CDM Smith

110 Fieldcrest Avenue, #8
6th Floor
Edison, New Jersey 08837
tel: 732-225-7000
fax: 732-225-7851

January 9, 2014

Catherine Douglass
Division of Property Management & Construction
Contracts and Procurement Unit
9th Floor Plan Room
33 West State Street
Trenton, NJ 08625-0034

Subject: Proposal - Demolition Consultant Multiple Award Term Contract (TC-008)
Project #1103-00

Dear Ms. Douglass:

CDM Smith Inc. is pleased to submit one original and five copies of our proposal to the New Jersey Department of Treasury, Division of Property Management and Construction (DPMC) to provide demolition consultant services in support of the Blue Acres Program which is in the process of acquiring and demolishing homes that are flood prone or have sustained flood damage. As demonstrated throughout our proposal, the CDM Smith team is committed to meeting all major objectives outlined by DPMC. We have chosen our team carefully with the knowledge that our team brings the keys to success on this phase of the Blue Acres Program, including:

- *Disaster Management Expertise* - CDM Smith has proven experience in all phases of emergency and disaster management, and we are knowledgeable of the rules and regulatory requirements to successfully work within the Federal Emergency Management Agency (FEMA) and Housing and Urban Development (HUD) guidelines to maximize funding to DPMC. This includes numerous home demolition programs utilizing both sources of funding. This knowledge has been gained through our significant involvement with some of the largest presidential declared disasters to impact our nation.

- *Use of Lessons Learned from Past Projects to Anticipate Challenges* – Our team will apply best practices, lessons learned, and adapt existing policies and procedures from our previous housing demolition experience to successfully execute this phase of the Blue Acres Program for DPMC. We have considerable experience in all aspects of this project, providing us with an immense database from which to derive important "lessons learned". Furthermore, CDM Smith has assembled a project team that represents the strongest possible complement of expertise necessary to complete this project on time and within budget. Finally, our project team is New Jersey based, providing us with a unique combination of local access and institutional knowledge with national expertise. We will use these strengths to provide DPMC with the appropriate blend of technical expertise and practical knowledge necessary to anticipate challenges, identify appropriate solutions, resolve problems and avoid timely delays.

CDM Smith

- *A Dedicated Management Team* - CDM Smith offers a dedicated program management team and leadership staff ready to begin work immediately and diligently for the duration of the project. Importantly, virtually all work for this project will be conducted from CDM Smith's New Jersey (Edison) office, ensuring quick responses to concerns the State may have throughout the project. Locally our project team is supported by nearly 200 New Jersey based technical and support staff. The convenience of the CDM Smith office and those of our local subconsultants will enable project team members to respond quickly to DPMC's needs and concerns.

- *A Proven Technical Approach* - Our technical approach takes into account our years of experience in the demolition of tens of thousands of residential properties throughout the country. We have proposed our best and brightest nationally recognized FEMA and HUD subject matter experts to support DPMC on the Blue Acres residential demolition program. We have provided decades of disaster recovery support on residential demolition programs and CDM Smith's clients have benefited from 100 percent reimbursement for all incurred costs under similar FEMA and HUD funded programs. Our innovative approach has proven to streamline federal FEMA and HUD auditing processes and tracking requirements and ensure federal re-imbursement.

- *Effective Collaboration* - In conjunction with a clearly defined execution plan, we believe it is important to keep an open line of communication between the CDM Smith team and the State of New Jersey at all stages of project execution. This will ensure that all parties are properly informed, that our team understands DPMC's needs, and potential options can be considered while subsequent activities are properly focused.

If selected, the CDM Smith team will apply lessons learned from our extensive experience on similar demolition programs across the country to successfully complete this phase of the Blue Acres Program for the State of New Jersey. We look forward to working with DPMC on this important assignment.

Very truly yours,

Maria Watt, P.E.
Principal
CDM Smith Inc.

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SECTION 1:
Organization Chart/Staffing Plan

At CDM Smith Inc. (CDM Smith), we are committed to building strong and lasting relationships with our clients, and each other. We work together—in teams and in partnerships with our clients and subconsultants—to solve complex environmental and infrastructure challenges. Together, we provide smart, integrated solutions, and are committed to doing what is right for our clients, our communities, each other, and the future. For every project, we incorporate our total quality management (TQM) processes, address issues of health and safety and community relations, and position ourselves as strong client advocates during regulatory strategy development and negotiations. We remain fully committed to our corporate philosophy to "Listen. Think. Deliver." and to provide the best total solution for each and every client.

The founders of CDM Smith forged a vision of a firm that would break new technical ground, set new standards for client service, and engineer new solutions to meet the world's changing needs. That vision continues to be vigorously pursued.

To this end, CDM Smith has assembled an exceptionally experienced and qualified team to undertake this assignment. We recognize the importance of not only providing the highest caliber of resources, but in also providing the State of New Jersey, Department of Treasury, Division of Property Management & Construction (DPMC) the right expertise in the right roles. Figure 1-1 (on the following page) illustrates the proposed organization of our project team. Our team consists of program and project managers and technical experts, along with experienced staff who have weathered the storm, stayed the course, and provided immediate and long-term recovery assistance. This team has worked diligently to find ways to improve home demolition program management services for a variety of clients.

CDM Smith will be supported on this project by four key subconsultants, who will play important roles throughout project delivery. A summary of each firm's relevant experience is provided below.

CDM Smith consistency ranks among the top engineering and design firms in the US.

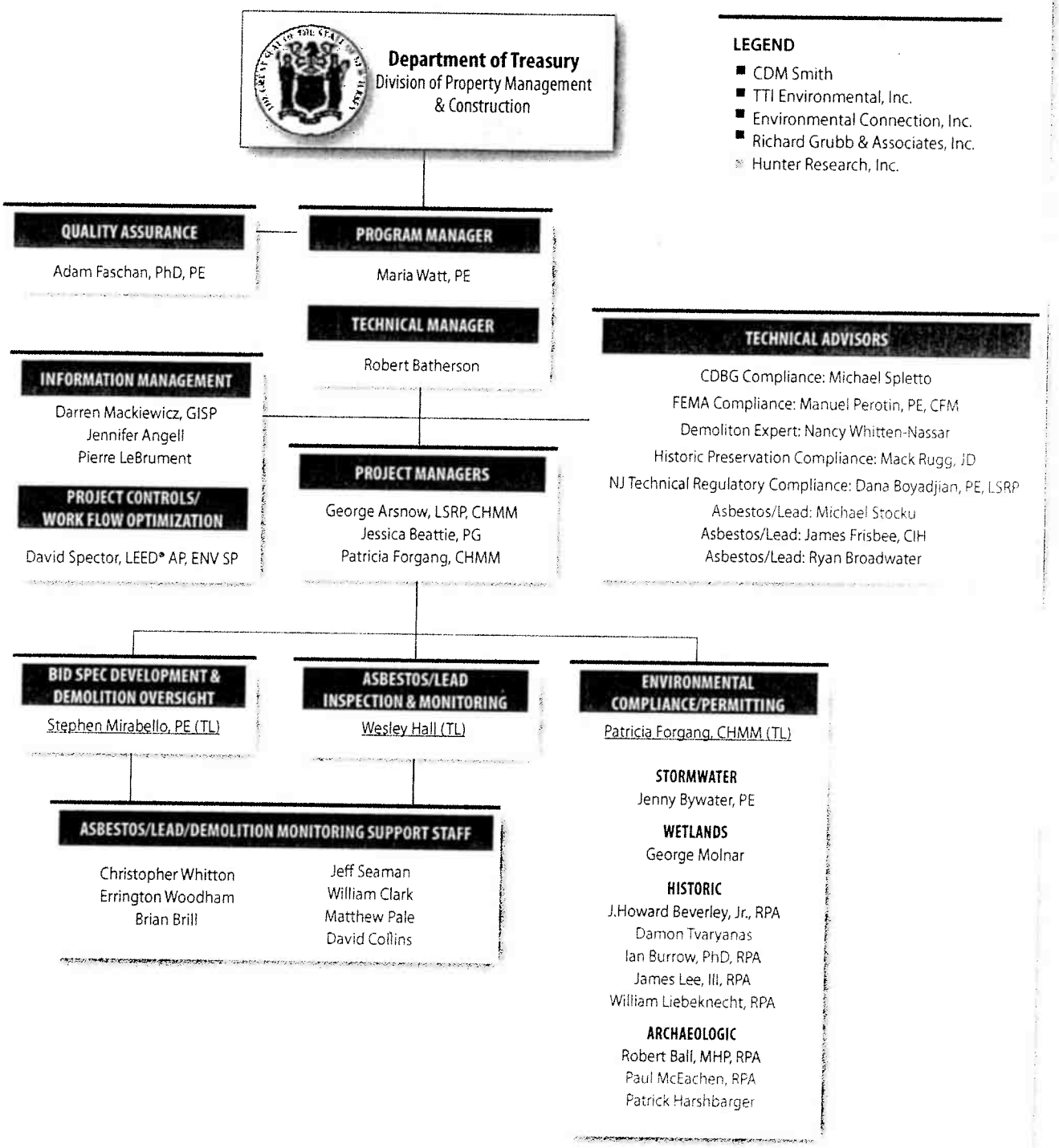
1.1 Team Organization

CDM SMITH

CDM Smith is an employee-owned global consulting, engineering, construction and operations firm. We currently employ more than 5,000 specialized personnel in 125 offices in the United States and abroad. For decades, CDM Smith has been providing our clients with natural disaster recovery assistance worldwide.

CDM Smith has proven experience in all phases of emergency and disaster management, architectural, multidiscipline engineering and environmental

Figure 1-1. Proposed CDM Smith Team Organization



(A&E) and construction management and support services. Our staff has the expertise in applicable rules and regulatory requirements to successfully work within the Department of Housing and Urban Development (HUD) and Federal Emergency Management Agency (FEMA) guidelines to maximize funding to affected local governments. Our experience includes a full slate of disaster recovery, including full A&E services for Gulf Coast clients in Louisiana and Mississippi after Hurricanes Katrina, Rita and Gustav, in Texas following Hurricane Ike, and directly for FEMA headquarters in Virginia for disaster recovery projects throughout the United States. Through this work, CDM Smith has built a disaster recovery practice that now serves crucial roles on programs such as New Jersey's Superstorm Sandy recovery program.

With our experience handling many types of projects, CDM Smith brings proven expertise and full service disaster recovery, program management, architectural, engineering, environmental, and construction management capabilities to ensure the success of the Blue Acres Program.

TTI ENVIRONMENTAL, INC. (TTI)

TTI is a multi-disciplined environmental service organization providing high quality consulting and contracting services since 1985. The firm provides environmental consulting, including asbestos and lead paint, tank management, industrial hygiene and environmental health and safety services. TTI has a qualified staff of experienced professionals who currently hold over 50 licenses and certifications relevant to the environmental field. Their staff expertise is enhanced by routine attendance in continuing education and participation in various and diverse professional organizations. TTI is a certified Small Business Enterprise (SBE) and a verified Service Disabled Veteran Owned Small Business (SDVOSB).

TTI's Environmental Consulting Division is licensed by the NJDEP, NJDCA, and pre-qualified by DPMC. The firm has been a contract holder for numerous years with the Department of Human Services through DPMC providing Asbestos Consulting and Abatement Management Services. TTI currently maintains the state contract for Asbestos Safety Control Monitor (ASCM) through the NJ Department of Treasury.

TTI is a New Jersey Asbestos Safety Control Monitoring (ASCM) firm (No. 00003) and their staff includes six licensed Asbestos Safety Technicians. The firm is a Lead Evaluation Contractor (#00013E) and has three licensed Lead Evaluators/ Risk Assessors. They are also a Certified Indoor Environmental Consulting firm (No. 1158).

Our team at a glance

CDM Smith

CDM Smith will apply best practices, lessons learned, and adapt existing policies and procedures from our previous housing demolition experience to successfully execute the demolition consulting services for this phase of the Blue Acres Program for DPMC.

TTI Environmental, Inc., a DPMC pre-qualified vendor and certified SBE, will provide asbestos abatement and lead-based paint investigation and abatement oversight ervices.

Environmental Connections, Inc., a DPMC pre-qualified vendor and certified SBE, will provide asbestos abatement and lead-based paint investigation and abatement oversight services.

Hunter Research, Inc., a certified SBE, will provide expertise in historical and archaeological investigations.

Richard Grubb & Associates, Inc., a certified SBE and WBE, will provide expertise in historical and archaeological investigations.

TTI's Industrial Hygiene staff has performed asbestos management services for over 100 school districts. Their experience includes the preparation of Asbestos Hazard Emergency Response Act (AHERA) Management Plans, Tri-Annual Inspections, Six Month Surveillance, building surveys, abatement design, air monitoring and reporting.

ENVIRONMENTAL CONNECTION, INC. (EC)

EC, a subsidiary of Vertical Technologies, Inc., (VTI) was established in May of 1983 as a multi-dimensional Environmental Management Corporation. With headquarters in the City of Trenton, central offices of various State agencies are accessible within minutes to attend meetings (scheduled or emergency) and obtain construction permits from the NJDCA. Additionally, EC is able to mobilize to most sites within the State of New Jersey within no more than two (2) hours from leaving its offices. The firm has an extensive background and has amassed a lengthy list of qualifications in the management of asbestos containing materials; construction cost estimating (CCE) for abatement; operations and maintenance (O&M) program design; United States Department of Labor, Occupational Safety and Health Administration, (OSHA) compliance consultation; environmental sampling; compliance consultation with respect to AHERA; and Lead Hazard Management and

X-ray Fluorescence (XRF) Lead Based Paint (LBP) Inspections/ Risk Assessments.

EC is an Agency Consultant for the State of New Jersey, DPMC, and has completed hundreds of projects at most of the State's departmental facilities. The projects include, but are not limited to, surveys, designs and project monitoring associated with asbestos containing materials, lead based paint, universal waste; emergency responses to identify, monitor, perform clearance sampling and prepare project close-out documents associated with potential and/or confirmed asbestos fiber release episodes; indoor air quality investigations; and microbial and water incursion investigations, remediation design and project oversight.

RICHARD GRUBB & ASSOCIATES, INC. (RGA)

RGA is a full-service cultural resource management firm established in 1988 and is a certified SBE and WBE in New Jersey. They assist public and private clients through the process of complying with federal, state, county, and municipal cultural resource and historic preservation regulations. RGA's multi-disciplinary staff of cultural resource professionals have met or exceeded the Secretary of Interior's Qualifications Standards (36CFR61) for archaeology, architectural history, and history. RGA has a current staff size of 32, including seven full-time principal investigators for archaeology; eight full-time principal investigators for architectural history and history; and 15 field directors, field technicians, research assistants, material culture specialists, geographic information system (GIS) and computer-aided design (CADD) technicians, and administrative staff.

For DPMC, RGA provided archaeological monitoring for the proposed Elmer Lake Dam Rehabilitation project and completed a Phase IA archaeological survey for a proposed utility upgrade project within the Monmouth Battlefield State Park in Manalapan Township.

HUNTER RESEARCH, INC.

HUNTER RESEARCH
Historical Resource Consultants

Hunter Research, Inc. is a Trenton-based cultural resources consulting firm offering a full range of archaeological and historic architectural services to public and private clients throughout the Mid-Atlantic and Northeast United States. The company, a certified SBE in New Jersey, has been in existence since 1986 and provides professional assistance for compliance with federal and state historic preservation laws and regulations, including Section 106 of the National Historic Preservation Act and the various permitting requirements of the U.S. Army Corps of Engineers and the New Jersey Department of Environmental Protection (NJDEP).

Currently, the firm is engaged in providing on-call archaeological monitoring and documentation services for the National Park Service in the wake of Superstorm Sandy damage to Liberty Island and Ellis Island in New York Harbor. Similar monitoring services have been provided at short notice to the NJDEP at the Moore's Beach restoration project in Cumberland County. Over the past 25 years, the firm has worked on HUD Community Development Block Grant (CDBG) projects requiring compliance with Section 106 of the National Historic Preservation Act. This work has mostly taken the form of site-specific urban redevelopment projects in Trenton, Paterson, Jersey City, Newark and New Brunswick and has involved the provision of both historic architectural and archaeological services.

1.2 Operational Management Plan

Professional program and project management will be key to successful project completion. CDM Smith's management structure is divided into the elements of project planning, project control, and execution. The project management structure combines the various functional areas performing work into a coordinated team reporting directly to the Program Manager. The objectives of the CDM Smith program management approach are to:

- Meet all contract requirements
- Be responsive to the time requirements of the specific site engagement process
- Produce quality work and documents
- Complete the project to the State's satisfaction, within budget, and on schedule

As a long-time provider of disaster recovery services to State and Federal government agencies, CDM Smith has in-place government-approved systems for scheduling, management and reporting that enable us to efficiently manage multiple work assignments under a term contract.

PRISM, our financial planning and control system, will be used as the basis for cost and schedule control. PRISM generates information on project financial status throughout the life of the project, including incurred costs, invoice data, and earned value information. These are based upon a work breakdown structure consistent with the Project Management Institute (PMI). This system will be used to generate Current Period Charge Reports (CPCRs) that track charges on a weekly basis and compare budget versus actual information on each project task and subtask, as well as the status on subcontractor invoices. This reporting system allows the project manager

to track progress on work orders, identify potential problems early, and implement corrective measures.

Another powerful project management tool generated in PRISM is our Project Status Report (PSR). Generated on a monthly basis, these reports contain budget and incurred costs. During monthly PSR review with the contract manager, all project managers are requested to identify and quantify any variances from the contract's budget, schedule, and scope and to project estimates-to-complete. The PSR is also used as a communication mechanism to the contract manager and corporate accounting group.

PRISM is also fully integrated with the Basic Management Tool (BMT), which allows for the development of Excel worksheets for setting up and managing a project, including detailed staffing requirements. The BMT allows entry of the contract terms, resources, and schedules. The system also generates S-curves that plot cumulative budget and actual cost by week; presents a picture of how actual costs compare with the budget; identifies each milestone and plots both on the budget and actual curve. BMT prints out Gantt charts, detailing project subtasks plotted over the weeks from project start to finish. For each assignment, the project manager will utilize PRISM to track and control the budget for each task compared to the percent completion.

1.3 Roles, Responsibilities, and Qualifications of Key Staff

The completed Project Key Personnel List and resumes for our entire team of experienced professionals are included at the end of this section. Resumes include each staff member's projected net availability, which accounts for existing and projected commitments. Our team has ample availability and therefore capability to staff task orders under this contract.

A summary of our proposed management team, including their roles, responsibilities, and qualifications are presented below.

PROGRAM MANAGEMENT

Our Program Manager, **Maria Watt, P.E.,** has extensive experience in managing multi-task, multi-disciplinary programs for a wide variety of disaster recovery, environmental assessments, restoration and redevelopment programs. Ms. Watt's recent disaster recovery experience includes her position as the Principal-in-Charge for the New Jersey Department of Community Affairs (NJDCA) contract to develop New Jersey's Action Plan in response to Superstorm Sandy and the development of procurement documents to facilitate obtaining the proper resources to implement the HUD approved Action Plan. She was also recently positioned as the Program Director of the New Jersey Department of Environmental Protection (NJDEP) residential home inspection and environmental assessment contract to provide environmental clearance to potentially thousands of residential homes impacted by Superstorm Sandy.

Ms. Watt will work to ensure that all resources are directed as necessary to complete each assignment task in accordance with the State's scope and schedule requirements, proactively providing quick responses to any concerns or needs. Ms. Watt will have overall responsibility for contract performance and will be the point of contact with DPMC. Ms. Watt will confer and meet regularly with other department contract personnel, Project Managers, and support staff to maintain direct and continuous communication. She will perform technical and administrative reviews of all submittals, as necessary to ensure compliance with NJ State contract requirements, quality of deliverables, and maximum success of the program.

As Program Manager, Ms. Watt will be responsible for planning and execution of contract work, including:

- Facilitating communications among the four key subconsultants and between the NJDEP and NJ Department of Treasury technical and administrative personnel
- Providing overall technical and administrative guidance and insight on all aspects of project execution
- Scoping, staffing, and budgeting for individual work orders, as well as performing conflict of interest research and executing certifications
- Assuring that project controls and QA/QC procedures are rigorously maintained
- Disseminating to Project Managers lessons learned from previous disaster recovery contracts to control costs and to streamline project activities
- Maintaining a high level of consistency and quality on administrative and technical deliverables, and assuring client satisfaction throughout the entire term contract
- Scheduling administrative meetings between the four key subconsultants and the State's Bureau/Section Chiefs and Contract Administrators, to review contract performance, correct deficiencies, and enhance deliverables
- Assign the best and most appropriate Project Manager for each work order based on technical capabilities matching the scope of work and cost-effectiveness as determined by labor rate commensurate with required level of expertise

TECHNICAL AND PROJECT MANAGEMENT

Robert Batherson will serve as CDM Smith's Technical Manager and will report directly to Ms. Watt. For the past five years, Mr. Batherson has managed extensive FEMA and HUD funded home demolition programs in Louisiana and North

Dakota. He will be supported by a cast of Project Managers and Technical Advisors who fill the specialized roles necessary for successful implementation of the program.

As Technical Manager, Mr. Batherson will be responsible for supporting the Program Manager as well as providing technical expertise to the project management team and ensuring coordination and consistency between offices.

The essence of CDM Smith's approach to project control resides with Project Managers. Proper project planning is the starting point for establishing project control and tracking progress. Our project management team consists of the following uniquely-qualified personnel.

George Arsnow, LSRP CHMM - Mr. Arsnow is a New Jersey LSRP specializing in program, project, and organizational management in the areas of environmental assessment, engineering, construction and demolition. His broad experience includes chemical plant and wastewater treatment plant (WWTP) decommissioning and demolition, Resource Conservation and Recovery Act (RCRA) hazardous waste management, acquisition related due diligence, hazardous waste screening, final scope development, remedial investigation, remedial action design, construction management, and New Jersey Pollutant Discharge Elimination System (NJPDES) permit procurement, and regulatory compliance.

Jessica Beattie, PG - Ms. Beattie is a licensed geologist with extensive experience managing a variety of environmental and geotechnical engineering projects and Site Investigations involving asbestos, lead-based paint and radon surveys, underground storage tank (UST) removals, construction oversight and monitoring, indoor air quality sampling, environmental site assessments, soil and groundwater contamination evaluations , remedial design, and cost estimating. As a senior geologist, Ms. Beattie's work experience includes preparing scoping documents, coordinating with state and local officials, ensuring QA/QC, environmental compliance, and preparing designs and bid specifications.

Patricia Forgang, CHMM - Ms. Forgang is a CHMM with vast experience in regulatory permitting, state funding, and environmental compliance. Her project experience has included municipal and industrial wastewater, water supply, infrastructure (dams and bridges), a recreational park, solid waste and hazardous waste operations, as well as project management of multi-faceted and complex contaminated site cleanups, and design-build projects. She currently serves as an internal project manager for NJDCA's Superstorm Sandy disaster recovery efforts and as Deputy Program Director for NJDEP's Community Development Block Grant - Disaster Recovery (CDBG-DR) Grant Program.

The Project Managers proposed for this contract will be responsible for:

- Attending project scoping meetings with the Program Manager, preparing project scoping documents, and estimating levels of effort for each site-specific engagement (work order) or subtask
- Establishing the project team and coordinating with the team technical advisors regarding the technical requirements and scope for each work order
- Regularly conferencing and coordinating with DPMC regarding technical and administrative aspects of work orders
- Tracking and controlling scope, schedule, and budget on a weekly basis using the PRISM system. Any issues identified will be addressed proactively to get the project back on track. The Program and Technical Managers will be notified immediately if issues arise that cannot be addressed through adjustments made by project staff.
- Preparing monthly project status and technical reports, including critical path management schedule to allocate resources and identify bottlenecks
- Preparing designs and bid specifications
- Preparing specifications for proper removal of hazardous materials and site remediation and restoration
- Procuring subcontractors for individual work orders
- Preparing monthly project invoices, as well as follow-up to project invoices ten days after being issued and resolving questions and problems on invoices, or their backup, and responding to auditor questions during audits
- Preparing and justifying modifications to the scope of work, as appropriate
- Managing technical and internal administrative project duties, including assisting in the prompt resolution of scheduling conflicts and site-specific challenges
- Verifying that technical guidance, codes, and appropriate, relevant and applicable requirements are being met
- Ensuring compliance with environmental statutes and regulations
- Controlling and monitoring that the project objectives, functional goals, and project purpose are being met or exceeded

Project Managers will select their project team based on technical discipline requirements, experience, and cost-effectiveness.

QUALITY ASSURANCE

Adam Faschan, Ph.D., P.E. will provide contract-wide quality assurance for all work orders under this contract. Dr. Faschan has one of the most comprehensive backgrounds in all aspects of disaster recovery. His background spans from debris management, private property demolition and removal programs, design of FEMA-funded permanent repairs to infrastructure, program management of FEMA-funded repairs, hazard mitigation and buyout programs, and program management of Community Development Block Grant-Disaster (CDBG-D) funded housing and infrastructure repairs. Dr. Faschan served as a senior technical resource for the oversight of all of CDM Smith's disaster recovery operations throughout Louisiana and Mississippi following Hurricanes Katrina, Rita, Gustav, and Ike. Dr. Faschan's unique experience provides insight into how to effectively integrate all of the various federal funding earmarked for disaster recovery.

As head of Quality Assurance, Dr. Faschan will be responsible for ensuring quality assurance and quality control is implemented in all aspects of work, including:

- Technical reviews
- Design reviews
- QA audits
- Field quality control

1.4 Ability to Support Existing Obligations While Undertaking Proposed Work

The CDM Smith team has the capacity to provide the personnel resources needed to meet existing obligations while supporting the work under this contract, as required in DPMC's Request for Proposals (RFP). Based upon our estimate, a package of 100 homes implemented within a 90 day period may require approximately seven full time employees identified for this important program. The resumes at the end of this section show each staff member's projected net availability, accounting for existing and projected commitments. These 37 professional personnel have ample availability to support this contract. Further, our team has an extensive pool of resources – a combined staff of over 5,000 people, with more than 200 located in the New Jersey- New York-Pennsylvania area alone - that can easily be tapped to meet any resource need. All of our team partners are also local to New Jersey.

CDM Smith maintains a full-service office in Edison, New Jersey that hosts over 130 staff. The convenience of the CDM Smith office and the New Jersey offices of our local subconsultants will enable project team members to respond quickly to DPMC's needs and concerns. With a large, multidisciplinary staff specializing in comprehensive disaster management services, CDM Smith is equipped to manage and execute multiple projects simultaneously from planning, assessment, and design through construction or construction management for a wide range of services.

PROJECT KEY PERSONNEL LIST

FIRM NAME	KEY PERSONNEL & TITLE	PERCENTAGE OF TIME ASSIGNED TO PROJECT							
		DESIGN DEVELOPMENT PHASE	FINAL DESIGN PHASE	PERMIT APPLICATION PHASE	BIDDING & AWARD PHASE	CONSTRUCTION OFFICE	CONSTRUCTION FIELD	CLOSE OUT PHASE	HOURLY WAGE LEVEL 1-7
CDM Smith	Maria Watt, PE Program Manager	5	5	5	5	5		5	7
CDM Smith	Robert Batherson Technical Manager	20	20	20	20	20		15	7
CDM Smith	Adam Faschan, PhD, PE Quality Assurance	5	5	5	5	5		5	7
CDM Smith	Michael Spletto Technical Advisor	5						5	7
CDM Smith	Mack Rugg, JD Technical Advisor	10	10						7
CDM Smith	Dana Boyadjian, LSRP Technical Advisor	15	15	15		15			7
CDM Smith	George Arsnow, LSRP, CHMM Project Manager	20	20	20	20	20	5	15	7
CDM Smith	Patricia Forgang, CHMM Project Manager and Environmental Compliance Permitting Lead	20	20	20	20	20	5	15	7
CDM Smith	Jessica Beattie, PG Project Manager	20	20	20	20	20	5	15	5
CDM Smith	David Spector, LEED® AP Project Controls/Work Flow Optimization	20	10	10	10	10		10	7
CDM Smith	Manuel Perotin, PE, CFM Technical Advisor	5	5		5			5	6
CDM Smith	Nancy Whitten-Nassar Technical Advisor	10	10	10				10	6
CDM Smith	Darren Mackiewicz, GISP Information Management	20		10				5	6
CDM Smith	Jenny Bywater, P.E., Environmental Compliance/ Permitting – Stormwater	5	5	5		5			5

PROJECT KEY PERSONNEL LIST

FIRM NAME	KEY PERSONNEL & TITLE	PERCENTAGE OF TIME ASSIGNED TO PROJECT							
		DESIGN DEVELOPMENT PHASE	FINAL DESIGN PHASE	PERMIT APPLICATION PHASE	BIDDING & AWARD PHASE	CONSTRUCTION		CLOSE OUT PHASE	HOURLY WAGE LEVEL 1-7
						OFFICE	FIELD		
CDM Smith	George Molnar, Environmental Compliance/ Permitting – Wetlands	5	5	5		5			5
CDM Smith	Stephen Mirabello, P.E, Bid Spec Development & Demolition Oversight	50	50	50	50	50		15	4
CDM Smith	Wesley Hall, Asbestos/Lead Inspection & Monitoring	100	100	100			100	20	4
CDM Smith	J. Howard Beverley, Jr., RPA, Environmental Compliance/ Permitting – Historic	10	5	5		5			4
CDM Smith	Robert Ball, RPA, Environmental Compliance/ Permitting – Archaeologic	10	5	5		5			4
CDM Smith	Jennifer Angell, Information Management	20		15				5	4
CDM Smith	Pierre LeBrument, Information Management	25	25	50	25	100		100	4
CDM Smith	Christopher Whitton, Bid Spec Development & Procurement Support and Asbestos/Lead Inspection & Compliance	50	50	50	20	20	20	15	3
Environmental Connection	James Frisbee, CIH, Technical Advisor	15	15				10		6
Environmental Connection	Ryan Broadwater, Technical Advisor	30					30		4
Environmental Connection	Errington Woodham, Asbestos/Lead/Demolition Monitoring Support	50					100		2
Environmental Connection	Brian Brill, Asbestos/Lead/Demolition Monitoring Support	50					100		2
Hunter Research	Ian Burrow, Ph.D., RPA, Environmental Compliance/ Permitting – Historic	4	2	2			4		6
Hunter Research	James Lee, III, RPA, Environmental Compliance/ Permitting – Historic	10	5	5			10		4

PROJECT KEY PERSONNEL LIST

FIRM NAME	KEY PERSONNEL & TITLE	PERCENTAGE OF TIME ASSIGNED TO PROJECT							
		DESIGN DEVELOPMENT PHASE	FINAL DESIGN PHASE	PERMIT APPLICATION PHASE	BIDDING & AWARD PHASE	CONSTRUCTION OFFICE	CONSTRUCTION FIELD	CLOSE OUT PHASE	HOURLY WAGE LEVEL 1-7
Hunter Research	William Liebeknecht, RPA, Environmental Compliance/ Permitting – Historic	10	5	5			10		4
Hunter Research	Patrick Harshbarger, Environmental Compliance/ Permitting – Archaeologic	8	4	4			8		4
Richard Grubb & Associates	Damon Tvayanas, Environmental Compliance/ Permitting	10	5	5			10		4
Richard Grubb & Associates	Paul McEachen, RPA, Environmental Compliance/ Permitting – Archaeologi	10	5	5			10		4
TTI Environmental	Michael Stocku, Technical Advisor	15	15				5		4
TTI Environmental	Jeff Seaman, Asbestos/ Lead/Demolition Monitoring Support	50					100		2
TTI Environmental	William Clark, Asbestos/ Lead/Demolition Monitoring Support	50					100		2
TTI Environmental	Matthew Pale, Asbestos Lead/Demolition Monitoring Support	50					100		2
TTI Environmental	David Collins, Asbestos/ Lead/Demolition Monitoring Support	50					100		1

INSERT THE WAGE LEVEL FROM 1 TO 7 OF EACH KEY PERSON. **DO NOT INSERT ANY HOURLY RATE**

Maria D. Watt, P.E.

Program Director

Ms. Watt has over 28 years of extensive experience in managing multimillion dollar, multi-disciplinary programs requiring extensive team and subcontractor coordination as well as significant stakeholder negotiations. She has managed major state and federal programs that include a wide variety of disaster recovery, environmental assessments, design, demolition, restoration, and redevelopment projects. Ms. Watt's recent disaster recovery experience includes being positioned as the Principal-in-Charge for the New Jersey Department of Community Affairs (NJDCA) contract to develop New Jersey's Action Plan in response to Superstorm Sandy and the development of procurement documents to facilitate obtaining the proper resources to implement the HUD approved Action Plan. She was also recently positioned as the Program Director of the New Jersey Department of Environmental Protection (NJDEP) residential home inspection and environmental assessment contract to provide environmental clearance to potentially thousands of residential homes impacted by Superstorm Sandy.

Principal-in-Charge, NJDCA Superstorm Sandy Disaster Recovery Support Term Contract, Trenton, New Jersey. As the Principal-in-Charge for the NJDCA 3-year on-call contract with a value of $9,500,000, Ms. Watt mobilized a team of over 30 staff to the NJDCA office in Trenton within 48 hours of notice of award. This highly experienced disaster recovery team developed a Draft Action Plan that included a detailed needs assessment within 5 business days. Action Plans typically require 30-45 days to complete. Extensive resource mobilization and management, weekly financial reporting and daily tracking of progress and deliverables were critical on such an expedited schedule. This high profile project required extensive communication and coordination with the Governor's representatives. A high quality document produced on an expedited schedule received HUD approval. In addition to expediting the development of the Action Plan, the team simultaneously began development of procurement documents to obtain additional resources and teams needed to implement the Action Plan. In addition to the above DCA support, CDM Smith assisted the New Jersey Department of Environmental Protection in performing environmental review of HUD-funded programs for recovery from Superstorm Sandy. CDM Smith helped DEP prepare tier 1 environmental assessments for the Rehabilitation, Reconstruction, Elevation and Mitigation (RREM) Program for single-family homes and the portion of the Small Rental Properties Program for buildings with up to four residential units. CDM Smith helped modify the tier 1 EA to meet the requirements of FEMA. CDM Smith also drafted the checklist to be used in tier 2 site-specific review.

Program Director, NJDEP Superstorm Sandy Disaster Recovery Support Term Contract, Trenton, New Jersey. As the Program Director for the NJDEP 3- year on-call contract with a value of, $9.6 million, Ms. Watt mobilized a team of over 30 staff to expedite the program development for the implementation of a massive residential site inspection and environmental assessment program in compliance with both HUD and FEMA requirements. Thousands of residential properties were substantially damaged in New Jersey during Superstorm Sandy. These site inspections and environmental assessments included toxics evaluation, historic architecture and archeology impacts assessments, extensive interaction state and local regulatory agencies and providing subject matter

Education

B.S. - Chemical Engineering, Rutgers University, New Brunswick, New Jersey; 1985

Registration

Professional Engineer: New Jersey

Years of Experience: 28

Net Availability: 25%

expertise for HUD compliance. Our thorough knowledge of the HUD regulatory requirements allowed for a streamlined execution of policies and procedures and expedited disaster recovery. CDM Smith performed over 300 site inspections, environmental surveys and assessments of residential properties within the first four months of our 3-year Superstorm Sandy term contract. Our subject matter experts provided significant HUD expertise to NJDEP in developing procedures and protocol to cost-effectively implement this disaster recovery program.

To accommodate the application volume, the program schedule demands, reporting needs, to provide for efficient management and execution, and to control quality, CDM Smith developed a customized information management system. This includes an iPad application to collect field data and a database that tracks detailed status of individual environmental reviews from assignment of project applications, through field data collection, site mapping, agency consultation and public notification, additional study requirements, quality review, environmental findings and clearance processes, and includes invoicing and receivables data management. CDM Smith's customized tools were developed to manage these data and to streamline both field and office execution, and include several reporting functionalities that automate forms and maps required for the environmental review records, weekly and monthly client status reports, internal management tracking reports, and invoices. Deployment of these tools enabled fast and efficient turnaround of residential home inspections and environmental reviews, providing more cost-effective and high-quality standardized deliverables to the NJDEP.

Program Manager, NJDEP Remedial Design Term Contract, Trenton, New Jersey. Ms. Watt serves as the Program Manager for this multi-million dollar major restoration program under a 5-year on-call contract. One of the more recent projects awarded on this contract includes a recent design and construction management service project for the creation and restoration of wetlands at Liberty State Park (LSP). Extensive excavation, waste segregation, on-site soils reuse and grading and restoration activities are required to restore this high profile restoration project. Soils impacted with inorganics and potential petroleum require special handling. The implementation plan ultimately developed for LSP includes the phased-in restoration of the 230-acre park. This project helps to restore the locally endangered ecological habitat, enhances overall park connectivity for increased public use and benefit, and is an important first step of an ambitious restoration process for the Port District section of the Hudson-Raritan Estuary.

Program Manager, Brookhaven National Laboratory, Department of Energy. Ms. Watt was responsible for the management of a major federal facility restoration contract. She received commendations from the client and agencies for expediting and submitting high quality documents. She received a 20 percent bonus fee for expediting the design and construction management of the demolition and closure of 130,000 gallon Imhoff tank that contained approximately 64,000 gallons of radioactive sludge. Design documents were developed along with construction specifications. Ms. Watt also managed the demolition and restoration activities required to close the massive underground Imhoff Tank. The radioactive sludge was treated to reduce the overall volume and the residue was shipped to an off-site approved disposal facility. Ms. Watt also management the Engineering Basic Ordering Agreement (BOA) contract that involved the design and decommissioning of numerous smaller above and underground tanks and other process equipment as part of

various laboratories and research facilities demolition and restoration projects throughout the 8 square mile Brookhaven National Laboratory site.

Senior Technical Advisor, Environmental Review for Demolition of Public Housing in Newark, New Jersey. Ms. Watt served as a Senior Technical Advisor for the preparation of a complete environmental assessment for proposed demolition of two public housing developments with a total of 32 buildings and 791 housing units. The environmental assessments were completed in accordance with HUD regulations in 24 CFR Part 58. A phase I environmental site assessment (ESA) was prepared as part of the environmental assessment for each housing development. The ESAs addressed asbestos, lead-based paint, and other hazardous materials.

Robert J. Batherson
Technical Manager

As a seasoned project manager, Mr. Batherson has 28 years of experience overseeing a diverse range of environmental projects including disaster recovery, stormwater management, wetland management, airport environmental management, industrial permitting and compliance, and solid waste permitting. Mr. Batherson has been responsible for major projects requiring expertise in state and federal regulations for both public and private sector clients.

Education

B.S. – Biology, University of Vermont, 1977

Years of Experience: 28

Net Availability: 50%

Project Manager, Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, State of Louisiana. The Louisiana Land Trust, or LLT, is a nonprofit organization funded by HUD, which was created by Louisiana Governor Bobby Jindal to manage the transfer of all Road Home properties. CDM Smith was responsible for managing over 10,500 properties located in 26 parishes within southern Louisiana. CDM Smith developed an innovative approach of preparing bid packages costs on a per-site basis instead of the conventional method of cubic yards and lowered the overall cost of bids on demolition packages, which in turn lowered the overall cost to the owner. The management of the program consists of the coordination of multiple federal, state, and local entities to ensure proper procedures for demolition, title transfer, and final disposition are being adhered to. At the conclusion of this program, CDM Smith expects to manage over 75 separate demolition packages throughout south Louisiana at a total cost of $70 million.

Mr. Batherson is the project manager and responsible for day-to-day management duties of the project office.

Project Manager, Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, Louisiana. Serving as the project manager, Mr. Batherson led efforts to remove debris and to facilitate private property debris removal and demolition. These efforts included comprehensive services to provide bid packages to remove debris and oversight of debris contractors. Private property demolition required coordination of right-of-entry information, inspection of structures requested for demolition, GIS documentation, and GPS tracking of impacted areas. All efforts required extensive debris monitoring and contractor oversight to assure maximum FEMA reimbursement. Combined, these projects required mobilization of up to 140 personnel to properly complete the project before FEMA's June 30th deadline for 100 percent reimbursement.

Project Manager, Private Property Demolition and Debris Removal Program, Jefferson Parish, Louisiana. After the USACE received instructions to demobilize from Jefferson Parish, CDM Smith quickly provided assistance to finish all the work for private property debris removal, voluntary demolition, and blighted homes demolition, meeting all the Parish's needs to implement this program and meet FEMA's reimbursement requirements and deadlines. Mr. Batherson served as the project manager.

Environmental Scientist, Sewer Regionalization Program Permitting, St. Charles Parish, Louisiana. This project resulted in permitting and mitigation for two new wastewater treatment plants and over 40 miles of force mains. Extensive coordination and

negotiations with the regulatory agencies was necessary. Mr. Batherson was the project leader in developing risk management plans for the major municipal facilities of the Sewerage & Water Board of New Orleans and Jefferson Parish. The risk management program involved assessment of hazardous chemicals, development of improved standard operation procedures, and a contingency plan for each plant. Mr. Batherson presented the plans at public hearings held in New Orleans and Jefferson Parish.

Environmental Scientist, Modification of the Air Emission Permit at the Sewerage and Water Board East Bank Sludge Incinerator, New Orleans, Louisiana. This facility was subject to a compliance order and required new monitoring protocol for several emission parameters. Complex negotiations with the Louisiana Department of Environmental Quality led to a successful resolution of the permit issue. Mr. Batherson served as an environmental scientist for this project.

Environmental Scientist, Solid Waste Services, Jefferson Parish, Louisiana. Mr. Batherson managed solid waste services in conjunction with expansion of the landfill as well as other sanitation projects. He was involved in landfill gas emission analysis and related air permitting compliance issues for Jefferson Parish and other clients.

Project Engineer, Solid Waste Management Consultation Services, Lafourche Parish, Louisiana. CDM Smith provided professional services to assist Lafourche Parish with the evaluation of the current solid waste collection and disposal contract and assist with the solicitation for proposals for a new contract for solid waste services. Mr. Batherson served as the project engineer for these efforts.

Project Manager, Baton Rouge Airport NPDES Permit Application, Baton Rouge, Louisiana. CDM Smith was selected to provide assistance to the Baton Rouge Airport District with all aspects of stormwater management necessary to achieve compliance with the National Pollutant Discharge Elimination System (NPDES) industrial permit application through development of cost-effective stormwater pollution strategies. Mr. Batherson served as project manager for this project.

Project Manager, Solid Waste Master Plan at Hartsfield Atlanta International Airport, Atlanta, Georgia. Mr. Batherson provided project management of the development of a Solid Waste Masterplan at the Hartsfield Atlanta International Airport. This project included a facility-wide waste assessment, contract evaluation, recycling program development, and recommendations for international waste handling. In conjunction with this work, Mr. Batherson developed new environmental lease language for tenants and operators at the airport.

Professional Activities

Member, Louisiana Environmental Professional Association

Member, Water Environment Federation

Member, American Waterworks Association

Publications

Batherson, R.J. "Cone Penetrometer Investigation of a Closed Landfill (City of Austin FM 812 Landfill)." 1996 Options for Texas Solid Waste Management Conference.

Adam Faschan, Ph.D., P.E.

Quality Assurance

Following Hurricanes Katrina, Rita, Gustav, and Ike, Dr. Faschan served as a senior technical resource for the oversight of all of CDM Smith's disaster recovery operations throughout Louisiana and Mississippi. Providing senior oversight of over $100 million in consulting services since the hurricanes, Dr. Faschan has one of the most comprehensive backgrounds in all aspects of disaster recovery. With 24 years of experience, his background spans from debris management, private property demolition and removal programs, design of Federal Emergency Management Agency (FEMA)-funded permanent repairs to infrastructure, program management of FEMA-funded repairs, hazard mitigation and buyout programs, and program management of Community Development Block Grant-Disaster (CDBG-D) funded housing and infrastructure repairs. Dr. Faschan's unique experience, gained over the past 24 years, provides insight into how to effectively integrate all the various federal funding for disaster recovery.

Senior Technical Advisor, Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, State of Louisiana. Since January 2009, CDM Smith has been the Program Manager of the Louisiana Land Trust (LLT) Home Demolition Program, with Dr. Faschan serving as Senior Technical Advisor. The purpose of the LLT Program is to facilitate the demolition of over 10,500 homes or house slabs remaining after Hurricanes Katrina and Rita throughout New Orleans and south Louisiana. These homes were acquired through a state- and federally-funded buyout program and placed under the direction of LLT (a non-profit agency). Work includes program planning and management, contractor procurement, supervision of contractors, contract monitoring, field monitoring, coordination of environmental services, financial monitoring and reporting, and related management services.

Senior Technical Advisor, Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, Louisiana. To meet impending deadlines for 100 percent FEMA reimbursement for house demolition and debris removal, CDM Smith provided quick response to St. Tammany Parish's needs to implement this program. Dr. Faschan served as a Senior Technical Advisor for this program. Implementation of the program included development and manning of a call center, receipt processing, review of right-of-entries for property demolition and debris removal, and development and oversight of the debris removal program. Development and oversight of the debris removal program included comprehensive activities such as development of debris removal and demolition plans, preparation of bidding documents for contract debris removal, GIS documentation and GPS tracking of affected properties, database management, and oversight of all debris removal contractors.

Senior Technical Advisor, Private Property Demolition and Debris Removal Program, St. Bernard Parish, Louisiana. Dr. Faschan served as Senior Technical Advisor when CDM Smith was hired for the removal of storm debris and hurricane damaged homes in St. Bernard Parish as a result of Hurricanes Katrina and Rita. The scale of the storm damage was profound and thousands of homes were destroyed requiring demolition and removal. The work included identification of debris sites and storm damaged homes and coordination with local Parish, State of Louisiana, and FEMA officials. CDM Smith's role

Education

Ph.D. Civil Engineering, Louisiana State University, 1992

(Concentration: Environmental Engineering. Minor: Toxicology.)

M.S. Civil Engineering, Louisiana State University, 1989

B.S. Civil Engineering, Bucknell University, 1987

Registration

Professional Engineer: Louisiana and Mississippi

Years of Experience: 24

Net Availability: 30%

was focused on the inspection of homes and businesses for asbestos containing materials and the production of structural reports detailing findings. The findings were used by abatement and demolition contractors hired by the Parish to properly abate, demolish, and remove the damaged buildings.

Senior Technical Advisor, Private Property Demolition and Debris Removal Program, Jefferson Parish, Louisiana. After the USACE received instructions to demobilize from Hurricane Katrina debris work in Jefferson Parish, CDM Smith quickly provided assistance to finish all remaining work for the private property debris removal (PPDR) program. Remaining work included voluntary demolition, blighted home demolition, and meeting all the Parish's needs to implement the program in accordance with FEMA's deadlines. Dr. Faschan led this program by acting as a Senior Technical Advisor. CDM Smith developed bidding specification and contract language and assisted in the solicitation of debris contractors. CDM Smith provided program management services which included administration and field monitoring. Working with the Department of Environmental Affairs, CDM Smith coordinated with FEMA on eligibility, provided contractor oversight, tested for asbestos, performed field monitoring, handled all load ticketing, reconciled contractor invoices, hosted progress meetings, and submitted status reports.

Senior Technical Advisor, Waterway Debris Removal Project, Ascension Parish, Louisiana. Ascension Parish experienced significant damage caused by Hurricane Gustav. A major aspect of the Gustav's impact was impairment of major drainage canals and bayous throughout the Parish due to downed trees and debris blocking the waterways. The Federal government recognized this situation as a potential future hazard to the citizens of the Parish. CDM Smith was retained to provide engineering and permitting services, and Dr. Faschan served as a senior technical advisor. As a first step CDM Smith acquired all required environmental permits for the work. Permits and/or environmental impact determinations were obtained from USACE and other permitting agencies.

Senior Technical Advisor, Administrative Program Management Assistance for FEMA Repairs, St. Bernard Parish, Louisiana. Overwhelmed by the extent of the damages to the Parish and suffering from impacts to their staffing levels, St. Bernard Parish hired CDM Smith to manage the implementation of all the FEMA-funded infrastructure repairs as a result of Hurricanes Katrina and Rita. Dr. Faschan serves as senior technical advisor for this program. Grant administration duties include reviewing and revising Project Worksheets and completing and maintaining all documentation required to ensure full and expeditious reimbursement of all eligible funds. CDM Smith staff supports St. Bernard Parish and FEMA by reviewing all pay requests for compliance with FEMA requirements and conformance with the scope of work, including documentation of proper procurement procedures, bid tabulations, and other materials necessary to assure FEMA approval of expenditures. CDM Smith also supports St. Bernard Parish by reviewing grant payments received from the state against payment requests to assure that all appropriate reimbursements are made.

Professional Activities

Member, Water Environment Federation

Member, American Society of Civil Engineers

Michael Spletto

Technical Advisor –CDBG Compliance

Mr. Spletto has more than 25 years of experience in the fields of community development and federal grant administration. He has extensive knowledge and experience with CDBG, CDBG Disaster, and HOME programs, in addition to having played a key role in many of the largest disaster programs in the country. Mr. Spletto has delivered numerous training sessions related to CDBG, HOME, HUD Environmental requirements (24 CFR part 58), lead-based paint, Section 504, labor standards, HUD compliance monitoring, HQS, strategic planning, and other related housing topics. For the State of North Dakota, Mr. Spletto managed the HOME program from 1992 to 2006 which, according to HUD's "snapshots," has the number one ranked HOME program of all state participating jurisdictions. He has been in the field of Community Development since 1989.

Program Manager, NJDCA Superstorm Sandy NJDCA Disaster Recovery Support and Remedial Design Term Contracts. Mr. Spletto served as the Program Manager for tasks associated with and on-call contract with the New Jersey Department of Community Affairs (NJDCA). Mr. Spletto organized a team of over 30 CDBG experts in three days to guide the NJDCA in developing a Draft Action Plan that included a detailed needs assessment within five business days. In addition to the fast-tracked Action Plan, he also led the team in providing long-term planning; CDBG-DR program specific policies and procedure development; and Internal DCA policy and procedure development. Mr. Spletto also led the effort to create a variety of Requests for Proposals to assist the NJDCA in meeting federal guidelines and procuring contractors to implement the various programs developed in the Action Plan.

Director of HUD Programs, CDM Smith. As the Director of HUD Programs for CDM Smith, Mr. Spletto works with local and state governments throughout the United States. He provides lessons learned and promotes streamlined disaster recovery methods, and has made numerous presentations to national organizations and state and local governments on disaster recovery. When CDBG-DR programs are awarded to CDM Smith, Mr. Spletto assures that expert CDBG staff are available to assist in the delivery of the disaster funds. He now coordinates over 50 CDBG staff with a cumulative knowledge base of over 500 years of CDBG experience, many of whom have over 20 years of CDBG experience.

Director, Community Development Block Grant Program, State of Illinois. Mr. Spletto is the director of the CDBG program for the State of Illinois Disaster Program, which received over $100 million for housing, infrastructure, economic development, and economic revitalization, and housing buy-out programs as a result of damage from Hurricane Ike. He is responsible for oversight and direction including application intake, application verification and processing for financial assistance, working with applicants, and quality control for the project.

Director, Community Development Block Grant Program, Harris County, Texas. Mr. Spletto is the director of the CDBG program for Harris County, which received $142 million for the repair and replacement of damaged and destroyed housing and infrastructure following Hurricane Ike. He is responsible for oversight of grant management, including application intake, application verification and processing for financial assistance,

Education

M.A. – Sociology, University of North Dakota, 1989

B.S. – Psychology, University of North Dakota, 1987

Years of Experience: 25

Net Availability: 25%

operation of Housing Assistance Centers, outreach programs for applicants, and quality control for the project.

Prior to CDM Smith

Director, State of Louisiana Disaster Recovery Unit, Baton Rouge Louisiana. Mr. Spletto assisted in the creation and delivery of the single largest disaster program in the country, which included over $13 billion of assistance. As the director of over 100 staff, Mr. Spletto worked in coordination with FEMA, the Louisiana Governor's office of Homeland Security, LRA, HUD, State Legislatures, and Federal Legislators. The $912 million contract disbursed nearly $7 billion in assistance in 12 months. He also had oversight of the consulting firm that had over 2,000 employees to assist in the delivery of the housing programs. While at the Disaster Recovery Unit, Mr. Spletto was involved with assisting over 100,000 homeowners receive compensation for their losses, which included the largest buy-out program in the country with over 12,000 homes purchased with CDBG-DR funds.

HOME Program Manager/Community Development Block Grant Administrator, State of North Dakota's Division of Community Services, Bismarck, North Dakota. Mr. Spletto managed nearly all aspects of the HOME, CDBG and CDBG disaster programs in North Dakota for nearly 20 years. He was responsible for working with local governments, non-profits, and for-profit agencies, and acted as the State point-of-contact for strategic planning. Mr. Spletto supervised staff, monitored projects for compliance, reviewed and interpreted federal regulations, conducted public hearings, and established and maintained labor, environmental, and civil rights requirements for the program.

Associate Planner, Roosevelt Custer Regional Planning Council, Dickinson, North Dakota. In his role as associate planner, Mr. Spletto worked with city and county governments to develop surveys, administer CDBG projects at a local level, and write state and federal applications.

Publications

Spletto, M. "Growth Fundamentalism in Dying Rural Towns: Implications for Rural Development Practitioners." *Agriculture and Human Values*, Volume 8, Number 3, June 1991.

Spletto, M. "Special Report: Stress in Rural North Dakota." North Dakota Rural Life Poll Report, University of North Dakota, Grand Forks, July 1987.

Manuel (Manny) A. Perotin, P.E., CFM
Technical Advisor – FEMA Compliance

Mr. Perotin is a professional engineer with 15 years of experience in civil engineering, risk and vulnerability assessments, hazard mitigation, benefit-cost analysis, floodplain management, planning, disaster recovery, and project management. Under nationwide contracts with the Federal Emergency Management Agency (FEMA), he served on post-disaster damage, mitigation assessment, and hazard mitigation assistance grant technical review teams, in addition to serving as an instructor teaching benefit-cost analysis and building science courses throughout the country. He has assisted state and local government agencies with preparing or updating emergency management plans, conducting training and exercises, tracking operations during an emergency, and aiding in coordinating reimbursement through the Federal Highway Administration Emergency Response (FHWA-ER) and FEMA Public Assistance (PA) programs.

Technical Lead, Hazard Mitigation Grants Policy Branch, FEMA Headquarters. CDM Smith is tasked by FEMA to provide policy and guidance development support for the Hazard Mitigation Assistance (HMA) grant program. Specifically, CDM Smith provides technical assistance for HMA program needs related to legislation, rulemaking, policies and guidance. Under this task order, CDM Smith is analyzing the potential impacts of strengthening the construction requirements for flood related mitigation projects, reviewing and crafting potential language changes to policy, guidance, and federal regulations for various project types, and is analyzing the benefits of implementing a program management system for the Grants Policy Branch. Mr. Perotin serves as a Subject Matter Expert for all HMA related issues, provides general guidance for all CDM Smith team members, and recommends methods to expedite the review process.

Technical Lead, Hazard Mitigation Grant Program (HMGP) Technical Reviews - FEMA. CDM Smith is tasked to perform technical reviews for FEMA Headquarters, including an eligibility and completeness review, an engineering review, a benefit-cost analysis (BCA) review, and an environmental and historic preservation (EHP) review for each proposed HMGP project. Mr. Perotin serves as a technical expert who reviews or provides quality assurance oversight for BCA reviews.

Prior to CDM Smith

Technical Lead, National Technical Review for the FEMA Hazard Mitigation Assistance Grant Applications, BCA Team. Mr. Perotin served as a technical expert assisting FEMA with the technical review of several hundred hazard mitigation assistance grant applications. Technical review reanalyzed applicant's BCA, then reviewed and ranked applications based on completeness, feasibility, and technical accuracy. BCAs were reviewed for supporting documentation and source credibility.

Technical Lead, Hazard Mitigation Grant Program (HMGP) Technical Assistance, FEMA. Mr. Perotin served as a technical expert who reviewed or provided quality assurance oversight for BCA reviews of HMGP projects in Florida, Iowa, Kansas, Louisiana, Missouri, Mississippi, and Texas.

Technical Lead, BCA Training, FEMA. Mr. Perotin was a lead trainer providing courses to building officials, local, state and federal emergency managers on BCA and preparing grant

Education

M.S., Engineering Management, Missouri University of Science & Technology, 2002

B.S., Civil Engineering, United States Military Academy, 1998

Registration

Professional Engineer: Florida (62730) and Missouri (2003002966)

Training/ Certifications

FEMA Benefit-Cost Analysis Software – Senior Trainer

Years of Experience: 15

Net Availability: 25%

applications for proposed mitigation projects. Courses were based on FEMA's BCA modules for wind, seismic, tornado, riverine, and coastal flooding.

Technical Lead, BCA Software Reengineering, FEMA. As the technical lead on this project, Mr. Perotin led the re-engineering of the FEMA BCA flood and hurricane data modules. He was responsible for the overall redesign of the flood and wind modules to include addressing a list of shortfalls with the existing software, developing a methodology, and coordinating peer review.

Technical Lead, Louisiana and Mississippi Post Katrina Benefit-Cost Analysis for Residential Structures. Mr. Perotin served as the BCA lead and created a database to simultaneously calculate the damages avoided for several thousand residential structures impacted by Hurricanes Katrina and Rita. He used a Geographic Information System (GIS) to estimate elevations for residential structures based on Light Detection and Ranging (LiDAR)/U.S. Geological Survey (USGS) topographic data, FEMA Advisory Base Flood Elevations (ABFE), and geocoded damage assessment data. Utilizing the elevation data along with flood probability data and standard assumptions for building replacement and contents value, the database associated each structure with the appropriate flood depth damage function to calculate the damages avoided by elevating the structures to the ABFE.

Technical Lead, Technical Assistance and Research Contract (TARC), FEMA. Mr. Perotin provided technical assistance related to the engineering and benefit-cost analysis of flood and wind retrofitting mitigation guidance across multiple task orders with the FEMA Building Science Branch. Served as a contributing author or reviewer of the following FEMA publications: P-259, Engineering Principals and Practices for Retrofitting Flood-Prone Residential Structures; FEMA 543, Design Guide for Improving Critical Facility Safety from Flooding and High Winds; FEMA P-55, Coastal Construction Manual; and FEMA P-804, Wind Retrofit Guide for Residential Buildings. Mr. Perotin also served on post disaster Mitigation Assessment Teams (MAT) who conducted technical evaluations to evaluate design practices and construction methods following natural disasters. The teams reported observations, documented conclusions, and provided recommendation to improve building performance. Mr. Perotin evaluated the performance of critical facilities, commercial and residential buildings, and safe rooms. He served as a MAT member following Hurricanes Katrina, Isaac, and Sandy; led the team that assessed damages in Joplin as part of the 2011 Spring Tornadoes MAT, and served as the overall team leader for the 2008 Midwest Floods MAT. In addition, he served as an instructor for courses on residential and critical facility design in hurricane and flood prone regions based on knowledge of the flood provisions in the International Codes Council's International Codes Series.

Professional Activities

Member, American Society of Civil Engineers

Member, Association of State Floodplain Managers (Nonstructural Floodproofing Committee)

Member, Florida Floodplain Management Association

Nancy Whitten-Nassar

Technical Advisor – Demolition Expert

Ms. Whitten-Nassar has 15 years of experience and was employed by the Federal Emergency Management Agency (FEMA) for nearly three years, most of which was devoted to post-Hurricane Katrina and Rita activities. FEMA incorporated several of its Public Assistance policies and practices as a result of Ms. Whitten-Nassar's experience in assessing situational awareness and communications. She anchored the largest-to-date FEMA Debris Operation and remains closely tied with FEMA's Public Assistance Disaster Assistance Directorates in Washington, DC and the agency's Region XI operation in Denton, Texas. Ms. Whitten-Nassar has supported numerous home demolition programs with CDM Smith involving both FEMA and Community Development Block Grant (CDBG) funding for project in St. Bernard Parish, Jefferson Parish, and the Louisiana Land Trust (Louisiana) and Minot (North Dakota).

FEMA/Disaster Recovery Specialist, Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, State of Louisiana. Ms. Whitten-Nassar provided professional assistance to the Lead Engineer / Project Manager on Louisiana Land Trust demolition project. She prepared bid specifications; worked closely with local government entities as well as with other local, state, and federal agencies involved regarding the locations of the properties. Ms. Whitten-Nassar also provided expert oversight to demolition contractors while monitoring budget, invoices, schedules, and project progress. She supported St. Bernard Parish Government, the Public Works Department, and the Finance Director and coordinated all parties with grant administration totaling more than $500 million. She administered rebuilding and reconstruction of all phases of infrastructure replacement after Hurricane Katrina, as well as overseeing project worksheet (PW) management and FEMA and State appeals process.

Highlights include:

- Effectively handled $8M of block grant money ensuring full compliance with all CDBG procedures
- Produced all required documentation designed to ensure full and prompt reimbursement of all eligible funds in collaboration with State Grant Administrators and the FEMA-expedited PW Team
- Partnered with FEMA Hazard Mitigation Team, Utilities Group, Justice Group, and Environmental and Historic Preservation in analyzing PWs for mitigation opportunities and alignment of original scopes of work to reflect actual extent of damage

FEMA/Disaster Recovery Specialist, FEMA and CDBG Funded Flood Recovery, Minot, North Dakota. Ms. Whitten-Nassar provided demolition and debris management oversight to the City of Minot for the 2011 Spring Flood Event. She worked closely with the City Engineer and FEMA officials to ensure that all local, state and federal regulations were followed during the City-wide debris removal and demolition efforts. Ms. Whitten-Nassar continued to support the City once FEMA projects were closed out and transitioned into HUD/CDBG demolition efforts.

Education

Associates Degree, General Education, Shelton State Community College, 1995

Licenses

Alabama Real Estate License, 1997

Specialized Training

FEMA Public Assistance Operations (Levels I and II)

Years of Experience: 15

Net Availability: 40%

CDM Smith

Prior to CDM Smith

Manager, Logistics and Resources, Deepwater Horizon Spill Cleanup, Mobile, Alabama and Lake Charles, Louisiana. Ms. Whitten-Nassar rendered efficient support to British Petroleum (BP) for the Deepwater Horizon MC252 Spill clean-up, by providing necessary equipment and supplies to decontaminate BP-mobilized vessels for oil recovery. Assumed responsibility for implementing $150M-contract for resources and logistical support to 750 employees.

FEMA Area Director, Area Field Office and Division Manager, Debris and Demolition Operations. Ms. Whitten-Nassar supervised full spectrum in overseeing agency's comprehensive planning and execution of Hurricane Katrina recovery mission; involving debris removal, waterway debris removal, demolition, and private property debris removal covering five distinctive counties; as well as corresponding financial obligations in excess of $750M. She recognized and coordinated mission priorities for the unit; and identified and secured staff and other resource requirements to achieve varied demands of task assignments. She also initiated and implemented strategic ways to surpass sensitive timelines for affected areas.

FEMA Debris Specialist-Ivan Francis Gene and Charlie, Alabama and Florida. Ms. Whitten-Nassar provided monitoring at load site's and disposal site's. She performed various types of validation for Vegetative Debris, Stumps and Reduction of Debris. She provided daily Activity Reports to Management, assisted with Project Worksheet formulation.

F. Mack Rugg, J.D.

Technical Advisor – Historic Preservation Compliance

With advanced degrees in law and environmental science, Mr. Rugg specializes in environmental impact assessment and regulatory analysis. He has 28 years of experience in the environmental field. For the past 7 years, his primary professional activity has been environmental review of projects proposed for funding by the U.S. Department of Housing and Urban Development (HUD). His work has received favorable reviews from the HUD Office of the Inspector General and HUD environmental personnel in Washington, D.C.

Technical Director, Superstorm Sandy NJDEP Disaster Recovery Support and Remedial Design Term Contracts, Station of New Jersey. Mr. Rugg helped NJDEP prepare the first tier of a tiered environmental assessment for HUD-funded rehabilitation and reconstruction of housing in the nine New Jersey counties most affected by Superstorm Sandy. The environmental assessment covers programs for single-family housing and rental properties with one to four housing units. Mr. Rugg also helped NJDEP create an annotated form for use in the site-specific tier of the tiered review. While helping create the tier 1 and tier 2 documents, he helped NJDEP personnel learn the HUD environmental review process.

Task Manager, HUD Environmental Review of Proposed Demolition of Public Housing. For the Newark Housing Authority, Mr. Rugg managed preparation of environmental assessments for proposed demolition of two public housing developments. The environmental assessments included "conditions for approval" designed to minimize impacts to the adjacent neighborhoods during demolition. Because the developments proposed for demolition were among the first constructed under the Public Housing Act of 1937, their eligibility for listing in the National Register of Historic Places became an issue in the environmental assessments. After an intensive architectural assessment by a qualified historic preservation specialist, the New Jersey Historic Preservation Office concluded that the developments were not eligible for listing in the National Register.

Task Manager, Environmental Review of Housing Projects Proposed for HUD Funding. For the Mississippi Development Authority, Mr. Rugg managed environmental review of housing developments proposed by housing authorities on the Mississippi Gulf Coast following Hurricane Katrina. Mr. Rugg led the preparation of 15 environmental assessments for new construction, four reviews of categorically excluded housing rehabilitation projects, and 2 reviews for purchase of housing developments by a housing authority.

Technical Reviewer for FEMA EHP Review in Three Regions. Mr. Rugg has served as CDM Smith's primary technical reviewer for environmental and historic preservation (EHP) review of proposed hazard mitigation projects in Texas (Region VI), Kansas (Region VII), and California (Region IX). He is familiar with the Federal Emergency Management Agency's (FEMA's) requirements for records of environmental consideration (RECs), environmental assessments, and environmental impact statements.

Education

M.S. - Environmental Science, Rutgers University, 1988

J.D. - Rutgers School of Law, 1977

B.A. – History, Wayne State University, 1974

Registration

Attorney at Law: New Jersey

Years of Experience: 27

Net Availability: 25%

CDM Smith

HUD Environmental Review of Proposed Disaster Recovery Projects in Illinois. Mr. Rugg prepared environmental reviews for 13 infrastructure projects proposed by Illinois municipalities under the Illinois "IKE" Disaster Recovery Program. He completed 10 environmental assessments and environmental documentation for 3 categorically excluded projects. He also prepared findings of no significant impact and requests for release of funds and certifications. He has provided thorough technical review of approximately 60 environmental reviews prepared by others, including reviews for infrastructure improvements, mixed use development, business assistance, and buyout and demolition projects.

Lead Technical Reviewer and Adviser, HUD Environmental Review of Proposed Workforce Housing Projects. In the Mississippi Development Authority's HUD-funded Long Term Workforce Housing Program, organizations seeking funds for a variety of housing projects prepared environmental review documentation for the projects they proposed. Mr. Rugg was the lead adviser to the consultants preparing the environmental documentation, and was the lead reviewer of the documentation submitted. As part of the project, he and another CDM Smith employee prepared a state- and county-specific annotation of HUD's environmental assessment forms. The annotation explained the documentation and analysis required in each part of the form, provided typical language, and listed links to sources of relevant information on the internet.

HUD Environmental Review of Housing and Infrastructure Projects in Texas. Following Hurricane Ike, Mr. Rugg wrote the first draft of the first tier environmental assessment for rehabilitation and reconstruction of single-family housing in Harris County, Texas. He provided technical review and guidance on regulatory requirements for environmental review of housing and infrastructure projects in Harris County. He assisted with preparation of public notices, agency consultation letters, and guidance for preparation of other environmental documentation. He determined which projects were "critical actions" under HUD regulations.

Task Manager, HUD Environmental Assessment for Redevelopment of Historic Factory Building. Mr. Rugg led the preparation of an environmental assessment for redevelopment of a historic factory building in Chicago, Illinois. The building is listed on the National Register of Historic Places. The proposed redevelopment involved exterior restoration and interior reconstruction for mixed commercial and residential use. In addition to historic preservation, principal issues in the environmental review were hazardous materials in the factory building and noise from an adjacent railroad and an expressway.

Professional Activities

Member, New Jersey State Bar Association (Environmental Law Section)

Dana M. Boyadjian, P.E., LSRP
Technical Advisor – NJ Technical Regulatory Compliance

Mr. Boyadjian has over 30 years of hands-on environmental engineering/remediation project management and field experience. This work includes a variety of soil and groundwater remediation projects, extent of contamination studies/remedial alternative evaluations, risk assessments and leaking underground storage tank (UST) investigations. Many of these projects involved extensive report writing and regulatory interaction under the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (Tech Regs) and recent Licensed Site Remediation Professional (LSRP) program. His experience also includes demolition planning, federal and state permit applications, New Jersey Industrial Property (ISRA/ECRA) submissions and NEPA environmental assessment.

Senior Environmental Engineer Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts, State of New Jersey. Mr. Boyadjian is performing property inspections under the NJDEP Superstorm Sandy Environmental Review Support contract. His responsibilities include the evaluation of general property conditions, possible environmental conditions on-site or within the surrounding area and providing documentation of same.

Prior to CDM Smith

Project Manager, Various Environmental Insurance Projects, New Jersey. Mr. Boyadjian served as senior project manager for major insurance companies related to their New Jersey residential or commercial policy holder properties contaminated with fuel oil or gasoline. Work activities included close client interaction along with management of site soil and ground water investigations, remedial investigation reporting/work plan preparation, contractor bid evaluations/selection, self-perform or oversight of site remediation and remedial action report preparation or review for quality assurance. Several of these projects were performed under the NJDEP LSRP program. Mr. Boyadjian's duties also included supervising, training and mentoring engineering staff in the evaluation and design of remedial plans/systems and their field implementation. This work also included evaluation/quality assurance of the project specific RI or RA report and remedial work plan to ensure compliance with the Technical Requirements for Site Remediation and the New Jersey soil remediation and groundwater quality standards. Evaluation/design of in-situ remediation as an alternative to excavation and "pump and treat" has been a significant focus of the work effort.

Project Manager, Various Brownfield Sites, New Jersey. Mr. Boyadjian's duties included project manager for a brownfield site in Hoboken. Issues involved significant chlorinated solvent contamination in soil and groundwater. The scope of work included preparation of the RI report and conceptual remedial plan including negotiations with NJDEP to approve a partial excavation/groundwater capture plan along with site capping. Additional brownfield site closure and reuse plans were prepared for a closed landfill to condominium conversion project in Elizabeth and closed landfill to warehouse project in Jersey City.

CDM Smith

Education

M.S. - Sanitary Engineering, Virginia Polytechnic Institute and State University,1977

B.S. - Civil Engineering, Northeastern University, Boston, Massachusetts, 1975

Registration

Professional Engineer: New Jersey, Pennsylvania

New Jersey Licensed Site Remediation Professional (LSRP) License No. 580159

Certifications

Underground Storage Tank, Subsurface Evaluation, New Jersey, 0010169

8-hour OSHA HAZWOPER Refresher, 2012

40-hour OSHA HAZWOPER, 1987

Training

Licensed Site Remediation Professional Ethics Course, 2013

NJDEP Case Study Training for LSRPs, 2013

Years of Experience: 30

Net Availability: 40%

Project Manager, New Jersey Brownfield to Residential Site Remediation. Mr. Boyadjian's project manager duties included NJDEP regulatory submittals, resource management, billing and schedule preparation and local and state agency interaction. This site, once the home of a vending machine manufacturer, is now partially occupied by new residential homes. The site is contaminated with chlorinated solvent materials in both soil and groundwater. The project involved three distinct tasks(two lump sum/unit price and one T&M): excavation of approximately 3000 cubic yards of soil (max depth 14 feet), which was stockpiled and disposed either off-site or reused on-site; construction and O&M of a soil vapor extraction (SVE) and 70 gpm groundwater recovery system and treatment plant to handle both contaminated waste streams; and quarterly groundwater sampling of approximately 25 wells and preparation/submittal of groundwater reports to NJDEP. A biennial CEA certification was also prepared under an expedited schedule to meet a regulatory deadline. The fixed price construction phase of the project was completed summer 2007 under budget and with a 75 percent increase to as bid margin.

Project Manager, Remedial Construction Services at the New York City Transit Coney Island Maintenance Yard, New York. Mr. Boyadjian managed lump sum and unit price scope of work including work plan preparation, underground tank removal, installation of a jet grout barrier wall, well abandonment and installation, biosolve injection and groundwater recovery. Additional tasks completed were temporary water line relocation, railroad track removal and replacement, soil excavation and transport/off-site disposal, backfill and compaction, asphalt paving and concrete ramp demolition rebuild. PM responsibilities included site activities, client and union relations, budget management and invoicing and project schedule.

Program/Project Manager, New York State Superfund Standby Contract. This cost plus task order contract was for projects ranging from PA/SI to RI/FS to design and construction oversight. Over 25 assignments were received including design of deep (45 foot) excavation of chromium contaminated soil, bedrock vapor extraction for TCE, landfill investigation for chemical agent material (mustard gas) and completion of various soil and groundwater site assessments.

Project Manager, Oil Terminal Cleanup, Newark, New Jersey. Mr. Boyadjian was project manager for property transfer remedial investigations and cleanup plans that were prepared for this oil terminal in Newark, New Jersey. Selected remedial methodology was landfarming (in-situ bioremediation) for which bid specifications were prepared and oversight of cleanup contractor and post-cleanup reporting to NJDEP was performed.

Project Manager, RI/FS Study of an Abandoned Solvent Storage and Processing Facility, Long Island, New York. Mr. Boyadjian served as project manager for this superfund site investigation that encompassed soil, groundwater, air and a major adjacent water body. A focused feasibility study for a second operable unit (buried drums) was also prepared on an expedited schedule. The project was performed for EPA Region II.

Professional Activities

Member, American Society of Civil Engineers

Member, Licensed Site Remediation Professionals Association

Training continued:

New Jersey Underground Storage Tank Regulations Refresher, 2012

Horizontal Remediation Well Workshop, 2013

Regulatory Training in Underground Storage Tanks, 2012

George F. Arsnow, LSRP, CHMM

Project Manager

Mr. Arsnow possesses 22 years of program, project, and organizational management experience in the areas of environmental engineering and science. His experience is broad based and includes remedial action design, permitting, construction, and operations and maintenance, chemical plant and industrial wastewater treatment plant decommissioning and demolition, in-situ chemical oxidation, RCRA hazardous waste management, sediment characterization and confined disposal facility design, complex remedial investigations, acquisition related due diligence, air pollution control and New Jersey Pollutant Discharge Elimination System (NJPDES) permit procurement, and regulatory compliance. As an experienced manager, Mr. Arsnow is responsible for project performance, quality assurance, resource identification and allocation, subcontractor management, and the development of solutions at the program, project, and organizational levels to ensure projects meet scope, schedule, budget, and quality goals. He is experienced in negotiating with regulators and communicating project status and direction to client management teams.

Program Manager, Confidential Client, Decommissioning and Demolition Services, Birmingham, New Jersey. Mr. Arsnow was the Program Manager for the planning and execution of a chemical plant decommissioning, decontamination, and demolition. The work was performed under an Engineer, Procure, Construction Management (EPCM) program. This program allowed the owner to participate in every aspect of the design, procurement, and management of the project, including competitively bidding all work and interviewing contractors prior to selection. Mr. Arsnow worked directly with the client management team to develop a program cost tracking tool for internal use. The program cost tracking tool was used to communicate inception to date costs against accrual. A cash flow model was developed and incorporated into the program cost tracking tool to support client planning for accrual adjustments. He managed the preparation of a Master Plan that formed the basis of the demolition project and identified all work elements, characterization through equipment decommissioning, which would be required for completion of the chemical plant and wastewater treatment plant (WWTP) demolition. He managed the preparation of Master Schedule using Primavera P3 tool with a forecast of activities and resources. The first phase of the work was to characterize existing chemical plant and WWTP conditions so that proper work elements, specifications, and construction sequencing could be developed. The detailed definition from the characterization phase was used to engineer specifications to competitively bid three distinct work elements: Hazardous, non-hazardous, and universal waste management, asbestos and lead based paint abatement, and demolition/site restoration. Mr. Arsnow managed all work elements of the demolition program including the permitting, environmental oversight, and compliance management during demolition.

Program Manager, Confidential Client, Post-Decommissioning and Demolition Services, Birmingham, New Jersey. Mr. Arsnow was the Program Manager for the design and construction facilities to upgrade/replace those that were eliminated during the chemical plant and WWTP decommissioning and demolition program. The work will support ongoing sales and warehousing activities and consisted of the following tasks:

Education

M.S. - Engineering Management, New Jersey Institute of Technology, 1999

B.S. - Environmental Science, Wesley College, 1991

Certifications

New Jersey Licensed Site Remediation Professional (LSRP) License No. 576298

Certified Hazardous Materials Manager License No. 13284

Years of Experience: 22

Net Availability: 50%

relocating and upgrading the electric feed to the Fire Water Pump House; cut and cap the underground fire water loop to eliminate sections that would no longer be required upon demolition of the chemical plant; constructing new office and restroom facilities for the ongoing warehousing operations; and constructing a new CMU wall along the west side of the warehouse.

Contract Project Manager, NJDOT Route 21, New Jersey. Mr. Arsnow was the Contract Project Manager for the Route 21, Section 2N, Contract B construction inspection services. His was responsible for ensuring compliance with the NJDOT Procedures Manual, Quality Assurance and Quality Control Plan development and implementation, and establishing a liaison function between NJDOT and NJDEP. He led the project team in the execution of construction remedial activities consisting of remedial investigation, remedial action, evaluation and closure of abandoned underground storage tank (UST) systems, closure of monitoring wells, soil excavation and characterization for on-site reuse and off-site disposal, and health and safety compliance. The reclassification of sulfide containing soils for on-site reuse versus off-site disposal resulted in an estimated $12 million cost savings.

Project Manager, NJDOT Route 29, New Jersey. Mr. Arsnow was Project Manager for the Route 29, Section 10C and 11B, tunnel construction environmental management services. Responsibilities consisted of ensuring compliance with the NJDOT Procedures Manual and establishing a liaison function between NJDOT and NJDEP. He led the project team in the execution of construction remedial activities including hazardous waste screening, site and remedial investigations, geophysical surveys, remedial actions, and hazardous waste characterization and disposal. The work was conducted at locations along the right-of-way as tunnel construction progressed. The potential for delays to the construction schedule was mitigated via detailed planning and scheduling. He designed and implemented a NJDEP approved soil reuse approach which resulted in a multimillion dollar cost savings.

Environmental Site Assessments and Audits Throughout the United States, New Jersey. Mr. Arsnow managed Phase 1 and Phase 2 environmental site assessments and compliance audits for several large private realty holding companies and industrial facilities. The site assessments and audits were performed on commercial and industrial properties ranging in complexity from general office to light manufacturing and were conducted in accordance with ASTM 1527 and where appropriate, the NJDEP Technical Requirements for Site Remediation. He was responsible for properties ranging in value from $1 to $80 million. Asbestos surveys and subsequent sampling were performed for many of the Phase 1 and Phase 2 environmental site assessments. Phase 2 work consisted of soil, groundwater, and air quality sampling.

Consolidated Edison Structural Inspections, New York. Mr. Arsnow worked with Cygna Group personnel performing power plant facade inspections and tank farm structural inspections for Consolidated Edison of New York. The work involved physical inspections of electric power generating plant facades and external structures following New York state guidelines. Turn of the century tank farm structures were inspected for integrity and upgrade potential. Other structures were inspected prior to demolition. Responsibilities included interviews, documentation, structural inspections, asbestos surveys, and the development of final inspection reports.

Jessica R. Beattie, P.G.

Project Manager

Ms. Beattie has 16 years of experience on a variety of environmental and geotechnical engineering projects, including environmental site assessments, remedial investigations (RIs), soil and groundwater contamination evaluations, geotechnical investigations and construction monitoring, asbestos, lead-based paint and radon surveys, indoor air quality sampling, remedial design, and cost estimating. As a senior geologist, Ms. Beattie's work experience includes performing hundreds of environmental site assessment, development of work plan and field sampling plan documents at hazardous waste sites, geophysical and soil gas surveys, subsurface investigations of petroleum spills and hazardous wastes, geotechnical investigations, indoor air quality investigations, RIs and feasibility study (RI/FS) and report preparation, evaluation of laboratory analytical data and reporting, site remediation at petroleum spills sites, and and quality assurance project plans.

Deputy Project Manager, Superstorm Sandy NJDCA Disaster Recovery Support and Remedial Design Term Contract, State of New Jersey. Ms. Beattie is serving as internal project manager to the firm's CDBG-HUD team, working from the New Jersey Department of Community Affairs offices, as they began the action plan effort to assist the State of New Jersey in Superstorm Sandy recovery efforts.

Project Manager, Confidential Client, Decommissioning and Demolition Services, Birmingham, New Jersey. Ms. Beattie served as project manager for the pre-demolition surveys performed as part of a chemical plant decommissioning, decontamination, and demolition project. The work was performed under an Engineer, Procure, Construction Management (EPCM) program. This program allowed the owner to participate in every aspect of the design, procurement, and management of the project, including competitively bidding all work and interviewing contractors prior to selection.

Project Manager, Environmental Reviews, Newark Housing Authority, New Jersey. Ms. Beattie manages the preparation of EAS/Phase I ESAs for two Public Housing Developments owned by the Newark Housing Authority. The properties have been identified by NHA as family sites likely to benefit from demolition and preparation for redevelopment. The EAS and Phase I ESAs were conducted as part of the Environmental Review required by and in accordance with the Department of Housing and Urban Development Title 24 of the Code of Federal Regulations (CFR) Parts 58, 24 and 970. The Phase 1 Environmental Site Assessments were prepared in accordance with the ASTM E 1527-05 and EPA's "All Appropriate Inquiries" rule (40 CFR Part 312). The developments include a total of 28 buildings and 789 units, plus ancillary maintenance buildings and heating plants. Historic uses of the properties will require Phase II Environmental Site Assessments, including UST removals, to be conducted prior to site redevelopment.

Project Manager, Pre-Demolition Surveys, Newark Housing Authority, Newark, New Jersey. Ms. Beattie managed the pre-demolition surveys at two daycare facilities. The surveys included asbestos containing materials, lead based paint and other regulated materials including mercury containing devices, PCB containing equipment, refrigerants, compressed gases, etc.

Education

Master of Engineering - Environmental Engineering, Stevens Institute of Technology, 2004

B.A. - Geological Science, State University of New York at Geneseo, 1997

Registration

Professional Geologist: Delaware, 2006

Certifications

40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

Hazardous Waste Site Health and Safety Supervisor

New Jersey Department of Environmental Protection – Underground Storage Tank Subsurface Evaluator - License #233493

Confined Space Entry

Years of Experience: 16

Net Availability: 50%

CDM Smith

Project Manager, Nestle Waters North America, Allentown, Pennsylvania. Ms. Beattie managed the Phase I and Phase II investigations at three properties. She also managed subcontractors that performed an asbestos and lead-paint pre-demolition survey, a wetlands delineation, and archeological surveys on the properties.

Project Manager/Project Scientist, Preliminary Site Assessments and Site Investigations, Multiple Properties, Burlington County, New Jersey. Ms. Beattie managed and conducted preliminary site assessments and site investigation at multiple properties in Burlington County. These properties are being considered by the County for open space preservation or farmland preservations and in most cases are partially funded by New Jersey's Green Acres Program. The requirements imposed for these environmental assessments and investigations include New Jersey's Site Remediation Program rules known as the Technical Requirements for Site Remediation. In addition to conducting the preliminary assessments, she prepares the scope of work and cost proposals for site investigation work on these properties. In addition to soil investigations, Ms. Beattie has conducted underground storage tank and groundwater investigations. She managed and conducted the site investigations at these properties leading the sampling teams.

Assistant Field Manager, Kent Gun Club Remediation, The Boeing Company, Kent, Washington. Ms. Beattie was responsible for project organization, reporting and confirmatory soil sampling. The project involved on-site stabilization and removal of 35,000 tons of lead contaminated soil. She was also responsible for the final cleanup report submitted to the Washington Department of Ecology, which resulted in the receipt of a no further action designation for the site.

Field Geologist, Geotechnical Investigation for Remedial Design, Brookfield Avenue Landfill Remediation Project, Staten Island, New York. For the New York City Department of Environmental Protection (NYCDEP), Ms. Beattie served as a field geologist in the geotechnical investigation of the Brookfield Avenue Landfill in Staten Island. The investigation gathered soil information for the remedial design which includes a barrier wall and interceptor trench to prevent the offsite migration of landfill leacheate. Over 50 borings were logged by Ms. Beattie.

Project Scientist, ESA Support for Major Construction Project, Upstate New York. For NYCDEP, Ms. Beattie is a project scientist participating in an ESA and hazardous materials evaluation task in support of a multimillion dollar design and construction project. Ms. Beattie conducted the Phase I environmental site assessment and Phase II site investigations for several large parcels of land that will be utilized for the new facilities. Large portions of the work involve redevelopment of the site that has been in use since the early 1900's and has primarily metals contamination. Several existing buildings in use for nearly a century are being evaluated for due diligence assessment in accordance with ASTM standards, plus performance of hazardous materials surveys (e.g., asbestos containing materials and lead based paint). The initial survey work has lead to the sampling of both soil and groundwater in areas of potential environmental concerns as well as sampling of PACMs, paint and other building materials. Investigation results have been compared to NYSDEC cleanup criteria and site specific client goals. These evaluations will lead to the development of special construction requirements that will be documented in the design drawings and specifications.

Patricia K. Forgang, CHMM

Project Manager & Environmental Compliance/ Permitting Technical Lead

Ms. Forgang has 28 years of experience in regulatory permitting, state funding, and compliance of a variety of projects, including municipal and industrial wastewater, water supply, infrastructure (dams and bridges), a recreational park, solid waste and hazardous waste operations, as well as project management of multi-faceted and complex contaminated site cleanups, and design/build projects. Ms. Forgang has assisted a variety of public and private clients to comply with the Clean Water Act, including the Pollutant Discharge Elimination System; the Resource Conservation and Recovery Act (RCRA); the Toxic Substances Control Act (TSCA); the Clean Air Act; underground storage tanks (USTs); and specific to New Jersey, the Industrial Site Recovery Act (ISRA), as well as all Division of Land Use Regulation permit matters involving freshwater and coastal wetlands, flood hazard areas, coastal areas, stormwater management, threatened and endangered species, cultural resources, and Category One waters. These projects encompass regulated discharges to groundwater, surface water, and air, and hazardous and solid waste landfill design, construction, and operations, and large-scale facility design/build projects.

Project Manager (Internal), Superstorm Sandy NJDCA Disaster Recovery Support and Remedial Design Term Contract, State of New Jersey. Ms. Forgang served as internal project manager to the firm's CDBG-HUD team, working from the New Jersey Department of Community Affairs offices, as they began the action plan effort to assist the State of New Jersey in Superstorm Sandy recovery efforts. Her duties included financial management of authorized services and subcontractor management.

Deputy Program Director, Superstorm Sandy NJDEP Disaster Recovery Support and Remedial Design Term Contract, State of New Jersey. Ms. Forgang serves as Deputy Program Direction on NJ's CDBG Disaster Recovery Program, which is currently assisting thousands of households whose homes have been damaged or destroyed by Superstorm Sandy. Ms. Forgang is responsible for helping lead standing-up this large program and organizing dozens of firm staff as well multiple specialty subcontractors to proceed with this important grant program. Her duties also include management and financial tracking of all specialty subcontractor work and incurred costs, assisting with program scheduling, additional work scoping and budgeting, client interfacing, and field team planning.

Project Manager, Decommissioning and Demolition Services, Birmingham, New Jersey. As project manager for a confidential industrial client's compliance project at a former manufacturing site in Middlesex County, Ms. Forgang managed the day-to-day implementation of the site investigation and remediation plans. Her responsibilities included completion of a comprehensive report on the results of field sampling activities and recommendations for site remediation and cleanup measures. The state's approval of this project paved the way for the remediation to commence. Remediation projects at the site included removal of over 4,000 tons of gasoline contaminated soils, removal and reconstruction of an active rail spur, excavation of 6,000 yards of fuel oil contaminated soil, and cleanup of approximately 40 electrical transformer substations for PCB contamination. In addition, Ms. Forgang served as project manager for an ongoing project

Education

B.S. - Chemical Engineering, University of Virginia, 1983

Registration

Engineer-in-Training: New Jersey

Certifications

40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

8-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Refresher Training

Certified Hazardous Materials Manager (CHMM), Certificate 2006

Honors/Awards

Alliance of Hazardous Materials Professionals, Champion of Excellence Award Winner, 2009, 2010

Years of Experience: 28

Net Availability: 50%

at this site involving the decommissioning/demolition of the client's non-operating plan. She was responsible for the preparation of plans and specifications, including non-hazardous chemical cleanup, aboveground fuel oil storage tank cleanup and other site remediation tasks.

Project Director/Project Manager, Environmental Site Assessment Services, Burlington County, New Jersey. For Burlington County, Ms. Forgang served as project director and project manager on multiple contracts to provide environmental site assessment services for farm properties under consideration for purchase as county open space. She directed or managed all aspects of these contracts, which included the preliminary assessment or "Phase I" assessment, and the site investigation or "Phase II" assessment. Other assessments included asbestos and lead-paint surveying. Many of these farm properties were included as part of the county's open space inventory with funding provided by the New Jersey's Green Acres Program.

Project Director, Phase I Environmental Site Assessments (ESA), Upper Macungie Township, Pennsylvania. Ms. Forgang served as project director on this property acquisition project, assisting with multiple Phase I ESAs as well as additional associated services, at three separate properties in Pennsylvania. This client, a confidential food manufacturer, was expanding its water-bottling plant and needed additional property adjacent to its location. In addition to ESA services, Ms. Forgang assisted the client with meeting construction permit application requirements which included freshwater wetland delineation, endangered species habitat evaluation, archaeological resources evaluation, and asbestos and lead-paint surveying.

Project Manager, Legalization of Warehouse Building in Floodplain, Phillipsburg, Warren County, New Jersey. For a confidential chemical manufacturer located in Phillipsburg, Warren County, Ms. Forgang was responsible for assisting with assisting the client to legalize a warehouse building. The site is mostly located in the regulated Flood Hazard Area of the Delaware River; the client has this building constructed in the FHA several years earlier without obtaining the appropriate state permit. The permit for construction of the building that was required, under NJDEP's Division of Land Use Regulation, included a Flood Hazard Area (FHA) individual permit along with application for a hardship waiver. This required FHA line verification and riparian zone determinations, as well as development of significant engineering documentation ot support the hardship waiver application. As a result of Ms. Forgang's efforts, the FHA permit and hardship waiver were both granted by the state. This results in savings of several hundred thousand dollars that it would have cost to demolish and move this building out of the flood plain or to fully flood-proof this building. The hardship waiver allowed for flooding of the building during flood event using flood venting.

Darren M. Mackiewicz, GISP
Information Management

Mr. Mackiewicz has 13 years of experience as a geographic information systems (GIS) specialist and application developer, who has worked on a broad range of GIS projects. His work has included architecture, design, development, and implementation of water/wastewater and cadastral GIS systems and web-based applications for county, municipal, regional, and Federal governments; completion of several environmental analysis projects; and design and coding of GIS and Decision Support System applications. He has developed applications to support a variety of end-users, from highly trained GIS professionals to casual users of ArcGIS Desktop, ArcGIS Mobile, ArcIMS, ArcGIS Server, AutoCAD, Silverlight and Flex, utilizing development languages including VB.NET, C#, VB Script, Action Script, Objective C, and JavaScript.

Data Architect-Application Developer, Superstorm Sandy NJDEP Disaster Recovery Support and Remedial Design Term Contract, New Jersey. Mr. Mackiewicz was responsible for designing the information management tools used by CDM Smith to track the status of hundreds to possibly thousands of environmental reviews for Sandy-impacted homeowner funding applications. These tools streamlined both field and office execution, and included a customized iPad field application and a database that tracks detailed status of individual environmental reviews from initial assignment through the project lifecycle, to invoicing and account receivables. The database includes several reporting functionalities that automate forms and maps required for the environmental documentation, weekly and monthly client status reports, internal management tracking reports, and invoices. The application provides near real-time feedback to management staff on the progress of a high volume of individual environmental reviews.

Lead Developer, iPad-based iOS Application, Bristol County Emergency Preparedness Coalition, Massachusetts. Mr. Mackiewicz was the lead developer of an iPad application for pandemic planning and preparedness. The application provides web-based access to GIS layers and allows for searching features, buffering, adding new features in the field, adding or editing attributes of existing or new features, collecting attachments in the form of pictures or video, and geometry editing. The application is architected utilizing an XML configuration file that holds the parameters for all aspects of the application, providing for "on-the-fly" changes to the application setup. The iOS mapping application allows for layer control, Quickmaps, and provides a full legend and GPS capabilities.

Lead Developer, iPad-based iOS Field Inspection Application, Haverhill, Massachusetts. Mr. Mackiewicz is the lead developer of an iPad application for collecting and editing spatial and non-spatial data features in the field. The application includes an inspection workflow that allows for multiple inspections to be performed on assets over time, capturing attribute information as well as attaching photos or videos to the spatial features or individual inspections.

Task Manager, Dublin City Flood Information Website, Dublin, Ireland. CDM Smith developed a Flood Information Website for Dublin City Council in conjunction with the Office of Public Works (OPW) to provide the citizens of Dublin with the latest information

Education

B.S. - Geography, Bridgewater State College, 1999

Certifications

Certified GIS Professional (GISP), 2009

Years of Experience: 13

Net Availability: 30%

on flood risks to the city. This forms part of the Dublin Flooding Initiative (DFI) and builds on the work of the EU funded INTERREG 111B funded SAFER (Strategies and Actions for Flood Emergency Risk Management) project. The maps produced are based on a number of recent studies commissioned by Dublin City council. Mr. Mackiewicz coordinated and participated in the web development and data development for the website. Application architecture features Google Maps and custom KML layers.

Lead Developer, iPad-based iOS Application, Puerto Rico Aqueduct and Sewer Authority. Mr. Mackiewicz is the lead developer of an iPad application for telemetry integration ("AquaPad") as a means for displaying data from multiple SCADA systems on a single island-wide map by leveraging GIS integration capabilities to add telemetry data. Capabilities include multiple, selectable telemetry feeds with alarms, interactive 6-month trending graph, GPS location, messaging and calendar integration.

Task Manager, Libby, Montana Asbestos Project, Libby, Montana. For the Environmental Protection Agency (EPA), Mr. Mackiewicz oversees all GPS and GIS data collection, which includes producing field protocols for soil, dust, and air data collection. He developed integration routines to review the quality of the incoming data and formatted it to be uploaded to the EPA's SQL Server database housed in Region 8 EPA headquarters. The project reformatted data collected during the first 2 years of the project and developed new procedures for data collected in 2002 and for the remainder of the project. Mr. Mackiewicz produced many applications to view and integrate the data collected daily at the project site. He was also the technical lead in developing specifications for an RFP for aerial photography of a 275-square-mile area in northwest Montana and oversaw the production of aerial photography.

Lead Developer, ArcIMS Website Project, Washington, D.C. For the Volpe Center and the U.S. EPA, Mr. Mackiewicz developed an ArcIMS intranet application to aid in the management of the project and deliver information to the EPA, Volpe Center, and CDM Smith project staff. The website provides dynamic mapping, identifying, data querying, and an interactive query/display tool for displaying soil and dust lab analysis data in a geographical context. Libby GIS combines non-spatial data (contaminant survey and sample analysis data) from the project database and county assessor's data with aerial orthophoto basemaps and Libby parcel lines.

Lead Developer, Diffuse Urban Runoff GIS Model, Multiple Locations. As part of the National Urban Pressures study commissioned under the Water Framework Directive (WFD), Mr. Mackiewicz developed an ArcGIS spatial model to aid in the calculation of diffuse urban runoff. CDM Smith aggregated existing land use zoning datasets nationally for 33 areas and created new polygon zoning layers and assigned each polygon one of 10 zoning land use codes. The datasets were broken down further to represent existing and proposed future land uses. This data was further subdivided to distinguish the percentages of each land use area which were connected to either the foul/combined sewer system, the storm sewer system of alternatively directly discharging to urban streams and rivers. Yearly rainfall and typical land use category specific pollution loading factors were applied to all areas to calculate yearly pollution runoff loadings. The result is a spreadsheet depicting the diffuse urban runoffs for all 33 urban areas, broken down by their land use category and existing or future development.

Jennifer L. Angell

Information Management

Ms. Angell is a geographic information system (GIS) Specialist with 19 years of experience in applications of GIS for projects involving water resources. She is skilled in the application using the ArcGIS suite of software including Spatial and 3D Analyst and in integrating these tools with MS-Access in the development and management of databases. She is trained in the third party software Community Viz an ArcGIS extension for land use planning and analysis. Ms. Angell has conducted build out analyses; developed databases; prepared data used in the development of hydraulic, hydrologic and water quality models; and trained junior staff in the use of GIS.

GIS Specialist, Superstorm Sandy NJDEPA Disaster Recovery Support and Remedial Design Term Contract, New Jersey. Ms. Angell supported development of data management and workflow automation tools to support fast-paced and efficient execution of hundreds of environmental reviews for Sandy-impacted homeowner funding applications. She was part of an information team that developed an iPad-based GIS, with a real-time, web-based data entry, and a standardized data reporting functionality. She also automated office-based mapping products and forms for inclusion in environmental documents. Ms. Angel has led a team of in-house staff and four subconsulting contractors for all field logistics and mapping efforts, and is responsible for executing a streamlined workflow for historical and architectural reviews. She is also responsible for generating database reports for client status reporting and for posting team deliverables to client document portal.

GIS Specialist, Mercer and Burlington County Water Management Plan, Mercer County, New Jersey. Ms. Angell assisted with the GIS aspects of the creation of a water management plan the County as mandated by the New Jersey Department of Environmental Protection. This work included geodatabase creation and continuous maintenance keeping track of changes and comments from the client, state and municipality utilizing a customized tool written in VBA.

Project GIS Specialist, Comprehensive Wet Weather Management Strategy Development and Program Support Services, Allegheny County, Pennsylvania. Ms. Angell is responsible for all aspects of the GIS data for combined sewer overflows (CSOs) and wet weather programs for the Allegheny County Sanitary Authority (ALCOSAN) including data collection and assessment for initial stage focusing on interceptor system and its hydraulic and hydrologic relationship with the municipal collection sewers. She has analyzed the environmental and census population and economic data in the GIS for such tasks as sensitive area, slope, imperviousness, environmental justice and infrastructure grant applications. GIS support for the three rivers wet weather demonstration program, which is a demonstration project in which CDM Smith provides ongoing technical assistance to municipalities, grant funding regulatory negations related to wet weather issues.

Project GIS Specialist, NJ Highlands Council – Water Use and Conservation. Responsible management of all GIS data for the support of the Regional Master Plan which objectives are preservation of the availability and quality of surface water and ground water resources throughout the Highlands region. Priority objectives are to restore and

Education

B.S. - Environmental Planning and Design, Cook College, Rutgers University, 1992

Years of Experience: 17

Net Availability: 40%

protect water resources within the Highlands Region. The development of Water Use and Conservation Management Plans specific to HUC14 subwatersheds is intended to address the requirements of this objective in a practical way that is applicable to each subwatershed. Ms. Angell utilized the GIS to provide methods to determine how water is routinely available for human use, as differentiated from water available for maintenance of ecosystem integrity and for maintenance of minimum levels in reservoirs and other surface water. The method determines Net Water Availability for each HUC14 subwatershed. Where Net Water Availability is positive, future human use of water supply is supported. Where Net Water Availability is negative, action is needed to address the deficit.

Project GIS Specialist, Watershed Resources Study, Burlington County, New Jersey. For Burlington County, New Jersey watershed resources study, Ms. Angell developed a GIS database for stormwater models for the Route 206 watershed. The project is part of Burlington County's initiative aimed at preventing further degradation of the water quality in the watershed. Ms. Angell is responsible for the data collection required to create the models including land use, soils, US Census population, and digital elevation models. Ms. Angell will incorporate the updated data into the production of a land use build-out scenario that will be included in the stormwater modeling analysis. She will also be responsible for interviewing county Agricultural Conservation District specialists in an attempt to obtain an understanding of the area mix of agricultural practices.

Project GIS Specialist, Water Resources and Stormwater Modeling, New Jersey. For the New Jersey Water Supply Authority (NJWSA), Ms. Angell developed a GIS database for stormwater models for the watersheds of the Spruce Run Reservoir. The project was part of NJWSA's Spruce Run Initiative, a program aimed at preventing further degradation of the water quality in the reservoir. Ms. Angell was responsible for the data collection required to create the models including land use, soils, US Census population, and digital elevation models. She was responsible for updating land use to at least 2000 status based on windshield survey and updated parcel mapping. Ms. Angell incorporated the updated data into the production of a land use build-out scenario that was included in the stormwater modeling analysis. She was responsible for interviewing county Agricultural Conservation District specialists in an attempt to obtain an understanding of the area mix of agricultural practices.

Project GIS Specialist, Sewer System Rehabilitation Prioritization Program, City of Newark, New Jersey. In order to evaluate the voluminous amount of information obtained during the sewer system inspections, Ms. Angell worked with the rest of the CDM Smith staff and developed a database and GIS. Access database was utilized for data entry and linked to the GIS for mapping. About 139,400 feet of pipe were evaluated for this project. Each pipe segment was illustrated on 1" = 350' maps, and color-coded to illustrate the five repair priorities developed. The reporting of conditions was generally done in 25-foot increments. The entire segment was characterized by the worst condition observed.

Pierre LeBrument
Information Management

Mr. LeBrument has steadily increased his skills and knowledge since joining CDM Smith. He quickly moved from site inspector and customer service representative to a field management position. With eight years of experience, he currently holds the quality assurance/quality control (QA/QC) Management role on a major home demolition project in the New Orleans area.

QC Manager and Asbestos Inspector, Hurricanes Katrina and Rita Louisiana Land Trust (LLT) Home Demolition Program, State of Louisiana. Mr. LeBrument was the QA/QC manager responsible for all 10,393 properties in the $40.5 million LLT demolition project. He handled review of all LLT folder documents, all field personnel, and time sheets. He generated/created and maintains entire QA/QC protocol, database, and QA/QC forms in order to accurately account for all necessary documents to support entered data and confirm status of completed folders/properties upholding to the strict CDBG guidelines. Mr. LeBrument generated a correction log process to address errors with a superior level of accuracy and accountability to enhance performance and improvements from all CDM Smith field departments and contractors involved in the LLT project. He assembled and trained the QA/QC team members to meet all legislative auditing expectations in the LLT Community Development Block Grant (CDBG) program. Created a 70 percent improvement of accuracy and quality in field personnel's field activity daily logs, time sheets, and property work order entry. He also achieved 100 percent client and legislative auditing satisfaction in the QA/QC property process.

As the asbestos inspector, Mr. LeBrument inspected buildings, slabs, and properties for the purpose of asbestos remediation, to be conducted in compliance with Louisiana Department of Environmental Quality (LDEQ) regulations. He identified asbestos containing suspect material, gathered samples, drew up maps & completed paperwork to document the description, location, square footage quantities of each and every material found at sites. Mr. LeBrument conducted Quantity Verification of material inspected on site with abatement contractor in order to confirm and agree on the scope and total amount of material to be removed from each sites. He monitored the abatement process and progress to ensure full compliance with LDEQ regulations.

Site Inspector, Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, Louisiana. Mr. LeBrument identified the status of blighted/damaged homes and structures and documented such with photos, GPS readings, site maps, and paperwork in order to remove hazardous buildings. He conducted in field legal verification using municipal legal surveys & maps in order to identify lots & rightful owners of the properties. Mr. LeBrument monitored the status of blighted properties and posted municipal/parish violation notices until demolition. He provided all pertinent information to concerned parish residents in order to resolve possible confusion and protect the trust between CDM Smith and the client.

Project Crew Leader/Field Supervisor, Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, Louisiana. Mr. LeBrument coordinated PPDR efforts with FEMA representatives and contractors in the

Certifications

Asbestos Inspector, LDEQ Accreditation, 2009

Years of Experience: 8

Net Availability: 100%

best interest of the Client while ensuring compliance with FEMA and LDEQ regulations. He trained field monitors and assigned work duties in order to protect all home owner properties while ensuring optimal quality results from contractors work crews. Mr. LeBrument served as liaison between Federal Emergency Management Agency (FEMA) representatives, contractors, and the Parish residents in order to ensure superior service in communications and performance provided to the client. He conducted QA/QC of all work sites and work documents to prevent errors and ensure the highest quality of documentation.

Additionally, Mr. LeBrument supervised the customer service hotline center, trained and scheduled all operators in order to provide prompt and accurate information in the most courteous manner to the St. Tammany Parish residents in relation to the PPDR project. He coordinated and supervised the distribution of PPDR informational flyers to the unincorporated Parish area residents in order to reach as many potential applicants as possible.

Property/Site Inspector & Customer Service Representative, FEMA Temporary Housing Project, Jefferson Parish, Louisiana. Mr. LeBrument was instrumental in facilitating the provision and installation of FEMA Temporary Housing in the form of Travel Trailers and Mobile Homes to home owners affected by Hurricane Katrina in Jefferson Parish, Louisiana. He assessed properties/sites, identified necessary utility locations, created site maps, and provided essential documentation for the installation of FEMA provided assistance. In addition, Mr. LeBrument coordinated legal documentation, procuring all necessary signatures and data in order to complete the applications and train the home owners on equipment use and operation, safety guidelines, and other important leasing information.

David A. Spector, LEED®AP, ENV SP

Project Controls/Work Flow Optimization

Through both education and experience, Mr. Spector has defined himself as a broad-based environmental scientist and planner, and has been effective at finding middle ground between economic and environmental perspectives in his consulting, planning, and volunteer work. As a senior project manager with 14 years of experience, he is responsible for developing and managing a diversity of projects geared towards solutions that balance the built and natural environment. He is an assistant market leader for integrated planning, an initiative to advance tools and expertise in development of sustainable, multiple-benefit project approaches and solutions. Additionally, Mr. Spector contributes to CDM Smith's sustainability delivery team, charged with continuing to incorporate sustainability practices into the corporate business model and project delivery protocols.

Project Manager, Superstorm Sandy NJDEP Disaster Recovery Support and Remedial Design Term Contract, State of New Jersey. CDM Smith has been tasked by NJDEP with hundreds of fast-turnaround individual homeowner environmental reviews. To manage the volume of sites, CDM Smith developed tools for data collection, document storage, and progress tracking/reporting that include the following: a customized iPad application for collecting field data on sites; workflow processes and protocols to streamline the review processes; a "cradle-to-grave" database that tracks status of individual properties from project assignment, through project milestones, to invoicing and accounts receivable; and reporting functions that support efficient management and detailed client reporting. Mr. Spector led creation of the workflow and the associated structure for information management tools, and coordinated with the IT team during development. He is also responsible for financial and schedule performance of the program.

Project Manager, HUD NEPA Compliance, Superstorm Sandy NJDCA Disaster Recovery Support and Remedial Design Term Contract, State of New Jersey. CDM Smith is supporting the NJDCA in facilitating environmental review for recovery projects receiving HUD CDBG funding, ranging from condensed Tier 2 environmental documentation for individual home rehabilitation/elevation, potentially to EAs or EISs for larger-scale community and infrastructure revitalization projects. To date, CDM Smith has been tasked with hundreds of fast-turnaround individual homeowner environmental reviews. To manage the manage the volume of sites, CDM Smith developed tools for data collection, document storage, and progress tracking/reporting that include the following: a customized iPad application for collecting field data on sites; workflow processes and protocols to streamline the review processes; a "cradle-to-grave" database that tracks status of individual properties from project assignment, through project milestones, to invoicing and accounts receivable; reporting functions that support efficient management and detailed client reporting; and a client-accessible document storage system.

Deputy Program Manager, HUD NEPA oversight for Mississippi Development Authority CDBG Long-Term Workforce Housing Program. Mr. Spector managed the program to oversee and expedite sub-recipient execution of NEPA review for 36 projects, representing approximately 4,900 housing units totaling $350 million in HUD CDBG support for workforce housing post-Katrina. He was responsible for staffing and management support of over 15 NEPA specialists; supported development of policies and

Education

M.S. - Earth Sciences, Montana State University, 1999

B.S. - Geography, Louisiana State University, 1997

Certifications

Leadership in Energy and Environmental Design Accredited Professional (LEED AP), 2007

Institute for Sustainable Infrastructure Envision Sustainable Professional (ENV SP) accreditation, 2013

Honors/Awards

2005 Smart Growth Achievement Award, Mississippi Department of Marine Resources

CDM Smith 2009 Thomas D. Furman Leadership Award, Honorable Mention

Years of Experience: 14

Net Availability: 40%

procedures for workflow organization among primary client, technical staff, and program sub-recipients; provided client interface during project execution.

Logistical Support, HUD NEPA Compliance - CDBG Public Housing Program. For the Mississippi Development Authority, Mr. Spector supported the program to develop NEPA documentation for approximately 2,200 housing units totaling $100 million in HUD CDBG support. He supported staffing and logistics for expedited execution post-Katrina.

Project Director, HUD NEPA Compliance for MDEQ Water/Wastewater and HUD CDBG Infrastructure Katrina Recovery Program. Mr. Spector was responsible for overseeing logistics and schedule compliance for 10 separate NEPA processes in severely compressed time schedule to support over $130M in HUD CDBG funds for water and wastewater treatment and conveyance improvements in Katrina-impacted communities. He managed a team of over 20 NEPA specialists, initiated policies/procedures for expediting workflow, and developed tracking and reporting tools and protocols.

Project Coordinator, Mississippi Gulf Coast Water, Wastewater, and Stormwater Master Plan. In the wake of Hurricane Katrina, Governor Barbour secured $630,000,000 through the HUD CDBG program to regionalize water, wastewater, and stormwater services, relocate critical infrastructure, and promote economic recovery in the six southern Mississippi Counties impacted by the storm. The planning effort assesses the pre- and post-Katrina infrastructure deficiencies, economic road blocks, and coastal/riverine water quality problems; summarizes and projects the changing demographic and economic trends; assists with the creation of individual county utility authorities and an oversight regional authority; and prioritizes projects for CDBG funding that accomplish regional infrastructure solutions and leverage funding from the FEMA, the Corps of Engineers, and the Mississippi Department of Marine Resources. Mr. Spector's role was to manage subcontractors, provide technical input on the stormwater component of the plan, and to coordinate among local elected officials, utility authority members, public works directors, economic developers, and Federal and State officials to determine priorities and opportunities, develop partnerships, and promote acceptance of the planning process and ultimately of the recommended construction projects.

Project Manager, Comprehensive Smart Growth Plan, Pearl River County, Mississippi. Pearl River County, a rural South Mississippi community, has experienced rapid growth in the last decade which has only been exacerbated by hurricane "refugees" from Louisiana and Coastal Mississippi seeking to relocate to higher elevation. To help the County adapt to the current growth rates, the plan will provide policy and planning guidance on the future physical development of the County, and address a wide range of issues including land use, transportation, housing, utilities, economic development, and capital improvements.

Project Manager, Comprehensive Planning, Hancock County, Mississippi. Hurricane Katrina made landfall in Hancock County. There has been tremendous impact to the business community, housing stock, public facilities and infrastructure, and to the fabric of the community. Mr. Spector is responsible for updating the county's comprehensive plan and land use ordinances, with particular focus on housing, economic development, and natural resource preservation strategies.

Stephen A. Mirabello, P.E.

Bid Spec Development & Demolition Oversight – Technical Lead

Mr. Mirabello is an environmental engineer with seven years of experience in remedial design, remedial site investigations and management, bedrock and overburden well installations, geological logging, soil, groundwater, and sediment sampling, field analysis, operation and maintenance of groundwater treatment systems, facility decommissioning, hydrogeological assessments, and permitting.

Field Team Leader/ Project Engineer, Decommissioning and Demolition Services, Birmingham, New Jersey. For a confidential client, Mr. Mirabello conducted site visits in support of various decommissioning efforts. Responsibilities included determining the cumulative masonry volumes of buildings, calculating sludge volume in an operating aeration basin, collecting masonry samples, conducting oversight for miscellaneous sampling efforts, report writing, and assisting in the preparation bid documents.

Project Engineer/Task Manager, Remedial Design, New York, New York. For the Mutual Redevelopment Houses Inc. (MRHI) complex, Mr. Mirabello coordinated the asbestos abatement design documents and current abatement oversight for 10 buildings in New York City. The abatement was a sub-task of a larger HVAC replacement project, for buildings with varied residential and commercial uses with poorly defined pipelines configurations. Mr. Mirabello closely worked with multiple sub-contractors to create building specific technical drawings and specifications in compliance with NYCDEP and NYCDOB regulations for the contract bid documents. As part of the ongoing abatement Mr. Mirabello coordinated the filing of ATRU and DOB permits in addition to performing follow up A-TR1 and DOB compliance inspections.

Project Engineer, Consolidated Edison, Facility Decommissioning, Brooklyn and Queens, New York. Mr. Mirabello prepared the specifications and drawings for bid documents for the decommissioning of a buried fuel oil pipeline. Special considerations and procedures were developed for portions of the pipeline that passed through environmentally sensitive or contaminated areas. Responsibilities included the coordination of technicians and draftsmen in the preparation of these documents.

Project Engineer, Price Landfill, Remedial Design, Pleasantville, New Jersey. Mr. Mirabello was a project engineer for the Iaconelli waste consolidation design. Responsibilities included the calculation and checking of excavation volumes, design of haul roads, review of drawings and amending and crafting of technical specifications. An additional site visit and comprehensive survey of field conditions was conducted to facilitate the design effort.

Project Engineer, Harrison Avenue Landfill Brownfield Site, Remedial Design Feasibility Study, Camden, New Jersey. Mr. Mirabello conducted a cost analysis and feasibility study for the excavation and off-site disposal to remedy a source area contamination. Two options for groundwater remediation analyzed were ISCO and natural attenuation. Additional considerations for the analysis were impacts to the local

Education

M.S. – Environmental Engineering, Cornell University, 2006

B.S. – Environmental Resources and Forest Engineering, State University of New York, 2004

Registration

Professional Engineer: New York, 2011

Certifications

OSHA 40-hour certificate HAZWOPER

Confined Space Entry Certification

OSHA Hazwaste

Supervisor

RCRA Hazwaste

Personnel Training

NYSDOL – Asbestos

Project Monitor

Years of Experience:
7

Net Availability:
70%

community, greenhouse gas emissions, and the hazardous vs. non-hazardous components of the waste.

Project Engineer, Interim Remedial Measure – Long Island, New York. For the NYSDEC Solvents site, Mr. Mirabello was a project engineer for the design and construction of an interim remedial measure to mitigate vapor intrusion as a result of a chlorinated solvent spill. Components included multiple SVE and AS wells, treated with vapor phase carbon adsorption. Responsibilities included analyzing pilot test data to determine radius of influence, system loss and sizing calculations, preparation the specifications and coordination with draftsmen and technicians to create the documents.

Project Engineer, Lawrence Aviation Industries, Remedial Action Oversight, Port Jefferson Station, New York. Mr. Mirabello was an on-site QA/QC engineer during the construction of a new groundwater treatment facility and performance of an in-situ chemical oxidation injection. Responsibilities included the review of submittals and determine compliance with contract construction engineering specifications and drawings, conducting regular inspections of site work, completed cost estimates for engineering change orders, evaluating engineering alternatives, and evaluating and analyzing sample and performance data as part of the remedial actions. Additional duties included daily and regular reporting to EPA and NYSDEC project managers regarding work progress and anticipated schedule.

Project Engineer, Nepera Chemical Superfund Site, Remedial Action Oversight, Hamptonburgh, New York. Mr. Mirabello was a project engineer for the remedial action oversight for soil and groundwater contamination. Responsibilities included the oversight of a pre-design soil investigation and collection of split samples, and multiple critical reviews of design drawings, specifications, and associated workplans associated with the multiple remedial actions designed for the site.

Field Team Leader/Project Engineer, Consolidated Edison, Soil and Groundwater Investigation, Queens, New York. Mr. Mirabello was the field team leader for numerous investigations. Responsibilities included oversight and sampling for activities including geophysical mark-out, vactor clearance, test pit excavation, geoprobe soil sampling, well installation, and report preparation. His responsibilities included coordination of activities with subcontractors, property owners, client representatives, and project management.

Field Team Leader and Project Engineer/Geologist, Clariant Site, Soil and Groundwater Investigations and Sampling, Fairlawn, New Jersey. Mr. Mirabello conducted site investigations for separate events, all including bedrock/soil/sediment/groundwater logging and sample management. His responsibilities included coordination of activities with subcontractors, property owners, project management, waste management, and health and safety monitoring.

Field Team Leader/Project Engineer/Geologist, Consolidated Edison, Soil and Groundwater Investigation, Brooklyn, New York. Mr. Mirabello conducted bi-monthly and supplemental site investigations at the Brooklyn Heights sub-station. His responsibilities included oversight and sampling for activities including geophysical mark-out, vactor clearance, geoprobe soil sampling, well installation, report preparation, periodic manual product removal at a site monitoring well, background water level monitoring, and data reporting.

Wesley P. Hall

Asbestos/Lead Inspection & Monitoring – Technical Lead

With 11 years of experience, Mr. Hall is an instrumental team player for CDM Smith on the Louisiana Land Trust (LLT) program where he supervises all assessments and asbestos related field activities involving thousands of homes, including inspecting and sampling suspect asbestos materials and documenting field findings. He was instrumental in achieving approval from the USEPA for the LLT to recycle and/or reuse concrete acquired from the many properties. In addition, Mr. Hall worked daily with Louisiana regulators to ensure that LLT operations were in compliance with USEPA regulations. He was responsible for assessing and documenting numerous aspects of LLT properties to accurately quantify pay items that were previous deemed necessary by contractors. Mr. Hall has also provided similar activities to support demolition progress in St. Bernard Parish, Louisiana and Minot, North Dakota. In Minot, Mr. Hall was a key contributor in creating the bid specifications for both the City of Minot and Ward County structure demolition and site restoration projects.

Asbestos and Assessment Supervisor, Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, State of Louisiana. Mr. Hall supervises several teams of field staff who are responsible for all assessment and asbestos field activities, including inspecting and sampling suspect asbestos material and documenting field findings. He was instrumental in achieving approval from the EPA for the Louisiana Land Trust (LLT) to recycle and/or reuse concrete acquired from the many properties. In addition, Mr. Hall works daily with LDEQ representatives to ensure that LLT operations are in compliance with EPA regulations. He was also responsible for assessing and documenting numerous aspects of LLT properties to accurately quantify pay items that were previously deemed necessary by contracts. Furthermore, Mr. Hall is the Health and Safety Manager for the LLT project.

Project Manager, FEMA and CDBG Funded Flood Recovery, Minot, North Dakota. Mr. Hall managed all aspects and activities related to the project including, but not limited to conducting asbestos inspections and property assessments, preparing bid documents, recommending winning contractor, hiring and managing demolition monitors, asbestos abatement activities, weekly progress meetings with contractor and client, contractor invoice review, final acceptance of completed sites, lead based paint clearance inspections, and project closeout.

Field Supervisor, Hurricane Katrina Private Property Demolition and Debris Removal Program, St Tammany Parish, Louisiana. Mr. Hall was the field supervisor who managed all operations of the contract, including: The scheduling and placement of up to 18 debris monitors/2 dump monitors/1 crew leader for approximately 60 straight days. He attended weekly progress meetings with the client and contractor. Field visits to determine FEMA eligibility for questionable debris.

Project Manager, Structure Demolition and Site Restoration Project (45 single family homes) Ward County, North Dakota. Mr. Hall managed all aspects and activities related to the project including, but not limited to conducting asbestos inspections and property

Training

Advanced Fungal Training Course, 2010

Certifications

MDEQ Certified Asbestos Building Inspector, 2011

MDEQ Certified Asbestos Contractor Supervisor, 2011

LDEQ Certified Lead Inspector and Risk Assessor, 2011-present

LDEQ Certified Asbestos Contractor Supervisor, 2010-present

LDEQ Certified Asbestos Building Inspector, 2009-present

North Dakota Asbestos Contractor Supervisor, 2011-present

North Dakota Asbestos Building Inspector, 2011-present

OSHA 7600 Disaster Site Worker, 2012

OSHA 40-hour HAZWOPER, 2013

OSHA-10-hour HAZWOPER, 2008

Years of Experience: 11

Net Availability: 100%

assessments, preparing bid documents, recommending winning contractor, hiring and managing demolition monitors, asbestos abatement activities, weekly progress meetings with contractor and client, contractor invoice review, final acceptance of completed sites, lead based paint clearance inspections, and project closeout.

Prior to CDM Smith

Quality Control Monitor, Allsouth Consulting Engineers, Metairie, Louisiana. Mr. Hall was responsible for monitoring operations on various sites for multiple projects stemming from Hurricane Katrina, including but not limited to RACM house demolitions, silt removal from drainage canals, replacing fire hydrants, re- digging drainage ditches, cleaning and video taping of underground sewer and drain destroyed city structures such as community centers, court houses, and several pump stations. Mr. Hall was also responsible for training new employees on policies and procedures with an emphasis on safety in the workplace.

E-4/Spc. U.S. Army. Mr. Hall was a driver, dismount, and gunner on an M1 Bradley. He served one year in Iraq as a Calvary Scout conducting mounted and dismounted patrols, raids, check points and other combat missions.

Jenny E. Bywater, P.E.

Environmental Compliance/Permitting - Stormwater

Ms. Bywater is a water resources engineer with seven years of experience modeling hydraulic wastewater distribution systems, addressing stormwater regulatory issues and performing health effect risk profiles of treated water sources.

Stormwater Compliance Officer, Louisiana Land Trust (LLT) Demolition Project, Southern Louisiana. Ms. Bywater acts as Stormwater Compliance Officer for the LLT project sites. She helped write the Erosion and Sediment Control Plans for each parish and now sees that they are properly enforced. Her tasks include ensuring that best management practices are properly installed and maintained; communicating with regulatory agencies, such as the U.S. Environmental Protection Agency and Louisiana Department of Environmental Quality; and tracking progress in achieving compliance over the thousands of site locations.

Project Engineer, Department of Public Works (DPW) City-Wide Drainage Master Plan, New Orleans, Louisiana. Ms. Bywater made recommendations for how DPW could incorporate more sustainable stormwater treatment and stormwater reduction features into the drainage system. She also analyzed how its planning review process may need to change depending on upcoming regulations and new ordinances.

Project Engineer, JEA Integrated Water Resource Planning Project, Jacksonville, Florida. Ms. Bywater helped create a STELLA model of JEA's integrated water, wastewater, and reclaimed water system in an effort to compare the performance, operating costs and other characteristics of future alternative facilities, configurations and management strategies. Specific roles included model development for all supply options and incorporating reliability metrics into the model structure.

Project Engineer, Upper Merrimack River Conceptual Model, New Hampshire. Ms. Bywater analyzed water quality and flow data to explore driving factors behind low dissolved oxygen conditions in the river. GIS spatial analysis was used to explore the effects of riverine impoundments, sub-watershed characteristics and wastewater treatment plant loading on river nutrient levels.

Project Engineer, Southeast Oklahoma Raw Water Supply Plan. Ms. Bywater helped create STELLA and Excel based models to assess water availability at various potential intake points within the Kiamichi River Basin. Additionally she determined preliminary operational guidelines for moving water throughout the system, balancing supply reliability with operational costs.

Project Engineer, Water Research Foundation Project 4169, Water Utility Framework for Responding to Emerging Contaminant Issues. Ms. Bywater is currently helping to develop a framework to guide water utilities in responding to emerging contaminant challenges. Her main role includes incorporating expert input into the framework as part of an iterative development process.

Education

M. Phil – Engineering for Sustainable Development, University of Cambridge (UK), 2009

M. Eng – Environmental Engineering, Massachusetts Institute of Technology, 2006

B.S. – Civil and Environmental Engineering, University of Washington, 2005

Registration

Professional Engineer (Civil): Louisiana, California (2008)

Honors/Awards

National Science Fellow, 2005-2010

MIT IDEAS Winner 2009

Years of Experience:

7

Net Availability:

40%

Project Engineer, Long-Term 2 (LT2) Enhanced Surface Water Treatment Rule Variance Request, Portland, Oregon. Ms. Bywater helped the Portland Water Bureau prepare a variance request for the LT2 Enhanced Surface Water Treatment Rule. Ms. Bywater's main role was to assist with technical writing and coordination of expert panelists for topics such as fate and transport of pathogens in the environment, microbial monitoring, and public health.

Project Engineer, Drinking Water Risk Comparisons, Los Angeles, California. For the Los Angeles Department of Water and Power (LADWP), Ms. Bywater was the technical lead in updating a risk model. The model allowed the comparison of carcinogenic health risks for various source waters and groundwater treatment alternatives, including a risk reduction verses cost analysis. The system was automated and training provided so that LADPW could easily make future updates to the model.

Project Engineer, Strategic Planning for San Francisco Public Utilities Commission (SFPUC), San Francisco, California. Ms. Bywater performed risk analysis for the San Francisco Public Utilities Commission as part of its long term strategic planning effort. She analyzed emerging contaminants and determined risk profiles for treated water sources. She also helped organized two workshops, including SFPUC staff, regulatory representatives and outside experts. The workshops highlighted risks and opportunities potentially facing the utility over a 20-year planning horizon.

Project Engineer, Wastewater Master Plan, Goleta West Sanitary District, Goleta West, California. Ms. Bywater assisted in the development of a wastewater distribution system model featuring multiple scenarios. Model development included allocating sewer demands by utilizing parcel information and calibrating the model to match flow monitoring data. With the calibrated model, she helped perform extended period simulations for different future build-out conditions. Based on the simulations, she helped determine sewer lines in need of future capacity upgrades and performed basic estimates of the project costs.

Project Engineer, Diablo Water District Mapping Update, Oakley, California. Ms. Bywater assisted with the development of a new set of water distribution system maps. Her tasks included developing and implementing a system to prepare new subdivision plan sets for easy digitization into ArcGIS. She also assisted with quality control of the finished map products.

Prior to CDM Smith

Research Assistant, Global Citizen Water Initiative, Tamale, Ghana, July-August 2008. Ms. Bywater assisted in developing an interactive water quality database along with a simple, low cost water testing kit that allowed average citizens to test the quality of their water and receive help in accessing resources. She also created a template for initial project data and trialed data collection in northern Ghana.

Research Assistant, Environmental Labs, University of Washington, December – June 2005. Ms. Bywater assembled and maintained an anaerobic digester for use by other students. She designed a protocol and schedule to evaluate the health of the digester by monitoring baseline readings.

George C. Molnar

Environmental Compliance/Permitting - Wetlands

Mr. Molnar is an environmental scientist with 21 years of experience conducting field investigations including ecological risk assessments, biological assessments and extent of contamination studies at hazardous waste sites nationwide. He has provided technical support for geological, engineering, and air monitoring site investigations; prepared and reviewed work plans, quality assurance project plans, technical memorandums, final reports, and other deliverables to multiple federal, state and industrial clients; supervised field and laboratory crews; and mentored junior staff. He is experienced in multi-matrix sampling techniques (e.g., groundwater, surface water, sediment pore water, soil, and sediment) as well as sample management and handling protocol. In addition, he is experienced in amphibian, fish, benthic macroinvertebrate, and small mammal sampling and survey techniques; and is familiar with laboratory and in-situ toxicity studies, vertebrate necropsy, and taxonomic identification of biota.

Project Scientist, Roebling Steel Company Superfund Site, Wetland Delineation, Florence Township, New Jersey. For the USACE, Mr. Molnar conducted a wetland delineation within areas of proposed dredging activities in support of remedial actions at the Roebling Steel Company Superfund site.

Project Scientist, Zschiegner Refining Company Site, Wetland Monitoring Program, Howell Township, New Jersey. For the USACE, Mr. Molnar assisted with the development of a long term wetland monitoring program in support of wetland restoration activities performed at Zschiegner Refining Company site.

Senior Team Member, WR Grace Site, Wetland Delineation, Hamilton, New Jersey. For WR Grace for the USEPA/ERT, Mr. Molnar assisted with the collection of soil borings and vegetation identification during a wetland delineation of areas scheduled for removal actives associated with asbestos contaminated fill and debris.

Project Scientist, Former Raritan Arsenal Site, Baseline Ecological Risk Assessment, Edison, New Jersey. For the USACE, Mr. Molnar assisted in sample collection/interpretation of data collected in support of a baseline ecological risk assessment at the former Raritan Arsenal. Areas evaluated included dredge spoils and sediments from the Raritan River and associated wetlands.

Senior Team Member, Wetland Delineation, Surface Water Sampling and Benthic Macroinvertebrate Sampling, Whitehall Township, Pennsylvania. For an Exxon Mobile spill emergency response for the USEPA/ERT, Mr. Molnar assisted with a wetland delineation, surface water sampling and benthic macroinvertebrate sampling/taxonomic identification in areas affected by a gasoline pipeline explosion.

Senior Team Member, Bunker Hill Site, Sediment and Surface Water Collection, Pinehurst, Idaho. At the Bunker Hill site, for the USEPA/ERT, Mr. Molnar was responsible for sediment and surface water collection within a biosolid cap covering a restored wetland that was historically used as disposal grounds for mine tailings. Sediment and water were submitted for chemical and toxicological analysis.

Education

M.S. - Environmental Science, Rutgers, The State University of New Jersey, 2006

B.S. - Environmental Studies, The Richard Stockton College of New Jersey, 1997

Certifications

OSHA 40-hour Health and Safety Training, 29 CFR 1910.120 (e)(3) (plus annual 8 hour refresher)

OSHA Site Health & Safety Coordinator Training, 29 CFR 1910.120 (e)(4)

CPR and First Aid Certified

Training

Response Readiness Training: Anthrax Response Workshop. U.S. EPA, 2001

Wetland Delineation: Rutgers Office of Continuing Professional Education, 2003

Years of Experience: 21

Net Availability: 30%

CDM Smith

Team Member, Rhinehart Tire Fire Site, Ecological Risk Assessment Support, Mount Pleasant, Virginia. For the Rhinehart Tire Fire site, under the USEPA/ERT, REAC, Mr. Molnar provided office, field, and laboratory support for an ecological risk assessment in a forested wetland contaminated with PAHs and zinc from a tire fire (estimated 5 to 7 million tires burned). He was responsible for the collection of soil, sediment, water, and taxonomic identification of benthic macroinvertebrates.

Team Member, Ross Metals Site, Collection of Water, Soil, Sediment and Frogs, Rossville, Tennessee. At the Ross Metals site in Rossville, under the USEPA/ERT REAC, Mr. Molnar was responsible for the collection of water, soil, sediment, and frogs for chemical analysis. The results were used to determine the impact of lead contaminated sediment in a wetland adjacent to an inactive lead reclamation and smelting facility. Findings of this investigation were used to establish the extent of ecological impact and target areas for future remedial activities.

Team Member, Marzone Inc. Site, Ecological Risk Assessment Support, Tifton, Georgia. At the Marzone Inc. site in Tifton, under the USEPA/ERT REAC, Mr. Molnar was responsible for the collection of soil, sediment, water, small mammals, crayfish, and frogs in a pesticide contaminated forested wetland.

Team Member, Boarhead Farm Site, Ecological Risk Assessment Support, Upper Black Eddy, Pennsylvania. At the Boarhead Farm site in Upper Black Eddy, under the USEPA/ERT REAC, Mr. Molnar provided office and field support in an investigation of a metal and VOC contaminated forested wetland. He was responsible for the collection of soil, water, and sediment. Data collected was used in an ecological risk assessment of the site.

Team Member, Hiteman Leather Site, Ecological Risk Assessment Support, West Winfield, New York. At the Hiteman Leather site in West Winfield, under the USEPA/ERT REAC, Mr. Molnar provided office and laboratory support on a broadscale investigation involving multi-disciplinary tasks in a chromium contaminated wetland associated with a historic tannery. He was responsible for the collection of sediment, soil, water, groundwater, fish, crayfish, and small mammals.

Team Member, OECI Site, Collection of Metals and Cyanide Contaminated Sediment, Ashippun, Wisconsin. At the OECI site in Ashippun, under the USEPA/ERT REAC, Mr. Molnar was responsible for the collection of metals and cyanide contaminated sediment from a wetland impacted by a former electroplating operation. In addition, he assisted with the preparation and screening of sediment samples using a field portable X-ray fluorescence. Data was used in support of an extent of contamination study.

Professional Activities

Board Member, Hudson/Delaware Chapter of Society of Environmental Toxicology and Chemistry 2007-2010.

Presentations

Perhamus. P, and G.C. Molnar. "Introduction to Wetland Delineation." HDC-SETAC Short Course; Stockton, New Jersey. 2010.

J. Howard Beverly Jr., RPA

Environmental Compliance/Permitting - Historic

Mr. Beverly began his career in 1989 as an assistant cultural resources coordinator. He joined the firm in 1995 as a field archaeologist, where he focused on excavations and artifact analysis. He now serves as an historical archaeologist, and is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility. Mr. Beverly also provides geographic information system (GIS) support on cultural resources projects. A brief listing of his project experience is provided below.

Principal Investigator – Architectural History, Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts, State of New Jersey. CDM Smith has been tasked with hundreds of fast-turnaround individual homeowner environmental reviews by NJDEP. Mr. Beverly is a Secretary of the Interior (SOI)-qualified architectural historian providing expertise in the areas of historical and architectural review to the CDM Smith team assisting the State of New Jersey in Superstorm Sandy recovery efforts. Mr. Beverly is responsible for these fast-turnaround reviews, which includes all aspects of historic review as an SOI-qualified professional, as well as preparation of the NJ State Historic Preservation Office (SHPO) report forms.

Principal Investigator, Kentucky Transportation Cabinet, CR 1283 Greenup County, Kentucky. As the principal investigator, Mr. Beverly is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Principal Investigator, Tennessee Department of Transportation, TWC Environmental, Tennessee. As the principal investigator, Mr. Beverly is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Co-Principal Investigator, Kentucky Transportation Cabinet KY 44 Phase I Survey, Kentucky. As the co-principal investigator, Mr. Beverly is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Principal Investigator, Southeast Archaeology, Cornette Mine Survey, Kentucky. As the principal investigator, Mr. Beverly is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Principal Investigator, West Virginia Department of Transportation, East Beckley Bypass Environmental Assessment, East Beckley, West Virginia. Services included wetland/stream mitigation and threatened and endangered species surveys for and environmental assessment for the proposed transportation improvements near East Beckley. As principal investigator, Mr. Beverly was responsible for all aspects of field work,

Education

BA - Anthropology, George Mason University, VA 1990

MA - Anthropology, Michigan State University, MI 2001

MAA - Anthropology, University of Maryland, MD, 1992

Registration

Registered Professional Archaeologist: (2003)

Years of Experience:
24

Net Availability:
30%

report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Principal Investigator, Mississippi Department of Transportation, Nail Road Interchange Environmental Assessment, Southhaven, Mississippi. Services included an environmental assessment for improvements to Nail Road in DeSoto County. This project also included traffic studies, concept design, ecology and noise studies, cultural resources, and public involvement. As the principal investigator, Mr. Beverly is responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Co-Principal Investigator, Mississippi Department of Transportation, State Route 9 Environmental Assessment, Lee and Union Counties, Mississippi. The project was an environmental assessment for improvements to SR 9, intended to provide a four-lane divided highway on new location. Environmental streamlining approaches were used in order to complete the project under an accelerated schedule, and the project required close coordination with Mississippi Department of Transportation and the Federal Highway Administration. As co-principal investigator for the archeological investigation, Mr. Beverly was responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Field Director, Blue Grass Airport Proposed Runway 9-27, Phase I Archaeology and Cultural Historic Surveys, Lexington, Kentucky. This project involved the identification of cultural resources potentially eligible for listing on the National Register of Historic Places for the proposed new runway at Blue Grass Airport. As field director, Mr. Beverly was responsible for field excavation oversight.

Principal Investigator, Baraga County Commission, Environmental Assessment of the Proposed Public Use Airport for Baraga County, L'Anse, Michigan. This project evaluated the potential environmental impacts associated with the development of a new public use airport in Baraga County, MI, including wetlands, threatened and endangered species, biotic habitat, and cultural resources. As principal investigator for the archeological study, Mr. Beverly was responsible for all aspects of field work, report preparation and content, National Register evaluation recommendations, and preliminary curation of project artifacts and records at an approved facility.

Co-Principal Investigator, Sevierville Public Building Authority, Veterans Boulevard (formerly Middle Creek Road) Design, Sevier County, Tennessee. Design services for this 5-lane and 4-lane divided, 5-mile-long arterial extension included a phase I environmental assessment, mapping, and preparation of final right-of-way and construction plans.

Professional Activities

Member, Kentucky Organization of Professional Archaeologists

Member, Society for Historical Archaeology

Member, Council for Northeast Archaeology

Member, Council on Michigan Archaeology

Robert W. Ball, MHP, RPA

Environmental Compliance/Permitting - Archaeologic

With 19 years of experience, Mr. Ball is the coordinator for the cultural resources staff as well as serving as an architectural historian and archaeologist responsible for crew supervision, field investigation, archival research, artifact analysis, state site forms, and technical report preparation of Phase I, II, and III archaeological investigations and cultural historic surveys. He meets the Secretary of Interior's Standards for architectural history and archaeology. Work outside of Kentucky includes investigations and surveys conducted in West Virginia, Tennessee, South Carolina, Michigan, Georgia, Mississippi, Ohio, Indiana, and Illinois. Mr. Ball has been a participant or managed NEPA projects for more than 15 years.

Principal Investigator - Archaeology, Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts, State of New Jersey. CDM Smith has been tasked with hundreds of fast-turnaround individual homeowner environmental reviews by NJDEP. Mr. Ball is a Secretary of the Interior (SOI)-qualified archaeologist providing expertise in the areas of archaeology and cultural resources review to the CDM Smith team assisting the State of New Jersey in Superstorm Sandy recovery efforts. Mr. Ball is responsible for these fast-turnaround reviews, which includes all aspects of archaeological review as an SOI-qualified professional, as well as preparation of the NJ State Historic Preservation Office (SHPO) report forms.

CR 6 Bridge Replacement, Township of Lexington, New York. Project involved a Phase I archaeological survey for a proposed bridge replacement in Greene County, New York. Mr. Ball served as the Co-Principal Investigator and field director for the survey.

Westchester County Hudson River Park, Tarrytown, New York. Mr. Ball was the Principal Investigator for a Phase IA Archival Survey of a proposed park in Westchester County, New York.

Co-Principal Investigator, CR 6, Greene County, New York. Mr. Ball served as co - principal investigator for a Phase I archaeological survey for a bridge replacement.

Principal Investigator and Project Manager, US 220 Widening, Hardy County, West Virginia. The project involved a Phase I archaeological and cultural historic survey for a proposed road widening near Moorefield, West Virginia. The cultural historic survey resulted in the documentation of 10 historic properties, three of which are potentially eligible for listing to the NRHP. The Phase I archaeological survey portion of the project resulted in the discovery and documentation of three historic sites, two of which date from the late eighteenth century to the early nineteenth century. Mr. Ball served as project manager for the project as well as principal investigator for the cultural historic survey.

Principal Investigator and Project Manager, Hott Curve Realignment, Pendleton County, West Virginia. The project involved a Phase I archaeological and cultural historic survey for a proposed curve realignment near Fort Seybert. The archaeological survey consisted of approximately two acres of proposed right of way. One new site was discovered and recommended as not eligible for listing on the National Register. The

Education

M.H.P. - Historic Preservation, University of Kentucky, 2005

B.A. - Anthropology, University of Kentucky, 1995

Certification

Register of Professional Archaeologists

Years of Experience: 19

Net Availability: 25%

architectural/historic resource survey involved the development of a historic context; field documentation of historic sites which includes mapping, photography, and completion of SHPO survey forms; and the integration and analysis of all data resulting in determinations of eligibility for the National Register and determinations of effect for all resources 50 years of age or older. Mr. Ball managed the project and served as Principal Investigator for the cultural historic survey and participated in the field work on the archaeological survey.

Field Investigator, US 522 Realignment, Berkeley Springs, West Virginia. The project involved a cultural historic survey for a proposed new route for US 522. Mr. Ball participated in the field documentation for the cultural historic survey.

Field Investigator, Phase II, Mansour, West Virginia. The project included Phase II fieldwork investigations that involved controlled surface collection of artifacts, and hand excavation of test units and shovel tests. These efforts resulted in the recovery of diagnostic artifacts ranging in age from about 7,000 years old to about 1,000 years old. Hand excavation in parts of the site produced evidence of sub-plowzone cultural deposits of about 40 cm thickness. Site 46Cb42 retained sufficient integrity to be considered potentially eligible for nomination to the National Register of Historic Places. Mr. Ball participated in the field work.

Blue Grass Airport Expansion, Lexington, Kentucky. Project involved a all Phases of archaeological investigations and a cultural historic survey for the proposed construction of Runway 9-27, a relocated general aviation facility and taxiway and a general aviation road at the Blue Grass Airport. The cultural historic survey resulted in the documentation of 10 historic properties, one of which was determined eligible for listing to the NRHP. The Phase I archaeological survey portion of the project resulted in the relocation and reassessment of four prehistoric sites and the discovery of a historic site recommended for further testing (Phase II). The Phase II resulted in a Phase III mitigation of excavating the site prior to construction. Mr. Ball served as Project Manager for the project as well as the Principal Investigator for the cultural historic survey.

Baraga Airport Expansion, Baraga, Michigan. Project involved a Phase I archaeological and cultural historic survey of 137.3 acres for the public use airport for Baraga County, Michigan. Ten previously undocumented archaeological sites were discovered. None were determined eligible for listing on the National Register of Historical Places. The cultural historic survey revealed seven structures that were older than 50 years of age which were surveyed for the project. None of the seven were recommended as eligible for listing on the NRHP. Mr. Ball served as the Principal Investigator for the cultural historic survey as well as participated in the field work for the archaeological survey.

I-75 Connector : Jessamine, Madison & Fayette Counties, Kentucky. Mr. Ball was the Principal Investigator for a Historic Structures Survey and Assessment for a proposed new road connecting the city of Nicholasville to Interstate 75. The survey identified a total of 430 sites to be evaluated for eligibility to the National Register of Historic Places. Buildings ranged from mid-19th century to mid-20th century agricultural, residential, commercial and religious properties. Based upon the nature of each property, 28 new properties were recommended as eligible for listing on the National Register of Historic Places. In addition, four Historic Districts were recommended along with one Multiple Property Group.

Christopher J. Whitton
Asbestos/Lead/Demolition Monitoring Support Staff

Mr. Whitton is an environmental engineer with 3 years of experience on a variety of environmental projects, including environmental site assessments, site characterizations, and remedial designs. He has prepared several work plans, site management plans, final engineering reports, and monitoring reports for the USEPA, NYSDEC, and various private industry clients. His field work experience includes surface and groundwater sampling, air sampling, field XRF analysis, and subcontractor oversight.

Project Engineer, Mutual Redevelopment Houses, Inc., New York, New York. Mr. Whitton assisted in the design of an asbestos abatement project and preparation of submittals to various New York City agencies. Additionally, he performed subcontractor oversight during remedial activities.

Project Engineer, Con Edison Inc., New York. Mr. Whitton prepared the work plan, field sampling plan, quality assurance project plan, and health and safety plan for the investigation of a petroleum spill in accordance with NYSDEC DER-10 requirements. He also prepared quantity estimates for pipeline excavation and abandonment.

Project Engineer, Zschiegner Refining Company Superfund Site, Howell, New Jersey. Mr. Whitton prepared a groundwater data evaluation report in order to monitor contamination remaining after completion of remedial activities. Additionally, he conducted low-flow groundwater sampling onsite.

Project Engineer, Clariant Corporation, Fair Lawn, New Jersey. Mr. Whitton performed operations, maintenance, and monitoring tasks for a groundwater and soil vapor treatment facility. He additionally prepared a monitoring report detailing site monitoring activities and treatment system operation.

Project Engineer, Lanxess Corporation, Haledon, New Jersey. Mr. Whitton performed operation, maintenance, and monitoring tasks for a groundwater and soil vapor treatment facility.

Project Engineer, Horseshoe Road Superfund Site, Sayreville, New Jersey. Mr. Whitton collected samples from sediment cores, and prepared and analyzed soil samples in the field with the use of x-ray fluorescence (XRF) analysis.

Project Engineer, Fumex Sanitation Site, Garden City Park, New York. Mr. Whitton prepared a Site Management Plan and a Final Engineering Report detailing all aspects of the completed remedial action and procedures for the monitoring and maintenance of remaining contamination.

Project Engineer, Solvent Finishers Site, Jericho, New York. Mr. Whitton collected groundwater samples using an inertial pump from multi-level well clusters and performed sample management.

Education

B.S. – Chemical Engineering, Rensselaer Polytechnic Institute, 2010

Certifications

40 hour OSHA HAZWOPER

HAZWOPER Supervisor

First Aid and CPR

NYS Asbestos Air Technician and Project Monitor

DOT Hazardous Materials Shipping for Environmental Professionals

Years of Experience: 4

Net Availability: 100%

CDM Smith

Prior to CDM Smith

Project Monitor, J.C. Broderick and Associates, Inc. Mr. Whitton was a project monitor and air technician for asbestos abatement projects. He collected air samples, performed visual inspections, and conducted oversight of abatement contractors.

Professional Activities

Member, American Institute of Chemical Engineers

MICHAEL R. STOCKU
TECHNICAL ADVISOR – ASBESTOS/LEAD

Years of Experience: 20

Net Availability: 40%

EXPERIENCE:

Project Manager for TTI Environmental, Inc. (TTI). With 20 years of experience, Mr. Stocku's responsibilities include:

- Lead Inspector/Risk Assessor utilizing TTI's XRF Analyzer. Performs numerous lead inspections throughout New Jersey. Mr. Stocku is the contract manager for New Jersey Transit Lead Based Paint Monitoring contract.
- Asbestos abatement design. Experienced in building surveys, preparation of abatement specifications, contractor evaluation and on-site monitoring.
- Air asbestos exposure assessments. Tasks include identification of materials and exposure risks as well as mitigation of identified problems via abatement and implementation of employee training programs.
- Radon assessments and testing in accordance with New Jersey Department of Environmental Protection (N.J.A.C. 7:28-27) regulations
- Mold assessments
- Supervises technicians and project scientists on assessment and abatement projects. Responsible for project timelines, budget, technical scope and closeout reporting.
- Performs pre-bid site visits and develops cost estimates for projects.

Director of Operations for Environmental Testing Consultants. Mr. Stocku oversaw the daily operations of the asbestos, lead, mold, and radon projects including scheduling, reporting and quality assurance. He performed risk assessment surveys and field investigation for the presence of possible asbestos containing material in the private and public sector. He also provided technical guidance to facility management in the proper operations and maintenance of the conditions found during baseline surveys, reviewed asbestos abatement contracts and provided full time supervision of asbestos abatement projects to ensure compliance with applicable local, state and federal regulation and specifications. Mr. Stocku additionally performed numerous mold assessments and radon testing.

EDUCATION:

Bachelor of Science Degree from Drexel University, 1994

CERTIFICATIONS:

New Jersey Department of Health & Senior Services Lead Inspector/Risk Assessor
New Jersey Asbestos Safety Technician, #00962
Certified AHERA Building Inspector
Certified AHERA Management Planner
Certified AHERA Asbestos Project Designer
City of Philadelphia, Asbestos Project Inspector
City of Philadelphia, Asbestos Investigator
Commonwealth of Pennsylvania, Lead Inspector
Radon Measurement Technician
NIOSH 582 Course

JEFF SEAMAN
ASBESTOS/LEAD/DEMOLITION MONITORING
SUPPORT STAFF

Years of Experience: 10
Net Availability: 100%

EXPERIENCE:

Field Technician for **TTI Environmental, Inc. (TTI).** With 10 years of experience, Mr. Seaman's responsibilities include:

- Experienced in building surveys, assisting in the preparation of abatement specifications, contractor evaluation and on-site monitoring.

- Conducts air asbestos exposure assessments. Tasks include identification of materials and exposure risks as well as mitigation of identified problems via abatement and implementation of employee training programs.

- Conducts lead based paint evaluations/inspections for school buildings, hospitals, residential homes and day care centers.

- Performs mold assessments and indoor air quality testing.

CERTIFICATIONS:

. New Jersey Department of Community Affairs – Asbestos Safety Technician #01136
. New Jersey Department of Health & Senior Services – Lead Certification Permit #019044
. EPA/AHERA – Asbestos Building Inspector
. EPA/AHERA – Asbestos Management Planner
. Hazardous Site Worker Course OSHA 29 CFR 1910.120

EDUCATION:

. B.A. in Criminal Justice, Richard Stockton College of New Jersey, Pomona, NJ (2003)

WILLIAM CLARK
ASBESTOS/LEAD/DEMOLITION MONITORING
SUPPORT STAFF

Years of Experience: 14

Net Availability: 100%

EXPERIENCE:

- **Senior Field Technician** for **TTI Environmental, Inc. (TTI)**. Mr. Clark has been involved in the asbestos abatement industry for over 14 years performing building inspections, air monitoring and overseeing abatement activities. Some of his responsibilities include:

  - Supervision of abatement contractors
  - Performing pre, during and clearance air sampling
  - On-site reading of PCM analyses
  - Asbestos building inspections

CERTIFICATIONS:

- New Jersey Asbestos Safety Technician
- Certified AHERA Building Inspector
- Certified AHERA Asbestos Management Planner
- Certified AHERA Asbestos Project Design
- NJDHSS Lead Evaluator/Risk Assessor
- EPA Asbestos Building Inspector
- Philadelphia Asbestos Project Inspector
- Philadelphia Certified Microscopist
- Philadelphia Asbestos Investigator
- Pennsylvania Asbestos Building Inspector
- Pennsylvania Asbestos Management Planner
- Delaware Project Monitor
- AIHA-AAR Microscopist
- NIOSH 582 Course

DAVID COLLINS
ASBESTOS/LEAD/DEMOLITION MONITORING
SUPPORT STAFF

Years of Experience: 8
Net Availability: 100%

EXPERIENCE:

Asbestos Building Inspector for **TTI Environmental, Inc. (TTI).** With eight years of experience, Mr. Collins' responsibilities include:

- Experienced in building surveys, preparation of abatement specifications, contractor evaluation and on-site monitoring.
- Conduct air asbestos exposure assessments. Tasks include identification of materials and exposure risks as well as mitigation of identified problems via abatement and implementation of employee training programs.

- **Technical Writer** for **TTI Environmental, Inc.** Mr. Collins is responsible for the preparation of detailed reports that document the completion of all Industrial Hygiene Department projects. His responsibilities include:

  - Building inspection reports for Lead-Based Paint and/or Asbestos-Containing Material.
  - Asbestos and lead abatement project reports, air monitoring and laboratory projects reports preparation.
  - Final review of all project reports, ensuring the reliability of all analytical results and compliance with existing city, state and federal regulations as they apply to each project.
  - Applying database, spreadsheet, graphic and CAD skills in the development of computerized report applications, invoice, manpower and revenue tracking systems, as well as, automated documentation of analytical results.

CERTIFICATIONS:

- EPA/AHERA – Asbestos Building Inspector

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Manuel Perotin, P.E., CFM

Title: Technical Advisor - FEMA Compliance

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Sandy New York A/E Mitigation Services/Hazard Mitigation Grant Program (HMGP) Technical Assistance - FEMA Region II (New York) Fee: $557,000	CDM Smith	Hazard Mitigation Technical Assistance – including HMGP Grant Reviews and Losses Avoidance Study	Subject Matter Expert	7 Months	60%	6/2013 – Present	FEMA Region II Robert J Tranter 212-680-3628
Sandy A/E Mitigation Services/Combined 404 & 406 Hazard Mitigation Demonstration Project- FEMA HQ (Washington DC) Fee: $374,455	CDM Smith	Hazard Mitigation Technical Assistance	Subject Matter Expert/ Project Manager	3 Months	20%	10/2013 - Present	FEMA Headquarters Franki Coons 202-646-3079
Hazard Mitigation Grant Program (HMGP) Technical Reviews - FEMA Region VI (Texas) Fee: $335,594	CDM Smith	Hazard Mitigation Technical Assistance – including HMGP Grant Reviews	Subject Matter Expert	7 Months	5%	6/2013 – Present	FEMA Region VI Connie Dill 940-898-5196
Hazard Mitigation Grant Program (HMGP) Environmental Assessments – FEMA Region VI (Texas) Fee: $1,300,000	CDM Smith	Environmental Assessments for approved HMGP Projects	Project Manager	5 Months	10%	8/2013 – Present	FEMA Region VI Connie Dill 940-898-5196
Hazard Mitigation Assistance Grant Program Technical Assistance - FEMA HQ (Washington DC) Fee $1,499,875	CDM Smith	Hazard Mitigation Technical Assistance – including HMGP Grant Reviews	Subject Matter Expert	7 Months	5%	6/2013 – Present	FEMA Region VI Kim Rogers 202-646-2712

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Michael Spletto

Title: Technical Advisor – CDBG Compliance

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDCA, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.5 million Fee: $1.8 million awarded to date Total CDBG funding $1.8 billion (First Allocation)	CDM Smith	Development of Action Plan and RFPs for intake and construction oversight. Environmental Review and Tier 1 Environmental Assessments	Program Manager	4 Months	100%	2/2013 – Present	State of NJ, Department of Community Affairs Paul Macchia, Chief of Staff 609-341-3221
Community Development Block Grant Program for "Ike" and Midwest Disaster Recovery, State of Illinois Fee: $11 million Total CDBG Funding: $200 Million	CDM Smith	Disaster Recovery	Director	30 Months	25%	6/2010 – 6/2015 (estimated)	State of Illinois Office of Community Development Frankie Atwater, Acting Deputy Director 217-299-5545
Community Development Block Grant Program, Harris County, TX Fee: $14.7 Million Total CDBG Funding: $56.3 Million	CDM Smith	Disaster Recovery	Director	36 Months	25%	5/09 – 4/2013	Harris County Office of Community Development Daphne Lemelle, Director 713-578-2064
FEMA and CDBG Funded Flood Recovery, Minot, ND Fee: $10 million Total CDBG Funding: $102 Million	CDM Smith	Disaster Recovery	Subject Matter Expert	24 Months	15%	5/2012 - Present	City of Minot Cindy Hemphill, Finance Director 701-857-4784

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Robert Batherson

Title: Technical Manager

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $40.5 million	CDM Smith	Home Demolition	Project Manager	48 Months	100%	1/2009 – 12/2013	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA Fee: $2.5 million	CDM Smith	Debris Removal	Project Manager	24 Months	25%	3/2006 – 8/2008	St. Tammany Parish Greg Gorden, Director 985-898-2535
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA Fee: $19.6 million	CDM Smith	Debris Removal	Project Manager	44 Months	50%	3/2006 – 12/2009	St. Tammany Parish Greg Gorden, Director 985-898-2535
FEMA and CDBG Funded Flood Recovery, Minot, ND Fee: $9.5 million	CDM Smith	Home Demolition, Rehabilitation and Reconstruction	Project Manager	10 Months	100%	3/2013 – 1/2014	City of Minot Cindy Hemphill, Finance Director 701-857-4784
Private Property Demolition and Debris Removal Program, Jefferson Parish, LA Fee: $2,197,310	CDM Smith	Demolition and Debris Removal	Project Manager	36 Months	25%	11/2007 – 5/2011	Jefferson Parish Marnie Winter, Director 504-736-6440

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Maria Watt, P.E.

Title: Program Manager

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDCA, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.5 million Fee: $1.8 million awarded to date Total CDBG funding $1.8 billion (First Allocation)	CDM Smith	Development of Action Plan, RFPs for intake, construction oversight. Environmental Review Tier 1 Environmental Assessments	Principal-in-Charge	11 Months	50% during the first 3 months; 10%-15% for the remaining months	2/2013 – Present	State of NJ, Department of Community Affairs Paul Macchia, Chief of Staff 609-341-3221
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments, Environmental Review Record Development	Program Director	5 Months	30% during the first 2 months; 10%-15% for the remaining months	8/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
NJDEP Remedial Design Term Contract, NJ Contract Value: $4 million Fee: $2 million awarded to date	CDM Smith	Scoping Documents, Environmental Assessments, Design Documents, Bid Specification, Procurement Support, Construction Administration Services	Program Manager	77 Months	Range between 10-20% depending on how many simultaneous Work Orders issued.	2007 – Present (Two 5-year term contracts)	NJDEP Publically Funded Remediation Element Bureau of Investigation, Design and Construction Michael Burlingame, Remedial Design Contract Manager 609-292-1424
Department of Energy, Brookhaven National Laboratory, Environmental Assessment, Design, Demolition, and Construction Services Fee: $15 million awarded	CDM Smith	Scoping Documents; Environmental Assessments, Design, Demolition and Construction Administration	Program Manager	120 Months	50%	1992 – 2002	GSA Public Buildings Service Thomas W. Burke, PE, General Service Administration 212-264-0800
Environmental Review for Demolition of Public Housing in Newark, New Jersey Fee: $91,845	CDM Smith	Environmental Assessments, Phase I Environmental Site Assessments	Senior Technical Advisor	10 Months	5%	11/2007 – 8/2008	Newark Housing Authority Ram Naveendra 973-273-6166

ENVIRONMENTAL CONNECTION INC
A Vertical Technologies Corporation

RESUME

JAMES FRISBEE, CIH
TECHNICAL ADVISOR – LEAD/ASBESTOS

Years of Experience: 30

Net Availability: 40%

RELEVANT EXPERIENCE:

Mr. Frisbee is the Operations Manager for the Industrial Hygiene Division of Vertical Technologies, Inc., (VTI) the parent company of Environmental Connection, Inc., (EC) and Contamination Control Engineering, Inc., (CCE). Mr. Frisbee is a Certified Industrial Hygienist (CIH) and is responsible for managing all industrial hygiene operations for the company, including asbestos and lead-based paint management services, indoor air quality, moisture and mold services, health and safety and OSHA monitoring services. Mr. Frisbee is also responsible for business development of industrial sector clients, developing OSHA compliance monitoring sampling plans, performing hazard assessments and expert witness testimony.

Mr. Frisbee has experience in conducting remedial site assessments, US EPA stationary source reference methods, OSHA and NIOSH sampling and analytical methods, indoor air quality investigations, ventilation system evaluations, occupational safety and health audits, asbestos inspections, asbestos management plans and designs and project management, lead-based paint management services and site investigations for microbial and building science related issues. Mr. Frisbee's career in industrial hygiene began in 1983 and he has maintained his American Board of Industrial Hygiene (ABIH) CIH designation since 1993.

PROJECT EXPERIENCE:

The following is an abridged synopsis of Mr. Frisbee's professional experience:

- Mr. Frisbee has managed industrial hygiene offices located in New York City, Pennsylvania and now in Trenton, NJ. He was active as an Asbestos Safety Technician and Project Manager in support of numerous asbestos abatement projects in New Jersey public schools between 1983 and 1990. He designed and managed a three year, $12,000,000 asbestos abatement project for Hartz Mountain Industries in Newark, New Jersey.

- Mr. Frisbee has conducted facility Health and Safety surveys for the General Services Administration throughout Region 2, including federal court houses, IRS facilities, and Region 2 headquarters at 26 Federal Plaza in New York City. Health and safety inspections involved the evaluation of physical, chemical and potential biological hazards within the workplace, including evaluation of noise sources, illumination, slip/trip/fall hazards, hazardous material storage, ingress/egress signage and fire safety concerns.

- Mr. Frisbee provided extensive industrial hygiene consultation and the oversight of monitoring services for lead paint disturbance activities for the New York City Transit Authority (NYCTA), Office of Systems Safety, (OSS) between 2000 and 2002. This work included the review of daily OSHA monitoring data for the NYCTA, review of daily monitoring log notes and paint chip sampling reports to develop a database of employee

exposure monitoring data for specific lead tasks (sandblasting, power drilling, needle-gun, hand-scraping, torch-cutting) and to develop a Lead Exposure Assessment and/or Negative Exposure Assessment for the tasks performed by the NYCTA maintenance personnel.

- Mr. Frisbee has also executed several large microbial investigation projects at the State of New Jersey Capital Complex and at The College of New Jersey, employing various investigative techniques, including moisture mapping, air sampling, surface sampling, Heating, Ventilation and Air Conditioning (HVAC) system investigation and testing.

- Mr. Frisbee has supported several State of New Jersey projects involving *Legionella* contamination within the domestic water systems. Mr. Frisbee developed investigation protocols, including visual inspections to identify mechanical system deficiencies, water and surface swab sampling plans to assist in rapid control of potential *legionella* contamination.

- Mr. Frisbee managed OSHA compliance monitoring for the US Pipe and Foundry facility located in Burlington, New Jersey, for exposures to carbon monoxide, formaldehyde, particulates, coal dust, metals, noise, crystalline silica and sulfur dioxide.

- Mr. Frisbee has supported Monmouth County with monitoring of lead dust clean-up within an Indoor Firing Range, including all surfaces, all Air Handling Units and associated air duct systems in support of a switch from the use of lead containing to lead-free ammunition.

EDUCATION:

B.S. Geology/ Environmental Science
Susquehanna University, Selinsgrove, PA (1979-1983)

CERTIFICATIONS AND ASSOCIATIONS:

During his extensive career in the environmental sciences, Mr. Frisbee has received certifications of proficiency as follows:

- Certified Industrial Hygienist (CIH)
- Certified Exterior Insulation Finish System (EIFS) Inspector
- State of New Jersey Asbestos Safety Technician (AST)
- AHERA Asbestos Building Inspector and Management Planner
- AHERA Asbestos Project Designer
- OSHA Hazardous Waste Operations and Emergency Responder (HAZWOPER)

Mr. Frisbee maintains professional membership in the following organizations:

- American Industrial Hygiene Association (AIHA)
- American Industrial Hygiene Association (AIHA) Philadelphia Section
- American Board of Industrial Hygiene (ABIH)
- Exterior Design Institute (EDI)

RESUME

RYAN BROADWATER
TECHNICAL ADVISOR: ASBESTOS/LEAD

Years of Experience: 20

Net Availability: 40%

AREAS OF EXPERTISE:

Mr. Broadwater is a Project Manager and Senior Industrial Hygienist for Vertical Technologies, Inc., (VTI) and its subsidiaries Environmental Connection, Inc., (EC) and Contamination Control Engineering, Inc., (CCE) whose background encompasses years of experience in environmental safety and health.

Mr. Broadwater has an extensive background in environmental investigations - including environmental site assessment, HVAC inspection and management; microbial remediation project design and implementation; indoor air quality; construction practices; subsurface evaluation, monitoring, and remediation coordination; development and implementation of site specific health and safety plans and AHERA management plans; lead project design and monitoring; and coordination of both large and small scale Asbestos Hazard Abatement Projects in a variety of jurisdictions. Mr. Broadwater has been involved in the environmental field since 2002.

As a Project Manager, Mr. Broadwater is directly responsible for overseeing a staff of technicians that monitor on-site activities of remediation/survey projects, while serving as a project point of contact on an administrative level and working in concert with key corporate personnel.

PROJECT EXPERIENCE:

The following is a listing of Mr. Broadwater's key project experience:

- Mr. Broadwater has provided successful project management, monitoring and analytical services for numerous asbestos, lead, microbial, ground water and soil reclamation, and chemical projects of various sizes and complexity.

- Served as supervising project manager for a three (3) year asbestos removal project to allow for the installation of code mandated fire suppression and associated security system at five (5) residential halls at Ancora Psychiatric Hospital, a State of New Jersey, Division of the Treasury, capital construction project. Mr. Broadwater conducted an audit of existing assessment reports and asbestos project design, and revised and updated work plans to accommodate the project throughout the progression of the construction activities. The five (5) buildings addressed in this project comprise the primary residential facilities at the hospital, and required delicate care and attention to detail in regards to the normal routine and activities of both the clients and staff in an effort to ensure the smooth continuation of Ancora Psychiatric Hospital's important mandate.

- Provided a variety of environmental consulting services for both public and private colleges and universities. Including The College of New Jersey, Bucks County Community College, Mercer County Community College, Middlesex County College, Ramapo College of New Jersey, Rider University, Princeton University, Rowan University, Stockton University, Essex County College, Farleigh Dickinson University, Camden County College, Stockton College, Thomas Edison State College, Burlington County Community College, and Ocean County College. Mr. Broadwater served as project manager for several projects of high sensitivity and importance – including emergency water intrusion and microbial impact study and remediation at Eickhoff Hall, which is the primary dining and campus life facility at the College of New Jersey, Environmental coordination for the demolition of an Academic Building (Bosshart Hall) and two residential housing complexes at Rowan University, and an extensive role in building retrofit and reallocation at Bucks County Community College – Newtown Campus.

- Served in a variety of tasks and roles for projects under term contracts for departments and agencies of the State of New Jersey, including the Department of Corrections, Department of Labor and Workforce Development, Department of Human Services, Department of Transportation, Department of Environmental Protection, Juvenile Justice Commission, and Division of Treasury – Department of Property Management and Construction. Key projects include the inspection, planning, and design of the asbestos abatement/ roof replacement project at Garden State Correctional Facility – Central Facilities and Administration, as well as the conversion activities at the Villas Wildlife Management Area. Mr. Broadwater has been involved in more than 100 projects conducted by the State of New Jersey and its agencies over nearly a decade.

- AHERA Coordinator for more than 45 public and private school districts located in New Jersey and Pennsylvania. Mr. Broadwater has addressed district personnel and community members regarding emergency response, guided Locale Education Agencies in project design, bid coordination, and construction timeline execution, has developed a variety of approaches to cost effectiveness in regards to public relations criteria for school districts on a case by case basis.

EDUCATION:

B.S. Political Science
The Pennsylvania State University 1995-1999

CERTIFICATIONS AND ASSOCIATIONS:

Mr. Broadwater has received certifications of completion/ licensure as follows:

- National Institute for Occupational Safety and Health (NIOSH) 582 Sampling and Analysis
- Listing on American Industrial Hygiene Association's Asbestos Analyst Registry
- Certified for the use of X-Ray Fluorescence Analysis Equipment
- USEPA Accreditation as an AHERA Building Inspector, licensed PA (prior NY and MD)

ENVIRONMENTAL CONNECTION INC
A Vertical Technologies Corporation

RESUME

ERRINGTON P. WOODHAM
ASBESTOS/LEAD/DEMOLITION MONITORING

Years of Experience: 26
Net Availability: 100%

RELEVANT EXPERIENCE:

Mr. Woodham started in the Industrial Hygiene industry in 1987, performing asbestos abatement and monitoring within various schools located in Philadelphia and New Jersey. Since that time, he has performed Phase I & II investigations and remediation activities at various abandoned industrial sites. Additionally, he provided air management services to various industrial clients throughout the Philadelphia metropolitan area. Mr. Woodham performed inspections, bulk sampling, PCM analysis and ensured contractor compliance during remediation activities for various city owned buildings in Philadelphia, including police garages, libraries and health centers. Mr. Woodham also provided Health and Safety oversight at major oil refineries during excavation activities. He has also provided Health and Safety oversight including area and personal monitoring for hydrocarbons during excavation activities at major pharmaceutical facilities. Lastly, Mr. Woodham has provided project oversight and air monitoring for a large microbial remediation for a large banking institution in Pennsylvania as well as the same oversight for a large State of New Jersey Department of Transportation project which involved microbial remediation, asbestos abatement and duct cleaning.

CERTIFICATIONS AND AFFILIATIONS:

Mr. Woodham has received certifications of proficiency as follows:

- Lead Hazard & Abatement-Temple University, #LH103
- Asbestos Project Monitor-Delaware, PM390
- NIOSH 582 PCM Analyses
- Certificate, Nuclear Hazards Training Course
- Certificate, Advanced Supervisor Course
- Certificate, Medical Specialist Course-US Army Academy
- Certificate, Preventative Medicine Procedures Course-US Public Health Service
- DOT-HAZMAT-Hazardous Waste packing/shipping/receiving
- City of Philadelphia Asbestos Project Inspector #911-2006
- City of Philadelphia Asbestos Investigator
- PADOL Asbestos Building Inspector #001624
- PADOL Asbestos Contractor/Supervisor #001624

Richard Grubb & Associates, Inc.
Cultural Resource Consultants
DBE/WBE/SBE Certified
email: mail@richardgrubb.com • www.richardgrubb.com

Damon Tvaryanas, Environmental Compliance/Permitting - Historic

Years of Experience
With this firm:
2011-Present
With other firms: 20

Education
M.S. 1993
University of Pennsylvania
Historic Preservation

B.A. 1991
New York University
Fine Arts

Professional Training
40-Hour Health and Safety Training for Hazardous Waste Operations and Emergency Response (OSHA 29 CFR 1910.120), October 2002; 8-Hour HAZWOPER Refresher, August 2011

Net Availability:
30%

Professional Experience Summary:

Damon Tvaryanas' technical and managerial responsibilities include the direction of cultural resource investigations, including historical architectural surveys, preservation plans, historic structure reports, National Register of Historic Places nominations, Historic American Building Survey (HABS)/Historic American Engineering Record (HAER) documentation, the development of historic interpretive displays and publications, and the preparation of reports. Mr. Tvaryanas provides technical oversight to project staff to ensure that all cultural resources investigations are technically complete and comply with Section 106 of the National Historic Preservation Act, NEPA, Section 4(f), and other cultural resource regulations. He exceeds the qualifications set forth in the Secretary of Interior's Standards for an Historian [36 CFR 61].

Representative Project Experience:

DeMott Lane Bridge, Delaware & Raritan Canal State Park, Franklin Township, Somerset County, NJ (Sponsor: State of New Jersey, Division of Property Management and Construction) Provided oversight to the senior architectural historian during the Application for Project Authorization (APA) performed in connection with the replacement of the DeMott Lane Bridge over the Delaware and Raritan Canal in Franklin Township. Since the proposed undertaking was located within the New Jersey and National Register-listed Delaware and Raritan Canal Historic District, the APA was required and completed in compliance with the New Jersey Register of Historic Places Act.

Hudson-Bergen Light Rail, Route 440 Extension, City of Jersey City, Hudson County, NJ (Sponsor: NJ Transit) Provided oversight to the senior architectural historian for a Historic Architectural Resources Background Study (HARBS) and a Phase IA Archaeological Survey and Effects Assessment Report performed in connection with NJ Transit's extension of the existing Hudson-Bergen Light Rail Line. The HARBS found 34 previously surveyed and newly identified resources more than 50 years of age within the APE-Architecture. Only one of these resources met the criteria for listing in the National Register of Historic Places as an above-ground historic property: the previously identified Former Candy Factory. The study concluded that the project would have no adverse effect to this historic property on condition that project plans in the vicinity of the Former Candy Factory followed the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, including context sensitive treatments in conjunction with the proposed abutment, staircases, and ramps, and that the HPO be afforded an opportunity to review and comment on the final design plans as they may affect the property.

Cross Harbor Freight Program, Greenville Yard Transfer Bridge Rehabilitation and Repair, City of Jersey City, Hudson County, NJ (Sponsor: Port Authority of New York and New Jersey) Provided oversight to the senior historian for the proposed emergency repairs to the National Register-eligible marine transfer bridges and car float system a project sponsored by the Port Authority of New York and New Jersey. The project was found to have no adverse effect to historic properties on condition that the work was guided by the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, including in-kind replacement of materials. Work tasks included background research, Section 106 consultation, assessment of project effects, HAER recordation, and participation in the production of a documentary video addressing the history of the historic railroad/port facility.

Richard Grubb & Associates, Inc.
Cultural Resource Consultants
DBE/WBE/SBE Certified
email: mail@richardgrubb.com • www.richardgrubb.com

Paul J. McEachen, Environmental Compliance/Permitting - Archaeologic

Years of Experience
15
With other firms: 3

Education
MA 1996
Memorial University
Anthropology

BA 1993
University of Windsor
Anthropology and
Classics

Professional Training
CRM Essentials:
Restoring Your Skills,
Trenton, NJ,
October 2005

Section 106 Workshop,
Albany, NY,
November 2008

Professional Registration
Register of Professional
Archaeologists

Professional Societies
Archaeological Society
of New Jersey

Society for American
Archaeology

Eastern States
Archaeological
Federation

Middle Atlantic
Archaeological
Conference

Net Availability:
30%

Professional Experience Summary:

Paul J. McEachen provides technical oversight on most archaeological projects undertaken in New Jersey. Mr. McEachen has served as a Principal Investigator on all phases of archaeological investigations and specializes in prehistoric archaeology. Mr. McEachen has prepared and directed cultural resources surveys in accordance with Section 106 of the National Historic Preservation Act, NEPA, and other cultural resource regulations. He exceeds the qualifications set forth in the Secretary of Interior's Standards for Archaeologists [36 CFR 61].

Representative Project Experience:

DeMott Lane Bridge, Delaware & Raritan Canal State Park, Franklin Township, Somerset County, NJ (Sponsor: State of New Jersey, Division of Property Management and Construction) Provided oversight to the principal investigator/senior archaeologist for the Phase IA/IB Archaeological Survey conducted within the Area of Potential Effects (APE) for the replacement of the DeMott Lane Bridge over the Delaware and Raritan Canal in Franklin Township. No significant prehistoric or historic archaeological resources were identified during the archaeological surveys. Since the proposed bridge was located within the New Jersey and National Register-listed Delaware and Raritan Canal Historic District, RGA also prepared an Application for Project Authorization in accordance with the New Jersey Register of Historic Places Act.

Elmer Lake Dam Rehabilitation, Borough of Elmer, Salem County, NJ (Sponsor: State of New Jersey, Division of Property Management and Construction) Provided oversight to the principal investigator/senior archaeologist during the archaeological monitoring for the proposed Elmer Lake Dam Rehabilitation project in the Borough of Elmer. Consultation with the NJ Historic Preservation Office (HPO) indicated that the right downstream embankment of the dam rehabilitation project had the potential to impact brick wall remains within the APE likely associated with a former early nineteenth-century gristmill. Excavation in and around the site was ultimately minimal and no intact subsurface artifact deposits were observed during the monitoring.

Utility Upgrade, Monmouth Battlefield State Park, Manalapan Township, Monmouth County, NJ (Sponsor: State of New Jersey, Division of Property Management and Construction) Provided oversight to the principal investigator/senior archaeologist during the a Phase IA Archaeological Survey for a proposed utility upgrade project located within the New Jersey and National Register-listed Monmouth Battlefield State Park and Historic District. As a result of the survey and after consultation with the HPO and representatives of the Monmouth Battlefield State Park, archaeological monitoring was recommended within selected areas of the APE where proposed utility trenching excavations had the potential to impact significant archaeological resources.

IAN C. BURROW, Ph.D., RPA
Environmental Compliance/Permitting - Historic

EDUCATION

Ph.D., History and Archaeology, University of Birmingham, England, 1979

B.A., History and Archaeology, University of Exeter, England, 1971

Years of Experience: 38

Net Availability: 30%

EXPERIENCE

1988-present	Principal Archaeologist Hunter Research, Inc., Trenton, NJ Vice President and stockholder of firm providing archaeological and historical research, survey, excavation, evaluation, report preparation and public outreach services in the Northeastern United States.
1995-present	Consultant Archaeological Reviewer for Township of Evesham, New Jersey, Planning and Zoning boards
2010-present	Adjunct Professor Rutgers University
2006-present	Adjunct Professor Drew University, New Jersey
2008-present	Adjunct Professor Rider University, New Jersey
1986-1988	Director Oxford Archaeological Unit, Oxford, England Principal in charge of non-profit organization undertaking archaeological projects.
1975-1986	County Archaeologist for counties of Somerset (1979-86) and Shropshire (1975-79), England

SPECIAL SKILLS AND INTERESTS

- 18th-century military sites
- archaeology and standing buildings
- urban archaeology
- archaeological education and public outreach
- national historic preservation policy
- master planning for historic sites
- National Register of Historic Places nominations

SELECTED PUBLICATIONS

"Historical Archaeology in Trenton: A Thirty-Year Retrospective." In *Historical Archaeology of the Delaware Valley, 1600-1850*, edited by Richard Veit and David Orr. University of Tennessee Press, Knoxville, Tennessee [2013] (with Richard Hunter).

"Steel Away: the Trenton Steel Works and the Struggle for American Manufacturing Independence" (with Richard Hunter). In *Footprints of Industry: Papers from the 300th Anniversary Conference at Coalbrookdale, 3-7 June 2009.* BAR British Series 523 [2010]: 69-88.

Review of Paul Everill: "The Invisible Diggers: a study of British Commercial Archeology". *Antiquity 84 (2010): 256-257*

"The Historical Geography and Archaeology of the Revolutionary War in New Jersey." In *New Jersey in the American Revolution*, edited by Barbara J. Mitnick, pp.165-193. Rutgers University Press [2005] (with Richard W. Hunter).

Ancient Ways: Native Americans in South Trenton, 10,000 B.C. to A.D. 1700. New Jersey Department of Transportation and Federal Highway Administration [2005] (24-page booklet).

A Tale of Two Houses: The Lambert Douglas House and the Rosey Hill Mansion, 1700-1850. New Jersey Department of Transportation and Federal Highway Administration [2005] (24-page booklet).

"Archaeological Data Recovery Investigations at the Derewal Prehistoric Site, Hunterdon County, New Jersey." *Bulletin of the Archaeological Society of New Jersey,* No. 54, 12-42, 1999, co-authored with Donald Thieme, William Liebeknecht and Joseph Schuldenrein.

"The Savich Farm Site: An Archaeological Survey for Phase I of the Long-Term Management Plan." *Bulletin of the Archaeological Society of New Jersey,* No. 52, 35-50, 1997.

PROFESSIONAL AFFILIATIONS AND CERTIFICATIONS

Friends of the New Jersey State Museum: Trustee 2002-11
Friends of the New Jersey State Museum: Vice President 2009-11
American Cultural Resources Association: Board member 2003-2008
New Jersey Council for the Humanities Speakers' Bureau Member since 1998
Registered Professional Archaeologist since 1999
Fellow of the Society of Antiquaries of London
Institute of Field Archaeologists (UK: Charter Member)
Society for Historical Archaeology
Society for American Archaeology
Archaeological Society of New Jersey

Current 40-hour HAZWOPER and 8-hour HAZWOPER Supervisory certification

ELECTED AND INVITED POSITIONS

Register of Professional Archaeologists: President, 2010-2012
American Cultural Resources Association: President, 2004-2005
Association of County Archaeological Officers, UK: Chair 1984-1986
White House Preserve America Summit, New Orleans 2007, Panel Member
New Jersey Historical Commission Grants Review Panel Member 2002-2005

JAMES S. LEE, III, RPA
Environmental Compliance/Permitting - Historic

EDUCATION

M.A., Archaeology, University of Durham, Durham, United Kingdom, 1996

B.A., Anthropology and History, Rutgers University, New Brunswick, New Jersey, 1995

Years of Experience: 17

Net Availability: 30%

EXPERIENCE

2001-present — Principal Investigator/Report Manager
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Technical and managerial responsibility for report production. Participation in:

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report and proposal preparation
- supervision of cartographic and GIS product, graphic design and report layout
- hiring and supervision of personnel

2001 — Crew Chief
Kittatinny Archaeological Research, Stroudsburg, Pennsylvania

- survey and excavation
- supervision of field personnel
- stratigraphic and artifact analysis

1997-2001 — Principal Investigator/Project Manager
Cultural Resource Consulting Group, Highland Park, New Jersey

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report and proposal preparation
- hiring and supervision of personnel

1997-2000 — Laboratory Supervisor
Cultural Resource Consulting Group, Highland Park, New Jersey

Technical and managerial responsibilities for laboratory components of archaeological projects.Participation in:

- management of laboratory operations
- supervision of laboratory personnel
- computerization of artifact data
- prehistoric and historic ceramic analysis
- preparation of artifact inventories and writing of artifact sections of reports

1996-1997 Field Technician
Cultural Resource Consulting Group, Highland Park, New Jersey

SPECIAL SKILLS AND INTERESTS

- canals and associated water control structures
- water-powered mill sites
- iron manufacture
- prehistory of the northeastern United States
- prehistoric lithic technology
- historic sites interpretation and public outreach

PROFESSIONAL AFFILIATIONS

Society for Industrial Archaeology
Archaeological Society of New Jersey, Bulletin Editor
Society for Pennsylvania Archaeology
New York State Archaeological Association
Canal Society of New Jersey
Warren County Morris Canal Committee
Society for Industrial Archeology
Eastern States Archaeological Federation

CERTIFICATIONS

OSHA 40-hour Initial Training, 2002
OSHA 8-hour Refresher Course, 2012
OSHA 8-hour Confined Space Entrant Training 2007
Register of Professional Archaeologists

WILLIAM B. LIEBEKNECHT, RPA
Environmental Compliance/Permitting - Historic

EDUCATION

M.A., Public History, Rutgers University, Camden, New Jersey, 1993

B.A., Anthropology, Beloit College, Beloit, Wisconsin, 1984

Years of Experience: 29

Net Availability: 30%

EXPERIENCE

1993-present — Principal Investigator
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Participation in:

- Overall site direction and day-to-day management
- Development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- Report and proposal preparation
- Hiring and supervision of personnel

2005 — Adjunct Instructor
Burlington County College, New Jersey
Teaching the Archaeology of New Jersey

1991-1993 — Senior Archaeologist
Hunter Research, Inc., Trenton, NJ

1988-1991 — Laboratory and Drafting Supervisor
Hunter Research, Inc., Trenton, NJ

1988 (June-Aug.) — Field Supervisor
University of Delaware Center for Archaeological Research, Newark, DE

1985-1988 — Laboratory and Field Supervisor
Research & Archaeological Management, Inc. (RAM), Highland Park, NJ

1984-1985 — Research and Field Assistant, Historic Sites Research, Princeton, NJ

SPECIAL SKILLS AND INTERESTS

- New Jersey ceramic and early glass manufacturing
- American stoneware and yellow ware
- Delaware Valley prehistory
- British ceramics

SELECTED PUBLICATIONS

"Archaeological Investigations at Wistarburgh." In *Historical Archaeology of the Delaware Valley, 16900-1850,* edited by Richard Veit and David Orr. University of Tennessee Press, Knoxville, Tennessee [2013] (with Damon Tvaryanas).

"Archaeological Investigations at the Hilltown Glasshouse Site, Bucks County, Pennsylvania." *Glass Club Bulletin of the National American Glass Club* No. 213 (Spring 2009):12-18 (with David Long and Damon Tvaryanas).

"Thousands of Artifacts Recovered at Wistarburgh Glassworks Site." *Journal of Glass Studies* (2008) (with Damon Tvaryanas).

"Survey at Pennsylvania Glass Factory Site Yields Thousands of Fragments." *Journal of Glass Studies* (2008) (with David Long and Damon Tvaryanas).

"The Smith-Fulper Stoneware Pottery Site, Flemington, New Jersey." *Ceramics in America 2008*:316-322 (with Nadine Sergejeff and Rebecca White).

"Ligowsky's Red Clay Mud Saucers." *Ceramics in America 2008*:326-328.

"Locating Early Colonial Sites in the Delmarva Peninsula." *Bulletin of the Archaeological Society of Delaware* 44 (2007), New Series.

"A Whale of a Tale: Fish imagery and its possible significance to Native Americans." *Bulletin of the Archaeological Society of New Jersey* 62 (2007) (with Greg Lattanzi and Tom Willert).

"Archaeology in The Tidal Zone: Phase II Cultural Resources Investigations Along The Delaware Bay in Cape May County, New Jersey." *Bulletin of the Archaeological Society of New Jersey* 61 (2006).

"Jar or Jug? A Handled Stoneware Storage Vessel from the Delaware Valley." *Ceramics in America 2004*:264-265.

"The Richards Face – Shades of an Eighteenth-Century American Bellarmine." *Ceramics in America, 2003*: 259-261 (with Richard Hunter).

"Archaeological Data Recovery Investigations at the Derewal Prehistoric Site, Hunterdon County, New Jersey." *Bulletin of the Archaeological Society of New Jersey* 54 (1999):12-43. (with Ian Burrow, Donald Thieme and Joseph Schuldenrein).

"Ceramic Production at the Hickory Bluff Prehistoric Site [7K-C-411]." *Bulletin of the Archaeological Society of Delaware* 36 (1999), New Series, 3-11.

PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA)
Middle Atlantic Archaeological Conference (2005 Program Chairman)
Archaeological Society of New Jersey, (President 2004-2008)
Eastern States Archaeological Federation
Archaeological Society of New York
Archaeological Society of Delaware
Society for Pennsylvania Archaeology
Council of Northeast Historical Archaeology

CERTIFICATIONS

OSHA 40-hour Initial Training, Spring 1994-Present
Hazardous Materials Supervisory Training, September 1994
Delaware Sediment and Stormwater Management Certification, 1994

PATRICK HARSHBARGER
Environmental Compliance/Permitting - Archaeologic

EDUCATION

Years of Experience: 29

Net Availability: 30%

1990, M.A., History, University of Delaware, Newark, Del.

1988, M.P.A., Public Administration, Florida International University, Miami, Fla.

1984, B.A. *magna cum laude*, American History, Brown University, Providence, R.I.

EXPERIENCE

2010-present	Principal Historian/Architectural Historian, Hunter Research, Inc., Trenton, N.J.
	Technical and day-to-day managerial responsibilities for historic and archival research in support or historic architecture and archaeology; historic architectural survey, evaluation and recording of buildings and structures; historic preservation planning; public outreach; historic exhibits and signage; interpretive planning and development; report preparation; proposal preparation.
1996-present	National Editor, *Society for Industrial Archeology Newsletter* (www.sia-web.org/siapubs/publications.html)
1991-2010	Senior Historian/Preservation Planner, TranSystems Corp. (formerly Lichtenstein Consulting Engineers), Langhorne, Pa. and Paramus, N.J.
1991-2009	Historian/Editor, McKelvey Museum Services, Wilmington, Del.
1990	Historian, National Park Service, Historic American Engineering Record, Boston, Mass.
1989	Architectural Historian Intern, Bucks County Conservancy, Doylestown, Pa.
1986-88	Special Assistant/Editor, Office of the Vice President, Florida International University, Miami, Fla.
1984-1986	Deputy Director, Slater Mill Historic Site, Pawtucket, R.I.

SPECIAL SKILLS AND INTERESTS

- historic bridges
- historic transportation systems (roads, canals, railroads)
- preservation of historic machinery and tools
- industrial and commercial architecture
- engineering heritage
- industrial archaeology
- public history and heritage tourism
- photography
- historic survey digital databases

SELECTED PUBLICATIONS

"Two Pioneering American Roadways." *Proceedings of the Institution of Civil Engineers – Engineering History and Heritage.* London, England, May 2010.

Editor. *Abstracts of American Truss Bridge Patents, 1817-1900.* Society for Industrial Archeology, Houghton, Mich., 2009.

Robert John Prowse, New Hampshire State Bridge Engineer. New Hampshire State Historic Preservation Monograph Series. Concord, N.H., 2009.

Co-author. *National Guidelines for Historic Bridge Rehabilitation and Replacement.* Washington, D.C.: American Association of State Highway and Transportation Officials, 2008.

"Defining Historic Roads." *Proceedings of the 6th Preserving the Historic Road in America Conference.* Albuquerque, N.M., 2008.

"Historic Bridge Basics." South Carolina Department of Transportation, Columbia, S.C., 2004.

"Strategies for Historic Evaluation of Standard Highway Bridges, 1920-1960." *Proceedings of the Preserving the Recent Past 2 Conference*, Philadelphia, October 2000.

"So Your Dualized Highway is 50 Years Old? Is It Historic?" *Proceedings of the Preserving the Historic Road in America Conference.* Morristown, New Jersey, April 2000.

Editor and Co-author. *Delaware's Historic Bridges: Survey and Evaluation of Historic Bridges with Historic Contexts for Highways and Railroads.* 2nd Edition Revised. Dover: Delaware Department of Transportation, 2000.

"Metal Truss Bridges and Their Builders in Historical Perspective: Some Thoughts from A Case Study of the Phoenix Bridge Company." *Spans of Time.* Ithaca, New York: Historic Ithaca, 1999.

PROFESSIONAL AFFILIATIONS

Association for Industrial Archaeology (U.K.)
Association for Preservation Technology International
National Railway Historical Society
National Society for the Preservation of Covered Bridges
National Trust for Historic Preservation
Newlin Foundation, Board of Directors
Society for Commercial Archeology
Society for the History of Technology
Society for Industrial Archeology
Society for the Preservation of Old Mills
Vernacular Architecture Forum

CONTINUING EDUCATION

Iron and Steel Preservation Workshop, Lansing, Mich., 2010, 2012
Ohio Department of Transportation, Section 106 Workshop, Columbus, Ohio, 2010
HAZWOPER 24-hr. Training, Philadelphia, Pa., 2009
Pennsylvania Department of Transportation, Section 106 Training, Allentown, Pa., 2009
Museum Studies Certificate, University of Delaware, Newark, Del., 1990
Hagley Museum and Library Fellow in the History of Industrialization and Technology, Wilmington, Del., 1988-1992

SECTION 2:
Experience

CDM Smith maintains specialized knowledge and expertise in developing, implementing, and administering disaster related private property and housing demolition programs. Our range of related services includes:

- Residential demolition program management
- Hazardous materials collection and disposal
- Asbestos and lead-based paint testing and abatement
- Environmental testing
- Surveying and utility engineering
- White goods removal, decommissioning, and recycling
- Contract procurement support and construction management
- Right-of-Entry (ROE) administration
- Selective salvage
- Debris disposal management

Our CDBG-DR experts are supported by a 5,000-person firm that provides program management and disaster recovery services to state and local governments for housing and infrastructure programs. With this depth of resources, CDM Smith can provide services to DPMC that include developing Requests for Proposals/Qualifications for demolition services that are compliant with HUD regulations; developing and reviewing construction cost estimates; developing demolition plans and specifications; performing oversight of demolition; reviewing invoices and change orders; and additional tasks. CDM Smith has developed housing demolition programs that are CDBG-DR compliant and will deliver this knowledge to DPMC's Blue Acres Program. Our experience includes a full slate of multi-discipline services and CDBG/CDBG-DR projects for which program management policies, procedures, forms, and manuals have been developed.

CDM Smith will apply best practices, lessons learned, and adapt existing policies and procedures from our previous housing demolition experience to successfully deliver the Blue Acres Program for DPMC.

CDM Smith has extensive experience on similar project as shown in Table 2-1 on the following page; however, as requested in the RFP, our five most relevant projects are presented in the remainder of this section.

Table 2-1.
The CDM Smith team has extensive experience on similar projects.

Project Name/Location	FEMA Funded	CDBG Funded	Asbestos Abatement	Home Demolition	Number of Homes	Debris Removal
Hurricanes Katrina and Rita, Louisiana Land Trust Home Demolition Program, LA		X	X	X	11,000	
Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts, NJ		X			300+	
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA	X					X
FEMA and CDBG Funded Flood Recovery, Minot, ND	X	X	X	X	143	X
Decommissioning and Demolition Services, Birmingham, NJ			X			X
Stick Built Homes Demolition Program, Ward County, ND		X	X	X	45	
Waterway Debris Removal, St. Tammany Parish, LA	X					X
Right-of-Way Debris Removal Management and Monitoring (Gustav), Ascension Parish, LA	X					X
Waterway Debris Removal Project, Ascension Parish, LA	X					X
Private Property Demolition Program, St. Bernard Parish, LA	X		X	X	17,000	
Right-of-Way Debris Removal Monitoring, Blytheville, AR	X					X
Tropical Storm Cindy Debris Monitoring, Jefferson Parish, LA	X					X
Hurricanes Katrina and Rita, Debris Staging Facility – Site Selection, City of Kenner, LA	X					X
Hurricanes Katrina and Rita, Storm Debris Staging Site – Operation, Jefferson Parish, LA	X					X
Hurricane Irene - Emergency Response and Storm Debris Cleanup, Assistance, Palm Beach County, FL						X
Hurricane Ivan - Emergency Debris Management Assistance, Bay County, FL	X					X
Cerro Grande Wildfire – Reconstruction and Engineering Consultation Services and Emergency Response Assistance, Los Alamos County, NM	X		X	X		X
Private Property Demolition and Debris Program, City of Slidell, LA	X		X	X	100	X

Hurricanes Katrina and Rita, Louisiana Land Trust Home Demolition Program State of Louisiana

1. **Client Name:** Louisiana Land Trust
2. **Regulatory Compliance:** HUD CDBG Funded; but work product met both FEMA and HUD Compliance requirements
3. **Contract Value:** $40.5 million
4. **Relevant Staff with Experience on Program:**
   - Robert Batherson, Program Manager
   - Adam Faschan, Ph.D., P.E., Senior Technical Advisor
   - Wesley Hall, Environmental and Contract Manager
   - Michael Spletto: HUD CDBG Compliance
   - Jenny Bywater, P.E., Stormwater Management
   - Nancy Whitten-Nassar, FEMA/Disaster Recovery Specialist
   - Pierre LeBrument, Crew Leader, QA/QC Manager

Key Project Features

- HUD CDBG disaster recovery
- Over 10,000 residential inspections and assessments performed
- Over 10,000 residential homes demolished
- Implemented innovative lump sum approach to demolition which reduced both demolitions and oversight costs

5. **Project Description of Tasks Performed:**

Since January 2009, CDM Smith has served as the Program Manager of the Louisiana Land Trust (LLT) Home Demolition Program that was developed in response to the devastation caused by Hurricanes Katrina and Rita. This program is the largest residential demolition program in the country to date. The inventory of properties owned by LLT or that have passed through disposition is 10,594. These homes were acquired through a state and federally funded buyout program and placed under the direction of the non-profit LLT. The intent of LLT is to return these properties to commerce either through demolition or rehabilitation of the structures.

The purpose of the LLT Demolition Program is to facilitate the demolition of over 10,000 storm-damaged homes and/or house slabs remaining after Hurricanes Katrina and Rita (2005) throughout Greater New Orleans and south Louisiana. Because all services and demolition activities are funded through the CDBG program, CDM Smith is responsible for assuring that all activities meet the requirements of this program.

Key to implementation of this program is to assure that the ultimate disposition of the properties meet the requirements of the jurisdiction that receives the property. This requires close coordination with all affected jurisdictions. For the City of New Orleans, this includes coordination with every neighborhood association to meet their goal of preserving damaged architecturally significant properties. The CDM Smith team has become an instrumental component in the Neighborhood Conservation District Commission (NCDC) and Historic Districts and Landmark Commission (HDLC) permit process in New Orleans. This required assessment of properties is performed to reclaim the structures if possible.

5.1. Preliminary Site Investigations

CDM Smith performed over 10,000 site inspections and assessments of residential properties within a three-year period. This comprehensive site inspection included inspections for white goods, household hazard waste, utility connections, storage tanks and other site features. Each of these properties were inspected and sampled for asbestos containing materials due to the age of the homes in compliance with State and Federal regulations. Prior to releasing any properties for demolition, an updated environmental checklist was completed in conjunction with the State Office of Community Development

Hurricanes Katrina and Rita, Louisiana Land Trust Home Demolition Program (Continued)
State of Louisiana

to ensure HUD compliance with ERR requirements. Also, all applicable homes were evaluated for historic architecture and archeological resources including coordination with the Neighborhood Conservation District Commission (NCDC) and Historic Districts and Landmark Commission (HDLC) permit process in New Orleans.

5.2. Project Scoping Documents

Upon completion of detailed site assessments and completion of asbestos sampling results, properties were scoped for demolition. Scoping consisted of establishing groupings of bid packages dependent on the characteristics of the properties. Properties were grouped by geographic location, size, whether or not Regulated Asbestos Containing Materials (RACM) demolitions were required, etc. Proposed groupings were reviewed with LLT to establish the most beneficial groupings to be established for bidding.

5.3. Preparation of Design and Bid Specifications

CDM Smith prepared over 80 bid packages for the demolition of over 10,000 homes in over 27 Parish areas. Bid packages were prepared according to geographic regions throughout the State of Louisiana. Also, bid packages were arranged in different sizes to facilitate maximum contractor participation. Multiple contracts were let concurrently with flexibility in unit quantities. This allowed LLT to release homes as they became available based upon the ongoing performance of each contractor. Combined with a unique price per home costing format, this approach helped to control both costs and quality of the demolition process.

5.4. Compliance with Environmental Statutes and Regulations

CDM Smith closely coordinated all asbestos inspection and abatement activities required for properties throughout the State with the Louisiana Department of Environmental Quality (LDEQ). Given the vast number of homes that were structurally too hazardous to enter, separate protocols for their demolition were developed to meet their approval. In addition, given the vast quantity of homes demolished, localized impacts on storm water quality were a concern. Again CDM Smith worked closely with LDEQ to develop, implement and oversee best management practices to minimize these impacts during the demolition process.

5.5. Permit Coordination/Approvals

CDM Smith established all permitting and utility disconnect protocols for all local demolition activities. Demolition permits for water and sewer utility disconnection permits were an embedded requirement in all demolition contracts to expedite the process and ensure that licensed plumbers were utilized and appropriate documentation provided prior to approving the demolition work. Site inspections by CDM Smith personal were performed to confirm white good removal, household hazardous waste removal, asbestos abatement clearance, and utility disconnects prior to allowing the contractor to proceed to demolition. CDM Smith also coordinated utility disconnections by private utilities such as electric, gas and cable service. Contractors were required to confirm disconnects prior to proceeding. This methodology for decommissioning sewer, water, electric, gas and cable utilities proved to be the optimal solution for rapid demolition of large numbers of residential structures.

5.6. Coordination with State, Federal and/or Local Officials

All applicable homes were evaluated for historic architecture and archeological resources including coordination of the Neighborhood Conservation District Commission (NCDC) and Historic Districts and Landmark Commission (HDLC) permit process in New Orleans. In addition, close coordination was provided with the Louisiana Office of Community Development to assure all HUD ERR compliance requirements were updated and met prior to demolition. CDM Smith worked with these resource agencies to "Historically Archive" listed or contributing historic structures that were too badly damaged to preserve.

A critical project aspect was establishing proper procurement procedures in compliance with HUD requirements prior to release of any bid packages. Once proper procurement

Hurricanes Katrina and Rita, Louisiana Land Trust Home Demolition Program (Continued)
State of Louisiana

procedures were established the ability to eliminate any un-reimbursable activities was provided.

5.7. Bid/Award Support Services

CDM Smith provided comprehensive bid and award support services for all 80 bid packages released. CDM Smith reviewed all bids and provided LLT recommendations for acceptance of bids. CDM Smith also supported LLT in the case of any bidder protests as well.

5.8. Quality Control/Assurance

Rigorous Quality Control/Assurance procedures were implemented and refined during the execution of this program. Our work has passed HUD audits and no negative findings were found. In addition, our quality management processes maximized reimbursement from funding agencies. Of note, all of the work performed on the LLT program was audited real time by the Louisiana Legislative Auditor resulting in a HUD ready closeout.

5.9. Construction Administration and Oversight

CDM Smith provided the construction oversight of all 80 bid packages and over 10,000 demolished homes. This included daily oversight activities, review and recommendation for approval of contractor invoices, review and recommendation of change order requests and documentation of all construction activities to support full reimbursement by HUD.

6. Project Highlights:

To expedite the demolition of the numerous structures, CDM Smith has implemented an innovative change to the approach typically utilized by FEMA. Based upon consultation with contractors and experience with numerous demolition programs, we implemented demolition on a per unit basis, rather than a cubic yard basis. By grouping homes by size categories, a lump sum price could be quoted for each home demolished.

This simplified the typical oversight and payment procedures utilized by FEMA. Without the need to painstakingly document each cubic yard of debris removed, the degree of monitor oversight was reduced and rate of home demolition by contractors was improved.

Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts
State of New Jersey

1. **Client Name:** New Jersey Department of Environmental Protection
2. **Regulatory Compliance:** HUD CDBG Funded; but work product met both FEMA and HUD Compliance requirements
3. **Contract Value:** $23 million (authorized over $5 million to date)
4. **Relevant Staff with Experience on Program:**
   - Maria Watt, PE: Program Director
   - Mack Rugg, JD: Technical Director
   - Michael Spletto: HUD CDBG Compliance/Program Manager (Action Plan)
   - Patty Forgang: Deputy Program Director
   - Dave Spector, LEED AP, ENV SP: Project Manager
   - Jessica Beattie: Deputy Project Manager
   - Darren Mackiewicz: Sandy Application Development Specialist
   - Jennifer Angell: Sandy Information Management Specialist
   - J. Howard Beverly, Jr., RPA: Historic Architecture (SOI Qualified Architectural Historian)
   - Robert Ball, MHP, RPA: Archaeologist (SOI Qualified Archaeologist)

Key Project Features

- HUD CDBG disaster recovery
- Over 300 residential inspections and assessments performed within the first four months of the 3 year term contract
- High-volume, fast turn-around site inspections and assessments

5. **Project Description of Tasks Performed:**

CDM Smith was awarded the Superstorm Sandy three-year term contract to fast track the development of the State of New Jersey's Action Plan. CDM Smith mobilized a team of over 30 staff to the NJDCA office in Trenton within 48 hours of notice of award. This highly experienced disaster recovery team developed an Action Plan that included a detailed needs assessment within 5 business days of contract award. Action Plans typically require 30-45 days to complete. This high profile project required extensive communication and coordination with the Governor's representatives. CDM Smith developed the necessary programs and policies required to expedite Superstorm Sandy recovery and to obtain the desperately needed $1.8 billion HUD CDBG funding (first phase of funding). A high quality document produced on an expedited schedule rapidly received HUD approval. In addition to expediting the development of the Action Plan (State-Wide Scope of Work for Superstorm Sandy Recovery), the team simultaneously began development of procurement documents and specifications to procure implementation contractors required to execute the Action Plan.

In addition to the above support, CDM Smith provided Subject Matter Experts that assisted NJDEP in performing environmental review of HUD-funded programs for recovery from Superstorm Sandy. CDM Smith supported NJDEP in the preparation of the tier 1 environmental assessments for nine impacted counties in the state of New Jersey for the Rehabilitation, Reconstruction, Elevation and Mitigation (RREM) Program for single-family homes and the portion of the Small Rental Properties Program for buildings with up to four residential units. CDM Smith helped modify the tier 1 EA to meet both the requirements of FEMA and HUD. CDM Smith also drafted the checklist to be used in tier 2 site-specific review. CDM Smith was also awarded a second three-year Term Contract to perform residential inspections and environmental assessments for thousands of residential properties impacted by Superstorm Sandy. These site inspections and environmental assessments included toxics evaluation, historic architecture and archeology impacts assessments, extensive interaction with state and local regulatory agencies, and providing subject matter expertise for HUD compliance. Our thorough knowledge of the HUD regulatory requirements allowed for a streamlined execution of policies and procedures and expedited disaster recovery.

In addition to the above support, CDM Smith has been providing remedial design, procurement and construction administration support for their publicly funded remedial design five-year term contract (recently awarded our second five-year term contract in 2012). The scope of work on this contract includes the development of remedial designs and

Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts (Continued)
State of New Jersey

bid specifications, procurement support and construction administration services for projects ranging from small above and underground fuel tanks to large industrial hazardous waste sites.

5.1. Preliminary Site Investigations

CDM Smith performed over 300 site inspections, environmental surveys and assessments of residential properties within the first four months of our three-year Superstorm Sandy term contract. Our subject matter experts provided significant HUD expertise to NJDEP in developing procedures and protocol to cost-effectively implement this disaster recovery program. CDM Smith expedited the execution of the residential assessment by develop county-wide Tier 1 documents for the 9 impacted counties within NJ which significantly streamlined the individual residential property assessment. Each residential property was inspected for toxic and hazardous substances and fuel storage tanks, historic architecture and archeological resources, and the presence of wetlands or coastal zone impacts.

5.2. Project Scoping Documents

CDM Smith prepared detailed scoping documents to implement numerous surveys of residential properties. CDM Smith contracted over 7 subcontractors to provide significant capacity to expedite the inspection and assessment of large quantities of residential homes. Detailed unit rate contract documents were developed to expedite the task order process and execution of residential site inspections and assessments.

5.3. Preparation of Design and Bid Specifications

CDM Smith has prepared numerous design and bid specification documents on our NJDEP Remedial Design Term Contract. Design documents and bid specifications have included property remediation and restoration activities, well and tank abandonment and closure activities and excavation, transport and waste removal activities.

5.4. Compliance with Environmental Statues and Regulations

CDM Smith not only has extensive national disaster recovery expertise in both FEMA and HUD regulatory jurisdiction, but we have extensive NJ state and local regulatory compliance expertise in demolition, ACM and lead survey and abatement, historic preservation (both historic architecture and archeology), stormwater and soil erosion and control, solid and hazardous waste regulations; and well and tank abandonment.

5.5. Permit Coordination/Approvals

Permitting, environmental oversight, and compliance management during numerous remedial design projects include:

- Well abandonment and installation permits
- Boring permits
- Discharge to Groundwater Permit By Rule
- Utility clearance
- Other state and local permits

Specific permitting, environmental oversight, and compliance management during the Liberty State Park project included:

- Construction permits
- Demolition permits
- Soil erosion and sediment control permits
- Stormwater management permits
- Site-wide soil reuse plan
- Waterfront development plan
- Wetlands permits

5.6. Coordination with State, Federal and/or Local Officials

CDM Smith's historic and archaeological work on the Sandy term contract lead to expedited clearance of numerous residential properties by providing in-house Secretary of Interior (SOI)-qualified archaeologist and architectural historians. We have had extensive communication and clearance from the New Jersey Historic Preservation Office (NJHPO) and have submitted exceptional quality documentation to expedite

Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts (Continued)
State of New Jersey

clearance of residential properties impacted by Superstorm Sandy.

CDM Smith also provided numerous Subject Matter Experts in a staff augmentation role for both NJDCA and NJDEP in negotiating with Federal HUD representatives to develop state-specific protocols for Superstorm Sandy disaster recovery.

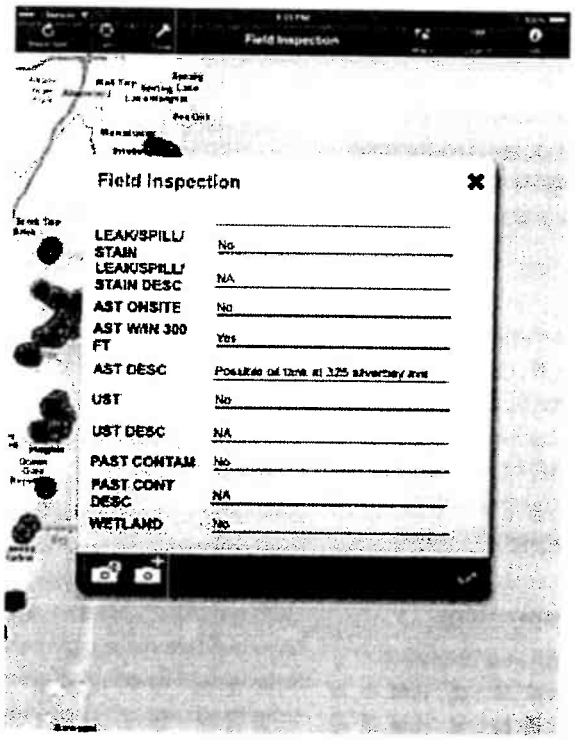
Extensive coordination with Governor Christie's representatives was necessary during the five-day development of the Action Plan. Over 30 CDM Smith employees were located within NJDCA offices to interface daily with representatives from Governor Christie's Office on the expedited development of the State of New Jersey's Action Plan.

5.7. Bid/Award Support Services

CDM Smith has numerous design projects on our remedial design term contract. One large restoration project at Liberty State Park involved submitting the design package to New Jersey Treasury for bid solicitation. This project involved extensive excavation, waste segregation and disposal, grading and restoration activities. CDM Smith will provide all the construction administration and oversight once the final construction contractor has been selected.

5.8. Quality Control/Assurance

As part of the initial CDM Smith team mobilization, a project quality management meeting was held among all team members to review the scope of services, clarify roles and responsibilities, refine the workflow processes, and to establish quality control and quality assurance protocols. An immediate output of this meeting was a finalization of a set of customized IT tools that standardized data collection and reporting, automating several components of the environmental documentation. This enabled fast and efficient execution and standardized consistent high quality deliverables. Every deliverable is further reviewed by senior-level staff with expertise in HUD and FEMA environmental policy.



5.9. Construction Administration and Oversight

CDM Smith will provide all the construction administration and oversight for a 9- month excavation, grading, waste segregation, disposal and restoration project. CDM Smith has been working closely with both NJDEP and Treasury for design document and bid specification finalization, and contractor procurement support. Even though the bid documents were finalized before 10/29/12, the date Superstorm Sandy devastated numerous costal communities within New Jersey, contractor procurement on this restoration project was delayed due to prioritization of any Superstorm Sandy contracts. CDM Smith is anticipating to be able to mobilize the construction contractor by spring 2014 and will be providing construction administration and oversight and support throughout 2014.

6. Project Highlights:.

CDM Smith supported programmatic execution of fast-turnaround environmental reviews, processing more than 300 HUD recovery funding applications for Sandy-impacted homeowners within the first few months of this three-year program. Each application review includes field and data evaluations to asses potential for hazardous materials and for historical architectural and archaeological significance. The program will include hundreds, if not thousands, of 30-day or less environmental reviews. Given the need to return residents to their homes as fast as possible, the program required immediate ramp-up, including procurement of subcontractors, development and execution of an efficient workflow for processing a high-volume of applications, and mobilization of a team of approximately 30 environmental scientists.

To accommodate the application volume, the program schedule demands, reporting needs, to provide for efficient management and execution, and to control

Superstorm Sandy NJDEP/NJDCA Disaster Recovery Support and Remedial Design Term Contracts (Continued)
State of New Jersey

quality, CDM Smith developed a customized information management system. This includes an iPad application to collect field data and a database that tracks detailed status of individual environmental reviews from assignment of project applications, through field data collection, site mapping, agency consultation and public notification, additional study requirements, quality review, environmental findings and clearance processes, and includes invoicing and receivables data management. CDM Smith's customized tools were developed to manage these data and to streamline both field and office execution, and include several reporting functionalities that automate forms and maps required for the environmental review records, weekly and monthly client status reports, internal management tracking reports, and invoices. Deployment of these tools enabled fast and efficient turnaround of environmental reviews, providing more cost-effective and high-quality standardized deliverables to the NJDEP.

Through commitment to the residents of New Jersey, innovative deployment of information management tools, HUD policy expertise, and a strong program management team, CDM Smith is successfully processing a high volume of environmental reviews in an efficient, high-quality manner to facilitate funding for homeowner recovery from Hurricane Sandy.

Hurricane Katrina Private Property Demolition and Debris Removal Program St. Tammany Parish, Louisiana

1. **Client Name:** St. Tammany Parish
2. **Regulatory Compliance:** FEMA Funded Demolition and Debris Removal
3. **Contract Value:** $20 million
4. **Relevant Staff with Experience on Program:**
   - Robert Batherson, Program Manager
   - Adam Faschan, Ph.D., P.E., Senior Technical Advisor
   - Nancy Whitten-Nassar, FEMA/Disaster Recovery Specialist
   - Pierre LeBrument, Crew Leader, QA/QC Manager
   - Wesley Hall, Asbestos and Assessment Supervisor

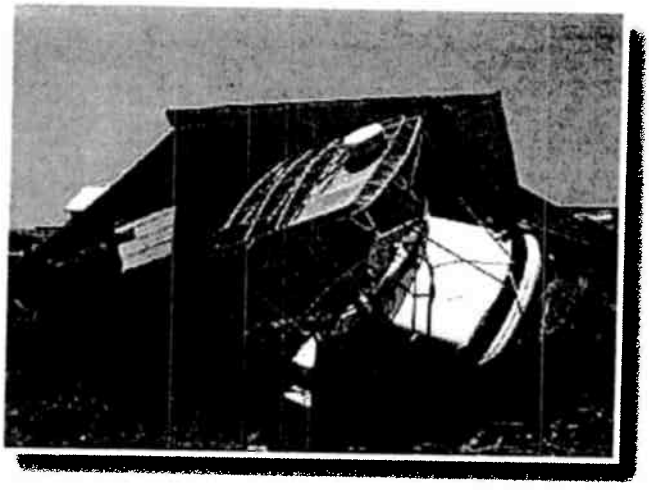
Key Project Features

- FEMA-funded demolitions
- Over 800 residential inspections, assessments and demolitions performed
- Mobilized over 100 staff to monitor debris removal operations
- St. Tammany Debris Program was used as the model for the new FEMA 325 Public Assistance Debris Guide

5. **Project Description of Tasks Performed:**

In conjunction with the Stafford Act and FEMA Regulations and Guidelines, CDM Smith provided a rapid response to St. Tammany Parish's needs to implement a comprehensive debris and demolition program in the wake of Hurricane Katrina. St. Tammany Parish is a coastal county in Southern Louisiana that was heavily impacted by this event. Damage included massive destruction from high winds throughout the Parish and catastrophic storm surge damage in the southern coastal areas. Under CDM Smith's management and oversight, more than 5,000 sites had debris removed utilizing FEMA funding from the Private Property Debris Removal Program (PPDR). In addition, over 800 residential structures were demolished due to eminent threat to health and safety.

CDM Smith mobilized a staff of over 100 people within five days of receipt of notice-to-proceed. CDM Smith organized a debris inspection program and provided dozens of skilled inspectors to make assessments and determinations on hurricane debris as well as damaged structures. Due to the immediate need for action, CDM Smith quickly developed bidding documents and solicited demolition and debris contractors.



5.1 Preliminary Site Investigations

CDM Smith performed over 800 site inspections and assessments of residential properties. This assessment was initially provided to assess whether the property was an imminent threat to human health and the environment. Once structures were established as warranting demolition, a comprehensive site inspection was performed. This comprehensive site inspection included inspections for white goods, household hazard waste, utility connections, storage tanks and other site features. All of these properties were inspected and sampled for asbestos containing materials.

5.2 Project Scoping Documents

Upon completion of detailed site assessments and completion of asbestos sampling results, properties were scoped for demolition. Scoping consisted of establishing groupings of bid packages dependent on the characteristics of the properties. Properties would be grouped by geographic location, size, whether or not RACM demolitions were required.

5.3 Preparation of Design and Bid Specifications

CDM Smith prepared multiple bid packages for the demolition of over 800 homes. This included preparing separate procedures for homes that contained RACM. In addition, CDM Smith prepared bid documents for the removal of debris from over 5,000 sites. Bid documents for the debris sites included GIS identification and tabulation of the variety

Hurricane Katrina Private Property Demolition and Debris Removal Program (Continued)
St. Tammany Parish, Louisiana

of debris categories such as leaning and hanging tree debris, stumps, etc.

5.4 Compliance with Environmental Statutes and Regulations

CDM Smith closely coordinated all asbestos inspection and abatement activities required for properties throughout the State with LDEQ. Given that all the homes in this program were too hazardous to enter, separate protocols for their demolition were developed to meet their approval. Both the removal requirements and oversight were developed with LDEQ input and oversight.

5.5 Permit Coordination/Approvals

CDM Smith established all permitting and utility disconnect requirements for all local demolition activities. Any demolition permits or local utility disconnection permits required were the sole responsibility of the demolition contractor to reduce any project delays or lack of accountability. CDM Smith approval was required within the contract documents prior to the contractor proceeding on new phases of demolition. Site inspections by CDM Smith personnel were required to confirm white good removal, household hazardous waste removal, asbestos abatement clearance, and utility disconnects prior to allowing the contractor to proceed to demolition. CDM Smith also coordinated utility disconnections by private utilities such as electric, gas and cable service.

5.6 Coordination with State, Federal and/or Local Officials

All bid packages for home demolition and debris removal activities were closely coordinated per FEMA's 325 Public Assistance Debris Guide. Given the magnitude of debris to be removed, special circumstances that were not clearly addressed by this FEMA policy guidance were closely coordinated with FEMA. By providing this close coordination with FEMA and addressing potential conflicts as they were identified, non-reimbursable costs under this program were eliminated.

CDM Smith hosted weekly meetings with FEMA, U.S. Army Corps of Engineers, St. Tammany Parish, LDEQ, and other stakeholders to address coordination needs from these entities.

5.7 Bid/Award Support Services

CDM Smith provided comprehensive bid and award support services for all bid packages released. CDM Smith reviewed all bids and provided St. Tammany recommendations for acceptance of bids. CDM Smith also supported St. Tammany in the case of any bidder protests.

5.8 Quality Control/Assurance

The systems employed under this program became the model for use in other post-Katrina disaster recovery programs. As evidence of the quality of our work and diligence, our St. Tammany Debris Program was used as the model for the new FEMA 325 Public Assistance Debris Guide.

5.9 Construction Administration and Oversight

CDM Smith provided the construction oversight of all bid packages and over 800 homes demolished. This included daily oversight activities, review and recommendation for approval of contractor pay requests, review and recommendation of change order requests and documentation of all construction activities to support full reimbursement by FEMA.

6. Project Highlights:

CDM Smith met all the Parish's goals to implement this program including: establishing and manning a call center and customer service centers, work order development, contractor procurement and management, assignment of crews for debris removal, right-of-entry coordination, environmental compliance and coordination with funding agencies. A full service field office was quickly established to manage the work and provide the necessary support services including: GIS documentation and GPS tracking of affected properties, database management and oversight of all debris removal contractors.

At its peak, the program included a staff in excess of 100 managers, field technicians and inspectors to monitor contractors and provide oversight of the program. Our fast

Hurricane Katrina Private Property Demolition and Debris Removal Program (Continued)
St. Tammany Parish, Louisiana

response helped to get the Parish back on its feet quickly and efficiently. Our management systems and documentation helped to ensure St. Tammany the maximum reimbursement amount under this program from FEMA. In addition we provided close coordination with FEMA to assure their approval of all program actions.

A unique service provided under this contract was for adjudication support for abandoned and blighted properties. Working with Parish administrative and legal staff, CDM Smith developed and staffed a production center for identification, notification, documentation, title search and legal support. This greatly increased the rate of adjudication hearings and resulting demolitions of blighted property.

FEMA and CDBG Funded Flood Recovery
Minot, North Dakota

1. **Client Name:** Minot, North Dakota
2. **Regulatory Compliance:** FEMA and CDBG Funded Flood Recovery
3. **Contract Value:** $9 million
4. **Relevant Staff with Experience on Program:**
   - Robert Batherson, Project Manager
   - Adam Faschan, Ph.D., P.E., Senior Technical Advisor
   - Nancy Whitten-Nassar, FEMA/Disaster Recovery Specialist
   - Wesley Hall, Asbestos and Assessment Supervisor
   - Michael Spletto: HUD CDBG Compliance

Key Project Features

- FEMA Funded infrastructure recovery
- HUD CDBG funded home demolition and renovation program
- Management of $67.5 million in CDBG to implement a variety of programs
- 53 FEMA-funded and 90 CDBG-funded demolitions

5. **Project Description of Tasks Performed:**

Following a record 100-year flood event along the Souris River in North Dakota, the City of Minot was forced to evacuate more than 10,000 residents and was faced with failing public works infrastructure. The city hired CDM Smith to help manage and coordinate the flood recovery efforts, including oversight to ensure that all activities performed meet FEMA reimbursement requirements.

The city is utilizing FEMA reimbursement to address recovery of Minot's public works infrastructure, including:

- Wastewater collection and distribution systems
- Stormwater conveyance systems
- Roads and bridges, and traffic control systems
- Permanent and temporary levee systems
- Damaged building infrastructure and equipment

CDM Smith also assisted the city with their Right-of-Way Debris Removal Management Plan and their Stick Built Homes Demolition project.

CDM Smith is also providing project management services for A/E design and construction related services on the city's projects, as each project moves into design, construction and closeout.

CDBG Program Management. On April 16, 2012 the HUD released $67.5 million in CDBG funds to the City of Minot for the purpose of assisting the long-term recovery of the city, including housing and infrastructure. The City also contracted with CDM Smith to help manage this portion of the recovery. Total program management includes program delivery, grant monitoring and closeout activities.

5.1 Preliminary Site Investigations

Under FEMA's Public Assistance (PA) program, CDM Smith completed Preliminary Data Assessments (PDAs) to accurately capture the scope of damages and costs to the city's infrastructure, and is ensuring that the repair and/or replacement costs were realistic. As part of the PA program, CDM Smith also assisted Minot in acquiring eligible Section 406 Hazard Mitigation Proposal Funding (HMP) originating from its FEMA Public Assistance Project Worksheets.

CDM Smith performed over 140 site inspections and assessments of residential properties. This comprehensive site inspection included inspections for white goods, household hazard waste, utility connections, storage tanks and other site features. All of these properties were inspected and sampled for asbestos containing materials. Prior to releasing any properties for demolition, an update of an environmental checklist was completed to ensure HUD compliance with ERR requirements.

FEMA and CDBG Funded Flood Recovery (Continued)
Minot, North Dakota

5.2 Project Scoping Documents

Upon completion of detailed site assessments and completion of asbestos sampling results properties were scoped for demolition. Scoping consisted of establishing groupings of bid packages dependent on the characteristics of the properties.

In addition, CDM Smith is assisting the city with long-term CDBG funded housing solutions, such as:

- Developing a rehabilitation grant program for homeowners impacted by the flood
- Opening a customer service center for direct applications from affected homeowners
- Providing case management and counseling to all applicants
- Providing comprehensive outreach utilizing media, flyers, public meetings, mail-outs and other strategies for housing grant candidates
- Working with non-profits, private banks, the State of North Dakota and other governmental entities to provide a coordinated assistance to affected home owners
- Facilitating the buy-out of flooded properties in high risk areas
- Contracting for home rehabilitation and reconstruction contract services
- Coordinating grant management, financing and contracting for repairs with eligible candidates

The focus of the rehabilitation and reconstruction program for residential housing was Low to Moderate Income (LMI) households. LMI households will be assisted with either rehabilitation or reconstruction of their homes depending on the severity of the damage. The application process for "Rehabs and Recons" is ongoing and the initial group of reconstructions is underway with the first "ribbon cutting" in April 2013.

In addition, the Minot Disaster Recovery Program addressed a number of critical infrastructure components that were damaged or impacted by the flooding. The work under this program element included:

- Repairing and expanding water and sewer services to foster housing development
- Providing infrastructure for developers fostering more affordable housing as a component of new development
- Addressing landfill capacity issues due to debris generated by the flooding and recovery
- Providing planning and funding for several critical public works repair and mitigation projects

5.3 Preparation of Design and Bid Specifications

CDM Smith prepared multiple bid packages for homes slated for both the demolition and renovation programs. This included preparing separate procedures for homes that contained Regulated Asbestos Containing Materials (RACM).

5.4 Compliance with Environmental Statutes and Regulations

CDM Smith closely coordinated all asbestos inspection and abatement activities required for properties throughout the State with North Dakota Department of Health (NDDH).

5.5 Permit Coordination/Approvals

CDM Smith established all permitting and utility disconnect requirements for all local demolition activities. Demolition permits or local utility disconnection permits were required as the sole responsibility of the demolition contractor to reduce any project delays or lack of accountability. CDM Smith approval was required within the contract documents prior to the contractor proceeding on new phases of demolition. Site inspections by CDM Smith personnel were required to confirm white good removal, household hazardous waste removal, asbestos abatement clearance, and utility disconnects prior to allowing the contractor to proceed to demolition. CDM Smith also coordinated utility disconnections by private utilities such as electric, gas and cable service.

5.6 Coordination with State, Federal and/or Local Officials

All bid packages funded through FEMA for home demolition and debris removal activities were closely coordinated per FEMA's 325 Public Assistance Debris Guide. All properties slated for demolition were passed through the HUD CDBG requirements such as the ERR compliance process indicated above.

5.7 Bid/Award Support Services

CDM Smith provided comprehensive bid and award support services for all bid packages released. CDM Smith reviewed all bids and provided Minot recommendations for acceptance of bids. CDM Smith also supported Minot in the case of any bidder protests.

FEMA and CDBG Funded Flood Recovery (Continued)
Minot, North Dakota

5.8 Quality Control/Assurance

Rigorous quality control/assurance procedures were implemented and refined during the execution of this program

5.9 Construction Administration and Oversight

CDM Smith provided the construction oversight of all bid packages for homes slated both for demolition and renovation. This included daily oversight activities, review and recommendation for approval of contractor pay requests, review and recommendation of change order requests and documentation of all construction activities to support full reimbursement by HUD.

6. Project Highlights:

CDM Smith's CDBG experts work to ensure compliance with federal guidelines and steer the City of Minot away from disallowed activities, which may be non-reimbursable, while at the same time providing robust support of the City's needs to HUD.

Specific programs which CDM Smith is administering include the Northern Housing Development Infrastructure—which will provide infrastructure for a new housing development outside the flood area with 51 percent affordable housing; Acquisition for Affordable Housing Development—CDBG funds will be used to purchase 50 vacant lots to develop affordable housing; Acquisition of Flooded Properties –CDBG funds as match for State funds intended to buy flooded properties that may be used for green space or flood access/control; Renters are also being assisted through the "Imagine Minot" Downtown Development Parking Facility—in support of development of LMI rental units; Infrastructure Repairs Downtown—repair of damaged storm sewers in support of affordable rental units; and Relocation Assistance for Displaced Tenants –relocation assistance for tenants displaced due to acquisition.

CDM Smith is providing case management, environmental reviews, construction management and other services necessary to implement these programs.

Decommissioning and Demolition Services
Birmingham, New Jersey

1. **Client Name:** Confidential Client
2. **Regulatory Compliance:** NJDEP SRRA, ISRA, Guidance for Characterization of Concrete and Clean Material Certification for Recycling, Nuclear Regulatory Commission nuclear material handling
3. **Contract Value:** $2.45 million
4. **Relevant Staff with Experience on Project:**
   - George Arsnow, CHMM, LSRP: Program Manager
   - Jessica Beattie, P.G.: Project Manager - Hazardous Materials Characterization
   - Patricia Forgang, CHMM: Permitting Specialist
   - Stephen Mirabello, P.E.: Field Team Leader

Key Project Features

- Chemical facility decomissioning and building demolition
- Engineer, Procure, Construct, Manage (EPCM) Contract
- Pre-demolition surveys: ACM, lead paint, other hazardous materials
- Hazardous materials handling including nuclear material
- Site restoration

5. Project Description of Tasks Performed

CDM Smith was contracted by a confidential chemical manufacturer in New Jersey to plan and execute plant decommissioning, decontamination, dismantlement, and final demolition of facilities relevant to former chemical manufacturing and industrial wastewater treatment plant (WWTP) operations. CDM Smith performed the work under an Engineer, Procure, Construction, Manage (EPCM) program. This program allowed the owner to participate in every aspect of the design, procurement, and management of the project including competitively bidding all work and interviewing contractors prior to selection. The EPCM program had the distinct advantage of reducing costs and expediting schedule by bridging traditional design-bid-build with the design-build approach. The EPCM program resulted in very competitive bids by qualified contractors. CDM Smith's self performance of the demolition scope greatly facilitated safe and successful project completion within the client's budget. The demolition work element bid process resulted in a payback to the owner (salvage credit and resale exceeded the value of the demolition). Construction management of the project was accomplished by an experienced CDM Smith team of full-time personnel.

The work that CDM Smith performed for this client was in accordance with appropriate federal, state, and local regulations extending over a two year period and encompassed the following elements:

5.1 Preliminary Site Investigations

Pre-Demolition Characterization: The first phase of the work was to characterize existing chemical plant conditions so that proper work elements and construction sequencing could be developed. This work consisted of the following elements:

- Asbestos pre-demolition surveys and abatement plan and management
- Lead-based paint pre-demolition survey and abatement plan and management
- Hazardous materials characterization and removal plan and management
- Universal waste characterization and removal plan and management
- Tank and reactor sampling and decommissioning plan and management
- Inaccessible area investigation and decommissioning plan and management

Decommissioning and Demolition Services (Continued)
Birmingham, New Jersey

- Concrete characterization and removal plan and management
- Process, storm water, and sanitary sewer identification/ characterization and decommissioning plan and management

5.2 Project Scoping Documents

Preparation of a Formal Master Plan: The Master Plan formed the basis of the demolition project and identified all work elements, characterization through equipment decommissioning, that would be required for completion of the chemical plant and WWTP demolition. Additionally, the Master Plan inventoried each asset. The inventory was used to identify asset status (e.g., chemically decommissioned reactor, oils removed from agitator gear box) and if the asset would be transferred to other client operating facilities, available for resale, salvaged for credit, or demolished. The Master Plan was a living document and a tool to communicate project progress to functional groups throughout the duration of the characterization, decommissioning, and demolition program.

Preparation of a Master Schedule with Forecast of Activities: The Master Schedule was driven from the Master Plan, continuously updated, and used to facilitate weekly construction meetings.

Hazardous Materials Sampling Work Plans: Work plans were prepared for the hazardous material sampling that was performed by CDM Smith and subcontractors, including concrete, insulation, asbestos containing materials, lead based paint, and other hazardous materials characterization.

Staged Demolition Sequence Plan:

- The OHM work was initiated first and involved the removal of universal wastes, tanks/reactors and contents from various production lines, collection of oils and refrigerants, and removal of concrete that did not meet regulatory requirements for on-site reuse.
- The ACM abatement overlapped the OHM work to expedite schedule. ACM abatement consisted of transite roof panels, window glazing, pipe insulation, mastics (roof and floor tiles), various transite used for siding and fire protection, and lab hoods and counters. One contractor was selected to complete both the OHM and ACM abatement work elements to take advantage of the synergies associated with overlapping the work elements.

- Demolition of the WWTP was initiated first to allow the ACM abatement to progress. The demolition contractor transitioned to the chemical plant as the ACM abatement contractor was nearing completion of their work

5.3 Preparation of Design and Bid Specifications

The information obtained from the characterization phase was used to prepare engineer specifications to competitively bid three distinct work elements:

- OHM (hazardous and non-hazardous materials)
- ACM abatement
- Demolition (chemical plant and WWTP)

5.4 Compliance with Environmental Statutes and Regulations

This project was conducted in accordance with the following regulations:

- Characterization activities were conducted in accordance with NJDEP Site Remediation Program requirements
- Asbestos handling and reporting was conducted in accordance with local, National Emission Standards for Hazardous Air Pollutants (NESHAP), and AHERA requirements
- Concrete characterization and handling was conducted in accordance with NJDEP Concrete Guidance and ISRA requirements

Decommissioning and Demolition Services (Continued)
Birmingham, New Jersey

- Nuclear (tritium exit signs) material handling and reporting was performed in accordance with NJDEP and Nuclear Regulatory Commission (NRC) requirements

5.5 Permit Coordination/Approvals

Permitting, environmental oversight, and compliance management during demolition activities

- Flood Hazard Area Permits
- Wetlands LOI, delineation, and permitting
- General demolition permitting at local and regional levels
- Soil erosion and sediment control plans
- Storm water permitting
- Utility termination notifications
- Asbestos containing materials NESHAP notifications
- NJDEP ISRA compliance for concrete reuse on site

5.6 Coordination with State, Federal and/or Local Officials

During the project, CDM Smith coordinated with the following agencies:

- Local building department (building permits)
- NJ Department of Community Affairs (ACM notifications)
- NJDEP (ISRA, Concrete Sampling, SRP)
- Burlington County Department of Land Use (stormwater, SESC)

5.7 Bid/Award Support Services

CDM Smith provided the following services on this project:

- Advertised the Request for Proposals (RFPs)
- Attended pre-bid meeting
- Responded to requests for information (RFI) and issued addenda
- Reviewed and tabulated bids
- Assisted with contractor selection

5.8 Quality Control/Assurance

CDM Smith performed internal quality management activities including a technical review committee (TRC) at project initiation. Quality Assurance/Project Controls included:

- Financial tracking
- Schedule updating
- Weekly meetings
- Project status reporting (weekly/monthly)
- Change order tracking
- Quality assurance reviews (technical and editorial) for regulatory reporting

5.9 Construction Administration and Oversight

The project included the following construction administration and oversight components:

- Managed logistics between ongoing plant operations and the multiple contractors completing the three work elements
- Construction management oversight, site supervision, and documentation
- Safety oversight, training and documentation
- Maintenance of the living Master Plan, cost estimate, and schedule
- Utility termination and isolation
- Building demolition
- Segregation and crushing of select demolition debris for on-site beneficial reuse
- Load out and staging of trucks and roll off containers for off-site shipments of salvageable materials, construction debris, and recovered equipment
- Responsible for work area security, completion of daily tail gate meetings, tracking materials shipped off-site for salvage, recovery, or disposal
- Post demolition testing and management of all demolition debris and waste to final disposition
- Complete final punch list items
- Broom sweep the entire chemical plant
- Release documentation
- Project closeout and final archives consisting of two copies of the paper file and two electronic copies

Design and Construction of Restructuring Tasks: To support the demolition program, CDM Smith completed the design and construction of restructuring tasks. These tasks were completed to replace facilities that were eliminated during the chemical plant and WWTP decommissioning and demolition program. The work will support ongoing sales and warehousing activities and consisted of the following tasks:

Decommissioning and Demolition Services (Continued)
Birmingham, New Jersey

- Relocating and upgrading the electric feed to the Fire Water Pump House
- Cut and cap the underground fire water loop to eliminate sections that would no longer be required upon demolition of the chemical plant
- Constructing new office and restroom facilities for the ongoing warehousing operations
- Constructing a new concrete masonry unit wall along the west side of the warehouse

WWTP Decommissioning and Closure: CDM Smith was tasked with the decommissioning and closure of the industrial WWTP. This work consisted of the following components:

- Installing a security fence around the perimeter of the former WWTP.
- Permanent closure of process, storm water, and sanitary sewers that fed the WWTP.
- Submission of a Closure Plan to NJDEP.
- Design and construction of a Temporary Treatment Unit (TTU) to handle decant waters from the various WWTP processes—equalization, aeration, clarification—upon termination of influent. The TTU consisted of a sequential batch reactor (SBR), sand filtration, and carbon adsorption. The existing aerobic digester was converted to the SBR.
- Removal of 3,300 yards of solids consisting of biological sludge and resins from the manufacturing process from the aeration basins and equalization basin. The work included basin characterization for solids volume and makeup, material characterization and profiling for disposal, excavation and live load-out, and removal of the splitter box, concrete liner, and earthen southwest wall of the aeration basin.
- Cleanout of the two, 200,000 gallon clarifiers, acid tank system, and lime slurry system and cleanout of the lime conditioning tank and filter press building. The work included tank characterization for sludge and solids volume and makeup, material characterization and profiling for disposal, and sludge removal via vacuum tankers followed by solids excavation and live load-out.
- The WWTP was then demolished and the outfall sealed.

6. Project Highlights:

Construction management of the project was accomplished by an experienced CDM Smith team of full-time personnel. The project was rigidly tracked and driven on schedule using the Primavera P3 tool. CDM Smith's self performance of the demolition scope greatly facilitated safe and successful project completion within the client's budget.

The CDM Smith construction management team rigidly adhered to core scope completion. Worthy of note is the fact that this project was completed with zero subcontractor claims and less than one half of one percent approved client change orders.

Key project highlights include:

- Holder of prime EPCM services contract with client as well as multiple subcontracts with pre-qualified OHM, ACM abatement, and demolition firms
- Procurement tasks to scope work, solicit bids, and award the work, including salvage values of select recovered materials and resale of select equipment
- Preparation and implementation of a staged demolition sequence plan
- Nuclear Material Handling: Identification, characterization, and decontamination of tritium released from self-luminous exit signs. Reporting in accordance with NJDEP and NRC requirements was completed
- Site Restoration for remaining buildings which were converted into administrative and warehousing functions

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Nancy Whitten-Nassar

Title: Technical Advisor -Demolition Expert

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $35 million	CDM Smith	Home Demolition	FEMA/Disaster Recovery Specialist	13 Months	90%	1/2009 – 1/2010	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
FEMA and CDBG Funded Flood Recovery, Minot, ND Fee: $2,342,044	CDM Smith	Home Demolition and Debris Management	FEMA/Disaster Recovery Specialist	Project Duration	25%	9/2011 – Current	City of Minot Cindy Hemphill, Finance Director 701-857-4784
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA Fee: $19.6 million	CDM Smith	Debris Removal	Senior Technical Advisor	Entire Project Duration	50%	3/2006 – 7/2007	St. Tammany Parish Greg Gorden, Director 985-898-2535
Program Management of FEMA Funded Repairs, St. Bernard Parish, LA Fee: $30 million	CDM Smith	Management of over $400 million of FEMA infrastructure repairs	FEMA Specialist	19 Months	50%	7/2007 – 1/2009	St. Bernard Parish Government Hillary Nunez, Managing Director Public Works, Water & Sewer 504-271-1681

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Mack Rugg, J.D.

Title: Technical Advisor -Historic Preservation Compliance

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDCA, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.5 million Fee: $1.8 million awarded to date Total CDBG funding $1.8 billion (First Allocation)	CDM Smith	Environmental Review, including Tier 1 Environmental Assessments and tier 2 checklist	Advisor, Writer, Reviewer	3 Months	50%	2/2013 – 5/2013	State of NJ, Department of Community Affairs Paul Macchia, Chief of Staff 609-341-3221
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Tier 2 Environmental Review	Technical Director	5 Months	60%	8/2013 - Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
HUD Environmental Review of Proposed Demolition of Public Housing, Newark Housing Authority, NJ Fee: $91,845	CDM Smith	Environmental Review	Task Manager	9 Months	5%	12/2007 – 8/2008	Newark Housing Authority Karen McLane Torian 973-273-6620
Environmental Review of Housing Projects Proposed for HUD Funding, Mississippi Development Authority Fee: Unavailable	CDM Smith	Environmental Review	Task Manager	27 Months	50%	12/2006 – 2/2009	Mississippi Development Authority Sara Watson 601-359-9344
Environmental and Historic Preservation (EHP) Review of Proposed Hazard Mitigation Projects, Texas (Region VI), Kansas (Region VII), and California (Region IX) Fee: Unavailable	CDM Smith	Environmental and Historic Preservation Review	Technical Lead and Reviewer	33 Months	30%	12/2010 – 8/2013	FEMA Gina White 202-646-3906 202-679-4063

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Dana Boyadjian, LSRP

Title: Technical Advisor -NJ Technical Regulatory Compliance

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Project Engineer	1 Month	15%	12/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
Wilkins American Service, Delran, NJ Fee: $250,000	ECC Horizon	LSRP-based Remedial Investigation of on and off-site gasoline plume, in-situ treatment remedial plan and cost estimate	Project Manager	57 Months	Varied from 0 to 60%	3/2009 to 11/2013	Resolute Insurance Gina Macari, Claim Manager 312-345-2491
Multiple NJ Residential Property Fuel Oil Tank Investigations and Soil and Groundwater Cleanup Fee: $500,000	ECC Horizon	Soil and groundwater investigations, remedial action plan preparation and oversight of site remediation	Project Manager	55 Months	Varied from 0 to	5/2009 to 11/2013	State Farm Insurance Andrea Stocklin, Claim Manager 215-990-8989
Brownfield Investigation and Remediation, Whippany, NJ Fee: $1.2 million	Shaw Environmental	Soil excavation & disposal plus groundwater treatment plant construction, operation and maintenance	Project Manager	28 Months	Varied from 0 to 80%	5/2005 to 9/2007	Landbank Properties Timothy Roberts 720-554-8206
Wayne Interim Storage Site Wayne, NJ Fee: $300,000	IT Corporation	Asbestos assessment, demolition plan preparation, groundwater investigation and design	Project Manager	40 Months	Varied from 0 to 60%	7/1999 to 11/2002	Environmental Chemical Corporation Mark Mizrahi, Project Manager 908-595-1777

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Michael Stocku

Title: Technical Advisor – Asbestos/Lead

Firm: TTI Environmental, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJ Reconstruction, Rehabilitation, Elevation and Mitigation (RREM) Program, Statewide (Contract No. J06027) Fee: $50,000	Gilbane Building Company	Asbestos and lead based paint inspections on residential properties damaged during Hurricane Sandy	Sr. Project Manager	3 Months (ongoing)	20%	11/2013 - Present	Gilbane Building Company Chris DeBruyn 610-283-4514
NJ Landlord Rental Repair Program (LRRP), Statewide (Contract No. J06132) Fee: $50,000	Gilbane Building Company	Asbestos and lead based paint inspections on housing units damaged during Hurricane Sandy	Sr. Project Manager	3 Months (ongoing)	20%	11/2013 - Present	Gilbane Building Company Chris DeBruyn 610-283-4514
State Contract – Asbestos Safety Control Monitor (ASCM), Statewide (Contract No. A77647) Fee: $80,000 (annually)	TTI Environmental	Asbestos, lead based paint and mold inspection services	Sr. Project Manager	72 Months (ongoing)	10%	2005 – Present	NJ Department of Military & Veterans Affairs Bill McBride 609-530-7136
New Lisbon Developmental Center, DPMC A1108-00, Woodland Township, NJ Fee: $64,310	The DaVinci Group	Lead-based paint evaluations, asbestos surveys, asbestos abatement design and abatement management and reporting	Sr. Project Manager	4 Months	20%	11/2020 – 2/2011	The DaVinci Group Frank Vinciguerra 856-848-7995
Richard Stockton College of NJ, B & F Wing Asbestos Abatement, Galloway, NJ Fee: $18,755	TTI Environmental	Asbestos abatement specification and abatement management	Sr. Project Manager	3 Months	30%	3/2013 – July 2013	Richard Stockton College of NJ Ben Risley 609-652-4281

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: James Frisbee, CIH

Title: Technical Advisor – Asbestos/Lead

Firm: Environmental Connection, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
New Jersey State House Complex, Trenton, NJ Fee: $56 million	Env. Connection	Microbial Inspection, Assessment and Reporting	Project Manager	14 Months	20%	7/2003 – 9/2004	DPMC Pasquale (Pat) Papero 609-633-3745
Student Apartments, The College of New Jersey, Ewing, NJ Fee: $50,000	Env. Connection	Microbial Investigation, Moisture Mapping	Project Manager	6 Months	30%	4/2004 – 9/2004	The College of New Jersey Brunelle ellis 609-771-2881
Somerset Medical Center, Somerville, NJ Fee: $5,000	Env. Connection	Moisture Mapping	Project Manager	<1 Month	100%	8/2004	WCD Consultants Chip D'Angelo 609-462-6766
Various Branches, Wachovia Bank, N.A., NJ, CT, MD Fee: $3 million	Env. Connection	Indoor Air Quality Studies Project Management	Project Manager	12 Months	50%	8/2003 - Present	Wachovia Bank, N.A. Bonnie Tomaszewski 267-321-7803
New Jersey State House Complex, Trenton, NJ Fee: $100,000	Env. Connection	Air Handler Modifications Pilot Project	Project Manager	14 Months	20%	7/2005 – 12/2008	DPMC Pasquale (Pat) Papero 609-633-3745

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Ryan Broadwater

Title: Technical Advisor – Asbestos/Lead

Firm: Environmental Connection, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Ancora Psychiatric Hospital Fire Suppression Upgrades, Hammonton, NJ Fee: $17.5 million	STV Architects; USA Env. Mgt. Inc.	Environmental/HAZMAT Assessment, Remediation & Demolition Design, Project & Construction Management	Project Designer & Project Manager	30 Months	50%	7/2006 – 11/2008	DPMC Darren Comegys
Bosshart Hall, Rowan University, Glassboro, NJ Fee: $3 million	Lammey & Giorgi; USA Env. Mgt. Inc.		Asbestos Building Inspector, HAZWOPER Supervisor, Project Design, Project Management	8 Months	30%	8/2007 – 3/2008	Lammey & Giorgi Architects William Lammey 856-833-0100
Bloomfield High School, Bloomfield, NJ Fee: $30 million	MRM	Asbestos, Lead Based Paint & HAZMAT Survey, Remediation Design & Project Monitoring	Project Manager, Project Inspection, Design, and Coordination	26 Months	25%	4/2003 – 6/2005	Vincentsen-Thompson Meade, Inc. Keith Thompson 908-232-5860
Multiple Projects, The College of New Jersey, Ewing, NJ Fee: $20+ million	Env. Connection USA Env. Mgt. Inc.	Asbestos, Lead Based Paint, HAZMAT, Mircrobial Survey, Remediation Design and Project Monitoring	Inspection, Design, Project Management, and Construction Administration	80 Months	20%	1/2003 – 6/2011	The College of New Jersey Dept. of Occupational Safety & Env. Support Amanda Radosti 609-637-5152
NJDEP Parks and Historic Resources, Trenton, NJ Fee: $5+ million	Env. Connection	Asbestos, Lead Based Paint & HAZMAT Survey, Remediation Design & Project Monitoring	Inspection, Design, Project Management, and Construction Administration	34 Months	10%	6/2008 – 6/2011	NJDEP Office of Resource Development Edward Mulvan 609-292-4853

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Adam Faschan, Ph.D., P.E.

Title: Quality Assurance

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $35 million	CDM Smith	Home Demolition	Senior Technical Advisor	Project Duration	10%	1/2009 – 8/2012	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA Fee: $19.6 million	CDM Smith	Debris Removal	Senior Technical Advisor	Project Duration	5%	3/2006 – 8/2012	St. Tammany Parish Greg Gorden, Director 985-898-2535
Private Property Demolition and Debris Removal Program, St. Bernard Parish, LA Fee: $11 million	CDM Smith	Demolition and Debris Removal	Senior Technical Advisor	Project Duration	10%	4/2006 – 7/2010	Donald Bourgeois, Director of Recovery St. Bernard Parish 504-236-3877
Private Property Demolition and Debris Removal Program, Jefferson Parish, LA Fee: $2,197,310	CDM Smith	Demolition and Debris Removal	Senior Technical Advisor	Project Duration	5%	11/2007 – May 2012	Jefferson Parish Marnie Winter, Director 504-736-6440
Waterway Debris Removal Project, Ascension Parish, LA Fee: $68,353	CDM Smith	Debris Removal	Senior Technical Advisor	Project Duration	5%	7/2009 – 7/2012	Cedric S. Grant, Former Chief Administrative Officer, Ascension Parish Government Current New Orleans Deputy Mayor of Facilities, Infrastructure and Community Development 504-658-4000

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: George Arsnow, LSRP, CHMM

Title: Project Manager

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Decommissioning and Demolition Services, Birmingham, NJ Fee: $2.5 million	CDM Smith	Planning, Decommissioning, Decontamination, Dismantlement, Demolition, and Restoration	Program Manager	24 Months	20%	May 2008 - April 2010	Confidential Client
Post-Decommissioning and Demolition Services, Birmingham, NJ Fee: $750,000	CDM Smith	Design, Temporary Treatment, Decommissioning, Decontamination, Demolition, and Restoration	Program Manager	18 Months	20%	October 2008 – March 2010	Confidential Client
NJDOT Route 21, NJ Fee: Unavailable	CDM Smith	Construction Inspection	Contract Project Manager	24 Months	15%	April 2001 – April 2003	NJDOT
NJDOT Route 29, NJ Fee: Unavailable	CDM Smith	Remediation	Project Manager	12 Months	15%	March 2001 - March 2002	NJDOT
Environmental Site Assessments and Audits Throughout the United States, NJ Fee: Unavailable	CDM Smith	Environmental Site Assessments	Project Manager	Ongoing over Multiple Years	5%	1991 - 2011	Various Confidential Clients

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Jessica Beattie, PG

Title: Project Manager

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Decommissioning and Demolition Services, Birmingham, NJ Fee: $2,454,529	CDM Smith	Pre-demolition Survey	Project Manager	15 Months	15%	1/2009 – 4/2010	Confidential Client
Environmental Review for Demolition of Public Housing in Newark, NJ Fee: $91,845	CDM Smith	Environmental Assessments and Phase I Environmental Site Assessments	Project Manager	10 Months	5%	11/2007 – 8/2008	Newark Housing Authority Ram Naveendra 973-273-6166
Pre-Demolition Surveys, Newark Housing Authority, Newark, NJ Fee: $36,094	CDM Smith	Pre-demolition Surveys (ACM, LBP, Haz Materials)	Project Manager	4 Months	5%	8/2008 – 12/2008	Newark Housing Authority Ram Naveendra 973-273-6166
Phase I Environmental Site Assessments (ESAs), Nestle Waters North America, Allentown/Upper Macungie Township, PA Fees: $270,474	CDM Smith	Preliminary Site Assessments and Site Investigations	Project Manager	7 Months	15%	9/2005-3/2006	Nestle Waters North America Nghia Tran, Facilities Design Manager 972-462-3663
Burlington County Open Space Program - Preliminary Site Assessments and Site Investigations, Multiple Properties, Burlington County, NJ Fee: $700,000	CDM Smith	Preliminary Site Assessments and Site Investigations	Project Manager/ Project Scientist	60 Months	20%	2002 - 2007	Burlington County Board of Chosen Freeholders Mary Pat Robbie, Director - DRC, Office of Land Use Planning 856-642-3850

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Patricia Forgang, CHMM

Title: Project Manager and Environmental Compliance/Permitting Task Leader

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDCA, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.5 million Fee: $1.8 million awarded to date Total CDBG funding $1.8 billion (First Allocation)	CDM Smith	Development of Action Plan	Project Manager (Internal)	6 Months	5%	2/2013 – 8/2013	State of NJ, Department of Community Affairs Paul Macchia, Chief of Staff 609-341-3221
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments, Environmental Review Record Development	Deputy Program Director	Ongoing	25%	August 2013 - present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
Decommissioning and Demolition Services, Birmingham, NJ Fee: $2,454,529	CDM Smith	Decommissioning, Decontamination, Dismantlement, and Final Demolition	Permitting Specialist	6 Months	5%	September 2008 - September 2009	Confidential Client
County Open Space Program, Burlington County, NJ Fee: $700,000	CDM Smith	Environmental Site Assessment and Site Remediation Services	Project Manager	60 Months	10%	2002 - 2007	Burlington County Board of Chosen Freeholders Mary Pat Robbie, Director - DRC, Office of Land Use Planning 856-642-3850
Phase I Environmental Site Assessments (ESAs), Nestle Waters North America, Upper Macungie Township, PA Fee: $270,474	CDM Smith	Environmental Site Assessments	Project Director	6 Months	5%	2005 - 2006	Nestle Waters North America Nghia Tran, Facilities Design Manager 972-462-3663

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Darren Mackiewicz, GISP

Title: Information Management

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Database Architect, Application Developer	6 Months	40%	8/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
Massachusetts Bristol County Emergency Preparedness Coalition Fee: $25,000	CDM Smith	Pandemic Planning and Preparedness	Lead Application Developer	12 Months	25%	7/2011 – 7/2012	Marcia Benes Executive Director Massachusetts Association of Health Boards 508-643-0234
Field Inspection Application, Haverhill, Massachusetts Fee: $10,000	CDM Smith	Field Inspection	Lead Application Developer	6 Months	10%	6/2012 – Present	Michael K. Stankovich Director of Public Works City of Haverhill 978-420-3815
Dublin City Flood Information Website, Dublin, Ireland Fee: $50,000	CDM Smith	Information Management	Task Manager, Lead GIS Developer	36 Months	100%	2006 – 2008	Tom Leahy was Executive Manager, City of Dublin
MassDOT Aeronautics – Airport Information Management System Fee: $600,000	CDM Smith	Program/Project Program Management	Project Manager	8 Months	25%	4/2013 – Present	Kathleen Mahoney Airport Engineer 617-412-3689

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Jennifer Angell

Title: Information Management

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Project GIS Specialist	4 Months (Ongoing)	30%	9/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
GIS Specialist, Mercer County Water Management Plan, Mercer County, NJ Fee: Unavailable	CDM Smith	Planning	Project GIS Specialist	60 Months (Ongoing)	10% - 25%	2008 – Present	Mercer County 609-989-6998
Comprehensive Wet Weather Management Strategy Development and Program Support Services, Allegheny County, PA Fee: $38.1 million	CDM Smith	Planning	Project GIS Specialist	220 Months (Ongoing)	10-100% (Varying Levels of Involvement over Project Duration)	1994 – Present	Allegheny County Sanitary Authority 412-766-4810
Water Use and Conservation, NJ Fee: $500,000	CDM Smith	Planning	Project GIS Specialist	48 Months (Intermittent Involvement over Project Duration)	5%-10%	2008 – 2012	New Jersey Highlands Council 908-879-6737
Sewer System Rehabilitation Prioritization Program, Newark, NJ Fee: $860,000	CDM Smith	Planning	Project GIS Specialist	Intermittent Involvement over Project Duration	5% - 10%	2001 – 2012	City of Newark 973-733-6400

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Pierre LeBrument

Title: Information Management

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $35 million	CDM Smith	Home Demolition	QA/QC Manager	46 Months	100%	9/2009 – 6/2013	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $35 million	CDM Smith	Home Demolition	Asbestos Inspector	8 Months	100%	2/2009 – 9/2009	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
Hurricane Katrina Private Property Demolition and Debris Removal Program, St. Tammany Parish, LA Fee: $19.6 million	CDM Smith	Debris Removal	Crew Leader/Field Supervisor	36 Months	100%	3/2006 – 9/2009	St. Tammany Parish Greg Gorden, Director 985-898-2535
FEMA Temporary Housing Project, Jefferson Parish, LA Fee: Unavailable (Work for Another Firm)	CDM Smith	FEMA Housing	Property/Site Inspector & Customer Service Representative	4 Months	100%	12/2005 – 3/2006	Jefferson Parish Marnie Winter, Director 504-736-6440
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $35 million	CDM Smith	Home Demolition	QA/QC Manager	51 Months	100%	9/2009 – 6/2013	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: David Spector, LEED AP, ENV SP

Title: Project Controls/Work Flow Optimization

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Project Manager	4 Months (Ongoing)	30%	9/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
HUD NEPA Oversight for CDBG Long-Term Workforce Housing Program, Mississippi Development Authority Fee: $1.5 million	CDM Smith	Environmental Compliance	Deputy Program Manager	8 Months	30%	6/2008 – 12/2010	Sara Watson 601-359-9344
HUD NEPA Oversight for CDBG Public Housing Program, Mississippi Development Authority Fee: $1 million	CDM Smith	Environmental Compliance	Logistical Support	6 Months	10%	11/2006 – 11/2009	Sara Watson 601-359-9344
HUD NEPA Compliance for MDEQ Water/Wastewater and HUD CDBG Infrastructure Katrina Recovery Program Fee: $750,000	CDM Smith	Environmental Compliance	Project Director	8 Months	40%	2007 – 2008	Steve Spengler 601-961-5070

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Stephen Mirabello, PE

Title: Bid Spec Development & Demolition Oversight Technical Lead

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Decommissioning and Demolition Services, Birmingham, NJ Fee: $2,454,529	CDM Smith	Decommissioning, Decontamination, Dismantlement, and Final Demolition	Field Team Leader	9 Months	Varies, 50-100%	January - August 2009	Confidential Client
Asbestos Consulting & Building HVAC System Replacement Engineering Design Services for Mutual Redevelopment Houses, Inc., New York, NY Fee: $2.5 Million	CDM Smith	Environmental Consulting and Design Services	Task Manager	>12 Months	Varies , overall~-25%	11/2010 – Present	Mutual Redevelopment Houses, Inc. Brendan Keany 212-675-3200
Con Edison Facility Decommissioning, Brooklyn and Queens, NY Fee: Unavailable	CDM Smith	Decommissioning	Project Engineer	>12 Months	Varies, overall ~10%	1/2012 – Present	Con Edison

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Wesley Hall

Title: Asbestos/Lead Inspection & Monitoring Technical Lead

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $40.5 million	CDM Smith	Home Demolition	Asbestos and Assessment Supervisor	46 Months	98%	3/2009 – 12/2013	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
FEMA and CDBG Funded Flood Recovery, Minot, ND Fee: $400,000	CDM Smith	Home Demolition and Debris Management	Project Manager	9 Months	50%	4/2013 – 12/2013	City of Minot Cindy Hemphill, Finance Director 701-857-4784
Hurricane Katrina Private Property Demolition and Debris Removal Program, St Tammany Parish, LA Fee: $359,513	CDM Smith	Debris Removal	Field Supervisor	4 Months	95%	8/2012 – 11/2012	St. Tammany Parish Greg Gordon, Director 985-898-2535
Structure Demolition and Site Restoration Project, Ward County, ND Fee: $297,500	CDM Smith	Demolition	Project Manager	8 Months	50%	5/2013 – 12/2013	Ward County Travis Schmit, Assistant County Engineer 701-838-2810

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Jenny Bywater, P.E.

Title: Environmental Compliance/Permitting - Stormwater

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF -TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Hurricanes Katrina and Rita Louisiana Land Trust Home Demolition Program, New Orleans, LA Fee: $40.5 million	CDM Smith	Home Demolition	Stormwater Compliance Officer	12 Months	50% during first 6 months; 10% for last six months	March 2010 – March 2011	Louisiana Land Trust Mike Taylor, Executive Director 225-395-0777
Department of Public Works City-Wide Drainage Master Plan, New Orleans, LA Fee: $1.9 million	CDM Smith	Stormwater Modeling and Planning	Project Engineer	3 Months	50%	January 2010 – March 2010	City of New Orleans, Department of Public Works Mark Jernigan, Director 504-658-8000
Long-Term 2 (LT2) Enhanced Surface Water Treatment Rule Variance Request, Portland, OR Fee: $600,000	CDM Smith	Regulation Variance Request	Project Engineer	6 Months	75%	January 2011 – June 2011	Portland Water Bureau Ann Richter 503-823-6135

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: George Molnar

Title: Environmental Compliance/Permitting - Wetlands

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Roebling Steel Superfund Site, Wetland Delineation, Florence Township, New Jersey Fee: Unavailable	CDM Smith	Contaminated Sediment Removal/Wetland Delineation	Project Scientist	<1 Month	40%	September 2008	United State Army Corps of Engineers Kansas City District Dan Hearnen 816-389-3578
Zschiegner Refining Corporation Superfund Site, Wetland Monitoring Program, Howell Township, New Jersey Fee: $770,000	CDM Smith	Contaminated Soil and Sediment Remedial Design, Wetlands Remediation	Project Scientist	18 Months	20%	11/2011 – 10/2013	United States Environmental Protection Agency Stephanie Vaughn 212-637-3914

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: J. Howard Beverly, Jr., RPA

Title: Environmental Compliance/Permitting - Historic

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Subject Matter Expert – Historic/Architectural	4 Months (Ongoing)	30%	9/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
Washington Pike/Millertown Pike Improvements, Section Two – Washington Pike from I-640 to Murphy Road, city of Knoxville, TN Fee: Unavailable	CDM Smith	Archaeological Survey & Cultural Historic Overview	Co-Principal Investigator	9 Months	20%	June 2011 – Feb. 2012	City of Morristown 100 W. 1st North Street, Morristown, Tennessee 37814
East Cedar Street Roadway Improvement Project, City of Bristol, TN Fee: Unavailable	CDM Smith	Archaeological Survey & Cultural Historic Overview	Co-Principal Investigator	9 Months	20%	June 2011 – Feb. 2012	City of Bristol, Tennessee PO Box 1189 Bristol, Tennessee 37621
CR 6 Bridge Replacement, Township of Lexington, NY Fee: $10,000	CDM Smith	Archaeological Survey & Cultural Historic Overview	Co-Principal Investigator	2 Months	40%	Sep. 2009 – Nov. 2009	Greene County Highway Department 240 West Main Street P.O. Box 485 Catskill, NY 12414

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Damon Tvaryanas

Title: Environmental Compliance/Permitting - Historic

Firm: Richard Grubb & Associates, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
DPMC DeMott Lane Bridge, Delaware & Raritan Canal State Park, Franklin Township, Somerset County, NJ Fee: $10,003	LAN Associates	Phase IA/IB Archaeological Survey and Application for Project Authorization	Principal Senior Historian	2 Months	10%	2/2013 – 3/2013	LAN Associates Christopher S. Guddemi 201-447-6400
NJ Transit Hudson-Bergen Light Rail, Route 440 Extension, City of Jersey City, Hudson County, NJ Fee: $20,580	AKRF, Inc.	Historic Architectural Resources Background Study (HARBS) and a Phase IA Archaeological Survey and Effects Assessment Report	Principal Senior Historian	2 Months	10%	5/2013 – 9/2012	AKRF, Inc. Dina Rybak 646-388-9601
PANY&NJ Greenville Yard Transfer Bridge Rehabilitation and Repair, City of Jersey City, Hudson County, NJ Fee: $23,188	AKRF, Inc.	Section 106 Consultation, Effects Assessment Study, HAER Recordation	Principal Senior Historian	1 Month	5%	3/2012 – 4/2012	AKRF, Inc. Molly McDonald 646-388-9810

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Ian Burrow, Ph.D., RPA

Title: Environmental Compliance/Permitting - Historic

Firm: Hunter Research, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Stow Creek Boat Ramp and Parking Area Improvements, Cumberland County, NJ NJDEP Fee: $11,000	Jefferis Engineering Associates	Phase I Archaeological Survey	Archaeologist (Principal Investigator) and Project Manager	5 Months	5%	3/2013 – 7/2013	Jefferis Engineering Associates Teal Jefferis 856-933-2005
Valley Forge Asbestos Remediation, Valley Forge National Historical Park, PA Fee: $165,000	John Milner Architects	Phase I Archaeological Survey	Archaeologist (Principal Investigator) and Project Manager	9 Months	25%	10/2012 – 6/2013	National Park Service Liza Rupp (NPS) 610-783-1028
James Tract Wetland Remediation Sussex County, DE USACOE, Philadelphia District Fee: $16,000	Hunter Research	Phase I Archaeological Survey	Archaeologist (Principal Investigator) and Project Manager	9 Months	10%	3/2010 – 11/2010	USACOE Nikki Minnichbach 215-834-1065
Big Brook Drainageway Improvement Project, Monmouth County, NJ Marlboro Township Fee: $6,000	CME Associates	Phase I Archaeological Survey	Archaeologist (Principal Investigator) and Project Manager	2 Months	5%	11/2013 – 12/2013	CME Associates Joseph Giddings 732-462-7400
U.S. Route 301 Highway Improvement Project, Delaware Department of Transportation Fee: $1,850,000	Hunter Research	Phase I, II and III Archaeological Studies	Archaeologist (Principal Investigator) and Project Manager	64 Months (ongoing)	20%	9/2008 – Present	DelDOT David Clarke 302-760-2771

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: James Lee, III

Title: Environmental Compliance/Permitting - Historic

Firm: Hunter Research, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Statue of Liberty/Ellis Island Life and Safety Upgrades and post-Superstorm Sandy Repairs, National Park Service Fee: $88,000	Atkins Global	Archaeological Monitoring	Archaeologist/Principal Investigator	25 Months (ongoing)	15%	12/2011 – Present	Atkins Global Gary Self 720-475-7142
Asbury Graphite Mill Rehabilitation and Demolition, Asbury, NJ **Musconetcong River Watershed Association** Fee: $22,000	Engineering Land Planning Associates	Archaeological Survey and Monitoring	Archaeologist/Principal Investigator	24 Months (ongoing)	5%	1/2012 – Present	Engineering Land Planning Associates Grant Lewis 908-238-0544
Holtwood Hydroelectric Facility Expansion, Holtwood, PA **PPL Electric Utilities Corporation** Fee: $11,000	Kleinschmidt Associates	Phase I Archaeological Survey	Archaeologist/Principal Investigator	4 Months	15%	1/2012 – 4/2012	Kleinschmidt Associates Tim Oakes 717-687-7211
Polhemus House Demolition **Newark Museum, Newark, NJ** Fee: $6,000	Michael Graves Architects	Archaeological Monitoring	Archaeologist/Principal Investigator	10 Months	2%	January – November 2012	Michael Graves Architects James Wisniewski 609-924-6409
Green Brook Flood Damage Reduction Project, West Main Street, Bound Brook, Diversion Pipes **USACOE, New York District** Fee: $65,000	Hunter Research	Phase II Archaeological Survey	Archaeologist/Principal Investigator	7 Months	25%	February – August 2010	USACOE Lynn Rakos 917-790-8629

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: William Liebeknecht

Title: Environmental Compliance/Permitting - Historic

Firm: Hunter Research, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
Moores Beach Restoration Cumberland County, NJ Fee: $9,000	Hunter Research	Archaeological Monitoring	Archaeologist/Principal Investigator	3 Months	30%	5/2013 – 7/2013	NJDEP William Dixon 609-273-7733
Natural Lands Trust Ecological Restoration, Cumberland County, NJ Fee: $29,000	Hunter Research	Phase I Archaeological Survey	Archaeologist/Principal Investigator	3 Months	50%	6/2011 – 8/2011	USDA NRCS ShayMaria Silvestri 732-537-6065
Cedar Neck Road Reconstruction Delaware Department of Transportation Fee: $325,000	Hunter Research	Phase I, II and III Archaeological Studies	Archaeologist/Principal Investigator	42 Months (ongoing)	20%	7/2010 – Present	DelDOT David Clarke 302-760-2771
Darby Dam Removal Chester County, PA Fee: $15,000	Princeton Hydro	Phase I Archaeological Survey	Archaeologist/Principal Investigator	4 Months	15%	3/2010 – 6/2010	Princeton Hydro Geoff Goll 908-237-5660
Halls Mill Road Bridge Replacement Monmouth County, NJ Fee: $65,000	T & M Associates	Phase II Archaeological Survey	Archaeologist/Principal Investigator	9 Months	25%	10/2008 – 6/2009	T & M Associates Fred Passeggio 732-671-6400

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Robert Ball, MHP, RPA

Title: Environmental Compliance/Permitting – Historic Archaeologic

Firm: CDM Smith

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
NJDEP, Superstorm Sandy Disaster Recovery Support Term Contract, NJ Contract Value: $9.6 million Fee: $1 million awarded to date	CDM Smith	Residential Site Inspections, Environmental Assessments and Environmental Review Record Development	Subject Matter Expert – Archaeology	4 Months (Ongoing)	30%	9/2013 – Present	NJDEP Donna Mahon, Director of Sandy Recovery Environmental and Historic Preservation Review Program 609-341-5313
CR 6 Bridge Replacement, Township of Lexington, NY Fee: $10,000	CDM Smith	Archaeological Survey & Cultural Historic Overview	Co-Principal Investigator	2 Months	20%	9/2009 – 11/2009	Greene County Highway Department 240 West Main Street P.O. Box 485 Catskill, NY 12414
Westchester County Hudson River Park, Tarrytown, NY Fee: $15,000	CDM Smith	Archaeological Survey & Cultural Historic Overview	Principal Investigator	2 Months	20%	9/2009 – 10/2009	Historic Hudson Valley 150 White Plains Road Tarrytown, NY 10591

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Paul McEachen, RPA

Title: Environmental Compliance/Permitting – Historic Archaeologic

Firm: Richard Grubb & Associates, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
DPMC DeMott Lane Bridge, Delaware & Raritan Canal State Park, Franklin Township, Somerset County, NJ Fee: $10,003	LAN Associates	Phase IA/IB Archaeological Survey and Application for Project Authorization	Principal Senior Archaeologist	2 Months	10%	2/2013 – 3/2013	LAN Associates Christopher S. Guddemi 201-447-6400
DPMC Elmer Lake Dam Rehabilitation, Borough of Elmer, Salem County, NJ Fee: $8,700	Civil Dynamics, Inc.	Archaeological Monitoring	Principal Senior Archaeologist	3 Months	5%	10/2011 – 12/2011; 3/2012	Civil Dynamics, Inc. Christopher Adams 973-697-3496
DPMC Utility Upgrade, Monmouth Battlefield State Park, Manalapan Township, Monmouth County, NJ Fee: $30,007	Birdsall Engineering, Inc.	Phase IA Archaeological Survey and Application for Project Authorization	Principal Senior Archaeologist	2 Months	10%	8/2010 – 12/2010	Birdsall Engineering, Inc. James McGoldrick (Former Project Manager - Contact Information Unavailable)

KEY TEAM MEMBER PROJECT EXPERIENCE DATA SHEET

Name: Patrick Harshbarger

Title: Environmental Compliance/Permitting – Historic Archaeologic

Firm: Hunter Research, Inc.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT (IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTACT PERSON AND PHONE NUMBER
New Jersey CDBG-DR Grant Program, New Jersey Department of Environmental Protection Fee: $25,000	CDM Smith	Archaeological and Architectural Screenings for Disaster Recovery	Principal Historian/Architectural Historian and Project Manager	3 Months (ongoing)	5%	10/2013 – Present	CDM Smith Patricia Forgang 732-590-4622
Riegelsville Dam Removal Hunterdon & Warren Counties, NJ Musconetcong River Watershed Association Fee: $15,000	Holt Morgan Russell	Historical Research and Archaeological Survey	Principal Historian/Architectural HIstorian	9 Months	10%	6/2011 – 2/2012	Holt Morgan Russell Robert Russell 609-924-1358
99th Regional Support Facilities Northeast and Middle Atlantic States USACOE, Louisville District Fee: $165,000	PARS Environmental Inc.	Phase I Archaeological Survey and Architectural Assessments	Principal Historian/Architectural Historian and Project Manager	13 Months	20%	11/2012 – 12/2013	U.S. Army Reserve Amanda Murphy 609-562-7666
Blackwells Mills Dam Removal Somerset County, NJ Fee: $12,000	Princeton Hydro	Phase I Archaeological Survey and Architectural Assessments	Principal Historian/Architectural Historian and Project Manager	37 Months (ongoing)	2%	12/2010 – Present	Stony Brook/Millstone River Watershed Association Amy Soli 609-737-3735
Gowanus Canal Archaeological Survey USACOE, New York District and USEPA, Region II Fee: $20,000	CH2MHill	Phase I Archaeological Survey and Eligibility Assessment	Principal Historian/Architectural Historian and Project Manager	9 Months	15%	10/2011 – 6/2012	CH2MHill Crystal Nguyen 714-435-6227

SECTION 3:
Project Approach to Services

The CDM Smith team has experience with some of the largest debris management programs ever undertaken including large post Hurricane Katrina efforts. Many clients in south Louisiana and throughout the country have been served by members of our team. The extent of post-Katrina demolition and debris removal management services performed by the CDM Smith team is impressive in terms of clients served and number of sites assessed, cleared, demolished and/or restored. Tens of thousands of sites have been touched by and benefited from our team's involvement.

3.1 Typical Procedures for Demolition Assignments

Demolition planning and implementation of storm damaged homes is a complicated process involving a large number of interrelated steps, processes and procedures. It is important to utilize a methodical approach that enforces proper communication and includes necessary controls for the demolition contractor. These management controls and technical procedures are imperative to ensure that homes are demolished rapidly and safely, with minimum risk and maximum reimbursement. Our technical approach is based on our experience as the management firm responsible for numerous demolition programs over the years involving tens of thousands of properties throughout the country, as well as methods to continually refine these processes.

Our technical approach takes into account our years of experience in post-hurricane demolition of tens of thousands of properties throughout the country, as well as methods to continually refine these processes.

The following is a brief explanation of the tasks necessary for completion of demolition activities and supporting requirements.

3.1.1 TASK 1- PRELIMINARY SITE INVESTIGATIONS

Pre-demolition site investigation activities focus on evaluating a property's condition and defining the work that needs to be completed prior to the home's demolition. These activities include: property inspection, pre-demolition site videos, asbestos and lead based paint (LBP) inspection and hazardous material evaluation.

Depending on the age and construction of the property and/or it's out buildings a historic architectural review may be required. If needed, this review includes performing a Section 106 historic architectural evaluation to support the New Jersey Historic Preservation Office's (NJHPO's) requirements. This evaluation may entail preparing a historical summary of the study area. Specifically, this summary could include review of historic maps, aerial photographs, published secondary sources, and other pertinent research data relating to the history of the study area such as agency files at the NJHPO. This background research task would be undertaken in support of an assessment of the historical and architectural significance of the study area. Fieldwork to be conducted should support an eligibility evaluation of whether the study area qualifies as a potential historic site, which may also include photographs of the streetscapes in the immediate vicinity of the site and identifying contributing/non-contributing resources in the vicinity. Data gathered in the field would be analyzed with reference to the background research information gathered. All data would then be compiled on NJHPO architectural survey forms, which might include a Historic District Overlay form and Eligibility Worksheet with physical description and historical summary of the study area, resulting in a justified eligibility assessment.

To complete each site investigation, a detailed hazardous material survey of building interiors and exteriors will be performed to identify and quantify hazardous materials that will need to be removed and/or an abatement

performed prior to demolition. The hazardous material survey will focus on the following items:

- PCB-containing equipment (e.g. ballasts, transformers)
- Mercury-containing equipment (e.g. gauges, switches, thermostats)
- Freon-containing equipment (A/C units)
- Above ground fuel oil storage tanks and/or previously unidentified underground fuel oil storage tanks
- Discarded oils, paints, solvents, cleaners, etc.
- White goods (refrigerators – freon, ovens – PCB capacitors)
- Universal wastes (lamps, including fluorescent lamps; batteries; pesticides that are part of a recall or collection program and mercury-containing equipment)
- Asbestos containing materials
- Lead-based paint
- PCB caulking and glazing
- Difficult-to-manage (e.g. compressed gas cylinders)

Our team will rely on the following methods for identifying and quantifying hazardous materials and conditions:

- Visual observations/date of home construction
- Field dimensions
- Manufacturer nameplate information
- Laboratory testing (caulk/glazing) for PCBs by EPA Method 8082
- X-ray fluorescence (XRF) analysis (LBP)
- Bulk sample analysis (ACM) by EPA Polarized Light Microscopy with Dispersion Staining (PLM/DS) method with visual estimation of any resulting asbestos concentrations

In addition to the hazardous material survey, documentation of pre-existing conditions as with any construction project is a good practice for establishing a baseline of any surrounding properties to eliminate or minimize complaints of property impacts that are brought to DPMC's attention as occurring due to the demolition. This documentation can be completed via a pre-demolition site video if approved by DPMC.

3.1.2 TASK 2 - PROJECT SCOPING DOCUMENTS

The team will develop a demolition scoping document for every site to be demolished specifying the overall work to be performed. A general description of items left behind by the former property owner will be provided. Materials that should be recycled and in what manner will also be described. The scoping document will also contain documentation such as:

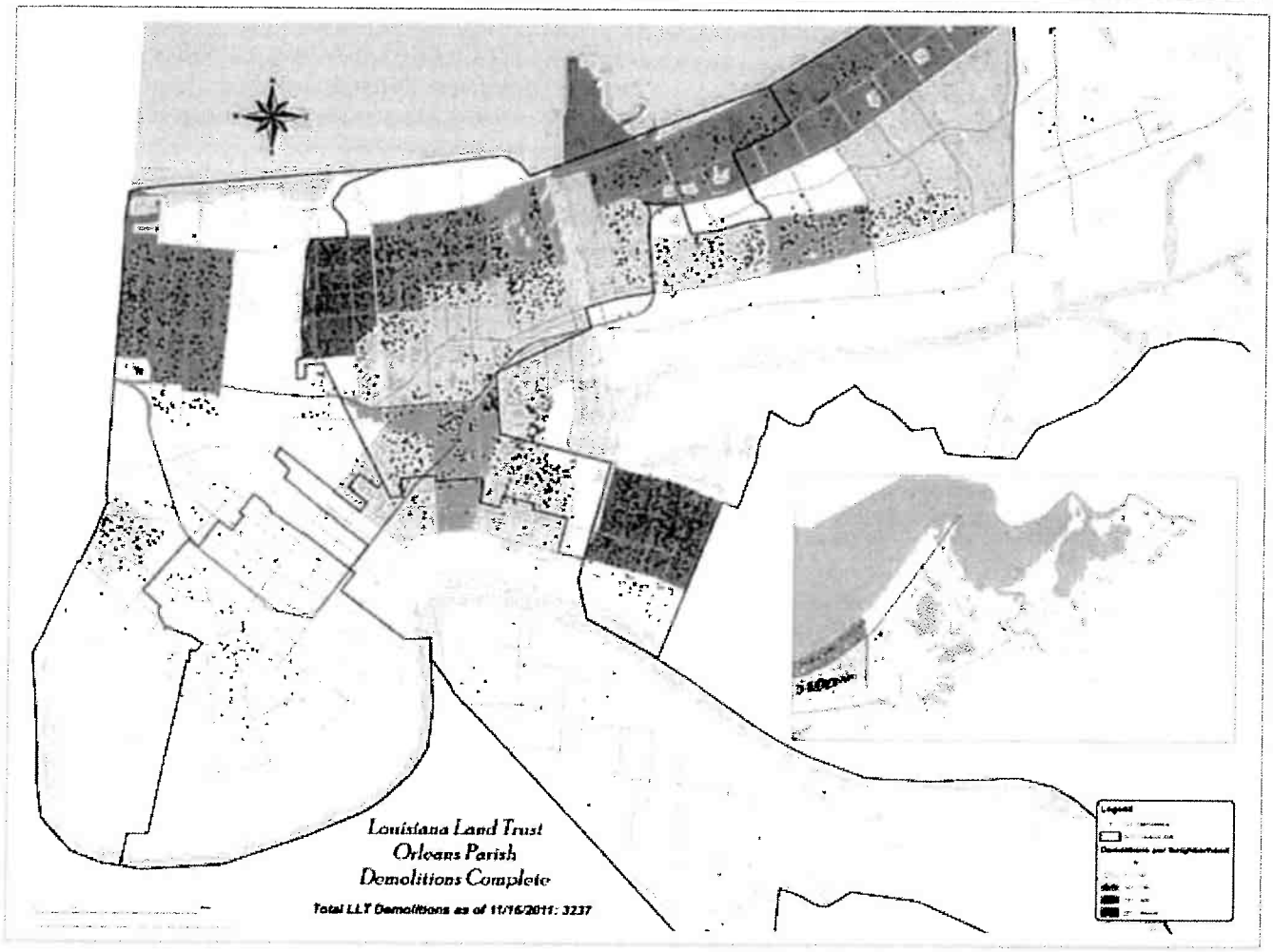
- Site address and GPS coordinates
- Demolition site plan including outbuildings, driveway, pool and known water supply well or other underground structures that will be demolished or closed in place
- Summary of the results of the hazardous material survey
- Historic architectural/possible archaeology issues, if any
- Health and safety requirements
- Site photos
- Utility disconnect listing
- Special monitoring provisions, if any (videotaping, vibration monitoring, etc.)
- Permit requirements
- Local municipality project representative

3.1.3 TASK 3 – PREPARATION OF DESIGNS AND BID SPECIFICATIONS

During many years of home demolition work, the CDM Smith team has developed specifications for procurement of demolition contractors. Our bid documents include a very focused and effective set of demolition specifications, that contains strict but fair and achievable controls for the contractor so work is completed rapidly, efficiently and safely. We will continue with the same successful bid specifications and management tools as we have used on previous programs, and which are improved and streamlined whenever the opportunity exists. We will also work with DPMC to incorporate their standard terms and conditions into the specifications along with any demolition specific items DPMC has found effective/relevant from previous demolition contracts that should be incorporated into the Blue Acres project bid specifications.

As part of the design and bid specification preparation task, the team will:

- Develop a base plan
- Evaluate structure stability and design mitigation measures, as needed
- Evaluate foundation stability and design mitigation measures, as needed
- Define general public and property concerns and develop protection measures, as needed
- Incorporate findings from the Hazardous Materials Survey into technical specifications that address abatement, removal, and health and safety



CDM Smith has performed over 3,200 demolitions/slab removals within Orleans Parish.

- Develop technical specifications for demolition that includes requirements for means and methods, work plans, engineering survey as required by OSHA 29 CFR 1926.850, and work controls.
- Define site restoration requirements and develop grading plan and soil stabilization measures

We will develop the following drawings:

G-0 Coversheet

G-1 General Notes and Legend

C-1 Existing Conditions

C-2 Protection Measures

C-3 Demolition

C-4 Restoration

C-5 Details

Where possible, the team will rely on annotated color photographs of buildings/structures/tanks to convey area-specific demolition details and include such photographs as part of the drawing package. It is noted that we have previously used this method on many demolition projects with excellent results.

The team will prepare specifications in Construction Specifications Institute (CSI) format. When preparing a demolition design, the main focus is preparing the building for demolition (i.e., hazardous material removal/abatement, utility cut and cap), and setting requirements to physically control the work so it is accomplished in a safe manner. Therefore, many of our specifications relate more to control of work than the actual demolition itself. The following is a list of specifications that we will develop as directed and approved by DPMC:

DIVISION 0: PROCUREMENT AND CONTRACTING REQUIREMENTS

00020 Invitation to Bid
00100 Instructions to Bidders
00300 Bid Form
00500 Agreement
00600 Bonds
00700 DPMC General Conditions

DIVISION 1: GENERAL REQUIREMENTS

01010 Summary of Work
01025 Measurement and Payment
01046 Control of Work
01101 Safety, Health, and Emergency Response
01200 Project Meetings
01300 Submittals
01311 Construction Scheduling
01500 Temporary Facilities

DIVISION 2: SITE WORK

02050 Demolition
02080 Asbestos Abatement
02082 Hazardous, Universal, and Non-Hazardous Waste Removal
02200 Earthwork
02230 Granular Fill Materials
02270 Erosion and Sedimentation Control
02930 Loaming and Hydroseeding

3.1.4 TASK 4 - COMPLIANCE WITH ALL ENVIRONMENTAL STATUTES AND REGULATIONS

There are a variety of environmental regulations that may be encountered as part of the residential home demolition process. In particular, NJ and USEPA's solid waste rules will control where the demolition debris can be disposed even after the asbestos and other remaining hazardous waste materials are removed and disposed of separately. The reason for this is due to the fact that if the home contains LBP on walls and wood doors and railings, separate removal of the LBP will not be practical and material classification will rest on either a defensible knowledge of the material or a representative sample tested for toxicity characteristic leaching procedure (TCLP) for lead. If the TCLP test fails then the demolition debris would be classified as a hazardous waste and if the TCLP passes then the material can be classified as construction and demolition waste.

Asbestos compliance is inherent in the following of multiple rules from NJDEP, USEPA and OSHA. Our team partners, TTI and Environmental Connection, have the necessary asbestos certifications to identify/evaluate asbestos containing materials and oversee abatement activities. The asbestos staff are highly trained and knowledgeable of the spectrum of asbestos rules and regulations.

As noted in Section 3.1.1 should architectural issues arise with any of the properties CDM Smith and it's team members Richard Grubb and Associates and Hunter Research are fully versed in the NJHPO's requirements for historic architecture. In addition, floodplains have a high potential for Native American archaeological deposits in the soil and subsoil. Prior to any soil disturbing activities, all properties shall be reviewed by our team specialist using known historic properties and archaeologically sensitive areas. Any identified archaeological sites on or adjacent to the property will have a buffer created by our SOI-qualified archaeologist to avoid impacting the known site. If debris removal activities disturb archaeological artifacts (e.g. old bricks, ceramic pieces, historic bottle glass or cans, beads, stones in the form of tools, pieces of crude clay pottery, etc.), archaeological features (e.g. grave markers, house foundations, cisterns, etc.), or human remains, it is expected that we will issue a stop work order in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. At that time, we will promptly contact the DPMC Plan & Code Review Unit, FEMA representatives and the New Jersey Historic Preservation Office (NJHPO) (as well as local law enforcement, county coroner/medical examiner, and county Office of Emergency Management representative for human remains, if applicable) for further discussion and guidance. We will not allow the contractor to proceed with work in the area(s) of concern until FEMA staff has completed consultation with the NJHPO and other interested parties, as necessary along with agreement from DPMC that the contractor can proceed with the site work.

Underground Storage Tanks (USTs) storing fuel oil for a residential property are exempt from the NJ UST regulations (NJAC 7:14B). However, if the tank has leaked and impacted site soils or groundwater are identified, then the site investigation and cleanup will be covered under the Administrative Requirements for the Remediation of Contaminated Sites (NJAC 7:26C) and the Technical Requirements for Site Remediation (NJAC &:26E). In order to receive a letter of no further action from NJDEP the remedial work should be performed by an individual with a NJ UST subsurface evaluator license. If the tank is part of a larger site with other areas of concern then the oil UST could be closed via the NJ Licensed Site Remediation Professional program.

3.1.5 TASK 5- PERMIT COORDINATION/ APPROVALS

The primary permit process anticipated for the demolition activity is the local municipal uniform construction code construction permit application. As per the RFP, this permit will be completed by the CDM Smith team and paid for/ obtained by DPMC. Proof of asbestos abatement will need to be provided as part of the permit application along with a site plan, utility disconnect letters, proof of notification, as needed, to surrounding property owners and the contractor's license. We understand that each community involved in the Blue Acres program will provide a representative that the consultant can work with to assist in the demolition permit approval process.

In addition to the demolition permit, closure of a drinking water well will require a well abandonment permit from NJDEP. For the atypical case where over 5,000 square feet of earth is disturbed as part of the overall demolition activities then discussion with the local county soil conservation office will be required.

Local permits may also be required for the removal of an underground tank or the closure of a septic tank and leach field.

3.1.6 TASK 6- COORDINATION WITH STATE, FEDERAL AND OR LOCAL OFFICIALS

The importance of "inclusion" cannot be underestimated when it comes to a program such as Blue Acres. Our team has found that integration of the relevant environmental agencies and local governments into the program is a key success factor. CDM Smith has an open line of communication with the New Jersey Department of Environmental Protection (NJDEP) based on our on-going Sandy Recovery work. Our team will continue to maintain a close working relationship and be proactive in our communication and involvement with NJDEP as well as DPMC and other critical resource agencies such as the New Jersey Historic Preservation Office, USEPA, FEMA, HUD, local government municipal and building construction officials, and any others who may have oversight or input roles. In addition, we will continue to invite representatives from these agencies/municipalities to attend our progress meetings on an as needed basis to help share information and work together toward solutions to problems. This has been a proven strategy in helping to expedite trouble-free demolition of structures.

3.1.7 TASK 7- BID/AWARD SUPPORT SERVICES TO DPMC

Without a good demolition contractor(s) governed by appropriate, sensible and implementable contract specifications and terms, the successful completion of the program would be at risk. The reality of demolition programs is that major problems and negative publicity are often due to mistakes made during procurement of the demolition contractor and the subsequent actions of the demolition contractor. The CDM Smith team has developed numerous bidding documents and specifications for demolition of hurricane damaged homes. Each time we have assisted our clients with contractor procurement, we took the opportunity to improve our bidding specifications and contract language. Our experience and knowledge is invaluable toward the creation of clear, concise, efficient and fair procurement documents and contract terms for the demolition contractor.

We understand that DPMC will utilize its existing pool of pre-qualified contractors to bid on the demolition packages developed for this program. From our team's experience, we applaud this approach since we believe this process tends to mitigate and control risks. In fact, our preferred approach typically is to include, at minimum, experience levels and measurable performance standards in the contract specifications to pre-select contractors. Thus, through DPMC's pre-selection of contractors, the first critical step to effective implementation is already available.

Under this task, our team will support DPMC, as requested, in the following procurement activities:

- Advertise the bids
- Attend pre-bid meeting with the contractors
- Issue addenda responding to contractor questions
- Review and tabulate bids
- Assist with contractor selection

Another key element of contractor procurement will be the method of determining payment. In nearly all demolition programs in the post-Katrina era, the primary unit item for payment has been the cost per cubic yard of material demolished. The large number of homes coupled with the team's knowledge of demolition costs has allowed us to re-evaluate contract bidding terms. Rather than using the traditional FEMA "per cubic yard" measure, we have developed a "per

Rather than using the traditional "per cubic yard" measure, we have established a "per home" cost for demolition. This method has many benefits related to simplicity both in administration and contractor management. CDM Smith will propose this approach to contract delivery as the primary type of demolition contract.

home" cost for demolition. This method has many benefits related to simplicity both in administration and contractor management. Of course additional unit price items may be needed in each package such as asbestos abatement, above ground storage tank (AST) removal, walkway and driveway removal, etc. Input of the necessary unit price items should assure the quickest implementation of the demolition process possible and CDM Smith is experienced in applying this approach for programs utilizing federal funds. We would be happy to discuss this approach to contract delivery as the primary type of demolition contract due not only to the likely lower costs but the ability to minimize the potential for non-reimbursed costs. A brief further discussion of this alternative demolition pricing approach is described below.

In order to develop what we believe to be a more cost-effective approach to home demolition pricing, on previous post-hurricane projects our team has implemented a unit cost price for a structure instead of payment on a cubic yard basis. The success of this approach allowed us to reduce the average cost of demolition per house significantly. It should be noted that this approach reduces both the demolition costs and the costs of demolition procurement and oversight.

This approach reduces both the demolition costs and the costs of demolition procurement and oversight.

It is important to point out that the CDM Smith team "per home" approach to demolition contracting, if agreeable to DPMC, can greatly simplify the Load Ticket managing effort. In fact, traditional cubic yardage Load Tickets are not necessary for debris disposal. Payment can be based on completion of the demolition according to the structure's size category and not the number of cubic yards of debris produced.

Landfill disposal receipts are required as proof of disposal but the quantity would only be used as a quality check and not a pay item. Accurate management of pay items tickets and other load tickets (such as sand) are critical to ensure proper accounting for FEMA or HUD-reimbursable payments to the contractor. We have established protocols to ensure this process is precise and accurate.

Although average demolition costs in New Jersey are anticipated to be different, CDM Smith's proposed approach to demolition on a per unit basis should provide similar savings of over $10,000 per home.

3.1.8 TASK 8- QUALITY CONTROL/ASSURANCE

A discussion of this task activity is provided in Section 3.4.

3.1.9 TASK 9- CONSTRUCTION ADMINISTRATION AND OVERSIGHT OF CONTRACTOR'S WORK

There are two key elements to a discussion regarding contract management: 1) the CDM Smith team itself, and 2) management of demolition contractors. The CDM Smith team has proven and tested internal and external procedures for management of both, including progress and budget tracking, budget projections, invoicing, reporting, document controls and related administrative functions. We employ industry leading management and budget tracking systems to control the work product and expenditures of contractors or subcontractors. We have employed these management procedures on large demolition projects as well as major infrastructure programs throughout the country.

Our contract management procedures form the front line of accurate documentation and fraud control. Oversight of demolition contracts is a comprehensive process that utilizes many of the same tools and controls as those used for management of other CDM Smith demolition contracts. Documentation, invoicing, and auditing are intimately related activities that combined with our effective and focused field monitoring are essential elements of our management plan.

For each demolition site, a pre-demo walkthrough is required to visually verify that the property is ready for demolition and that there are not any surprises. At this stage, the contractor will verify that all utilities are disconnected and properly marked, the necessary road signaling as required by the New Jersey Department of Transportation (NJDOT) is in place and that the area has been cordoned off. The walkthrough should also be used to identify and note sensitive areas or structures to be removed such as septic tanks, trees, fences, pools, etc.

Prior to demolition, the contractor will be responsible for documenting, if not done previously by the consultant, the condition of the site and neighboring properties, fences, sidewalks, and curbs to document pre-demolition conditions in case of damage to any of these items.

Based on past client interactions, our team recommends continued progress meetings between all interested parties, including regulatory agencies. Status reports will be provided and discussion of progress, delays and operational problems and issues are discussed and resolved.

Structures containing regulated asbestos will have to be abated. In the event that asbestos abatement is required, the CDM Smith team has experience in issuing detailed abatement reports and can provide the required contractor oversight and regulatory compliance support. Our team has the proper asbestos certifications and experience to provide site monitoring, including air sampling during abatement activities. Field monitoring will continue by the CDM Smith

team to ensure that the demolition proceeds in accordance with the contract documents and that all components of the demolition plan are completed as required. Monitoring serves to ensure that the necessary documentation is completed and accurate. The site monitor is also the liaison for neighbors, regulatory agencies and local government representatives who may visit the site for various reasons. Honest, reliable and well-trained monitors reflect positively on the entire program.

If requested by DPMC, once a request for payment by a contractor is submitted, our team will review each pay item quantity included on an invoice. Because all property documentation has undergone our multiple layered QA/QC review, any discrepancy is quickly identified. The invoice is reviewed to ensure that all requested pay items are eligible for payment per the contract documents and that they are also reflected on supporting documentation contained in the property folders and/or within the invoice. Once an invoice has been completely reviewed, a revised version identifying all discrepancies will be sent to the contractor for review along with supporting documentation when necessary, so that both parties are able to resolve any inconsistencies. Only when an agreement has been reached will an invoice be submitted to DPMC with our recommendation for payment.

It should be noted that providing close to a decade of similar work for tens of thousands of properties, CDM Smith's clients have yet to incur non-reimbursed costs under similar FEMA and HUD funded programs.

Finally as per Section 7.4 of the RFP, close-out documentation will be prepared and submitted to DPMC.

3.2 Identification of Responsibilities for the Various Tasks

Identification of staff responsible for the various tasks associated with the demolition assignments are clearly indicated on the organizational chart and staffing plan provided in Section 1 of this proposal. The day to day management and oversight of the Blue Acres project and coordination with DPMC resides with our project managers who will work with our field and engineering staff and our subconsultants to bring the site demolitions to completion. The CDM Smith team has identified our key subconsultants, TTI and Environmental Connection to supply staff certified in asbestos and lead based paint inspections, sampling and the oversight of asbestos removal. In addition, Richard Grubb and Associates and Hunter Research will assist CDM Smith with archaeology and historical architecture issues. Figure 1-1 in Section 1 clearly indicates the personnel assigned to each key task.

3.3. Contingency Plans to Deal with Problems and Correct Errors

CDM Smith utilizes lessons learned from demolition programs throughout the country to continually refine our property evaluation activities and procurement document preparation. This approach is supplemented by CDM Smith's QA/QC procedures to assure the quality of our project documents.

We believe that our team's history of anticipating and pre-empting potential problems will provide a framework to minimize project technical or administrative issues. The experience of the team's personnel and high regard for quality and safe operations require that outcomes or contingencies be evaluated before a task is initiated. Our philosophy is to prevent problems. To this end, we will hold an internal kick-off meeting for each work order. In this meeting, possible/probable problems and the contingencies to resolve them along with the identification of most (if not all) related stakeholders will be brainstormed. The most probable contingencies will then be discussed with DPMC's Project or Contract Manager. When a problem that has been anticipated occurs, the team will have a procedure to handle this circumstance that includes, but is not limited to, the following six steps. The steps are performed in a time-is-of-the-essence fashion:

- Obtain as much available information as possible, verify the source of information and inform the Project and Program Managers of the problem at hand
- Maintain clear, effective and up-to-date communications with DPMC's Project Manager and/or Contracting Officer
- Proactively, and jointly with DPMC, work on a win/win solution to the problem or oversight, with emphasis on meeting contractual requirements and serving the public as licensed professionals
- Retroactively correct all affected deliverables and/or calculations, assumptions, and conclusions
- Follow up with a formal corrective action memorandum (CAM) that describes the problem, the contractual or cost issues, recommendations, and a monitoring plan to document that the error was corrected; how all affected particulars were properly addressed; how the error was corrected; and how the work can be monitored in the future to prevent re-occurrence.
- The CAM would be entered into a database so that lessons learned can be used to benefit other current and future project properties.

In addition to the above, weekly coordination meetings will allow task project managers and the technical manager to

investigate and develop solutions on a timely basis prior to significant cost or schedule impacts occurring. Resolutions of problems that occur during construction are also managed through proactive oversight and interaction with the contractors. If issues are identified that may impact funding eligibility, than our key technical resources that understand FEMA and CDBG funding issues can be called upon to inquire at the appropriate levels of FEMA and HUD to avoid funding compliance issues.

3.4. Policy and Procedures for Maintaining Quality Control

Quality has been the cornerstone of CDM Smith's reputation for more than half a century. From the smallest study or environmental assessment, to the most complex project, quality management is fully integrated into every project task. Project quality management, or PQM, is the umbrella process by which we impose the most stringent quality controls on our projects. This process can be implemented in various degrees, depending on the nature and magnitude of a given project. PQM can be defined as all activities undertaken to ensure that the services provided by CDM Smith meet client expectations and contract requirements.

The PQM activities are further subdivided into two categories—the first being specific QC procedures undertaken by staff engaged in a particular project and the second being timely overview by authorized staff to ensure that such control procedures are being followed to the extent appropriate. To guide these efforts, CDM Smith has developed PQM manuals to provide procedures and guidelines to be followed in the execution of all our projects. The processes outlined in these documents apply to all project-related activities—from proposal preparation to project design to the storage of project records and include:

- Project Startup Activities: budget and cost allocations, project planning and scoping documents, and scoping meetings.
- Project Deliverables: site investigation reports, construction drawings and bid specifications
- Field Activities: sampling and QC samples, field data collection and documentation (Field Activity Data Logs), demolition, remediation, and restoration
- Construction Activities: bid documents, bid evaluations, communications, dispute prevention, construction site safety, contractor submittals, progress schedules, change orders, record drawings
- Project Audits: Conducted on a quarterly basis by the Program Manager.
- Project Closeout Activities: Closeout forms, storage of project records.

CDM Smith's QA procedures also ensure compliance with state and federal requirements and quality management. Our process ensures that the correct level of environmental review is completed for each work order and that all applicable federal and state environmental laws are considered as part of the reviews.

CDM Smith's deliverables are thoroughly reviewed prior to release to clients. The goal of the review process is to have an independent evaluation of work products with technical content to ensure that:

- Appropriate data quality objectives are met
- Accurate and appropriate data is collected to meet data quality objectives
- All necessary pertinent regulatory requirements are being followed
- Project objectives are accomplished

Work assignments with a low level of complexity may only require an individual review. More complex assignments, including design, may demand the attention of a wide variety of technical discipline reviews. A technical review committee is comprised of several specialists to review these projects. The outcome of these reviews is included in a memorandum that identifies all questions or issues related to a project deliverable. This memorandum must be addressed by the project team. CDM Smith also encourages "over-the-shoulder" reviews from DPMC Project Managers so they can provide input during document development.

CDM Smith's QA program is a documented management system designed by the firm to ensure that QC procedures appropriate to each type and scope of work are in place and functioning. We take full responsibility for ensuring that a quality product is delivered.

The most important result of the QA/QC strategy is that funding and eligibility are ensured for all costs associated with the Blue Acres Program.

3.5. Understanding and Knowledge of DPMC and NJDEP Procedures and Processes and Knowledge and Familiarity with FEMA and HUD Requirements

FEMA AND HUD REQUIREMENTS

With DPMC's current method of procurement for both professional and contracting services, DPMC appears well on its way to meet the funding requirements from FEMA or HUD. Proper and competitive procurement is one of the key components for meeting their funding requirements. The current procurement for consulting services should meet this requirement. Inclusion of a pricing component in both the RFPs for demolition consulting and demolition contracting should meet the competitive procurement requirement of both agencies.

The completion of the proper procurement approach is completed by requesting competitive bids from DPMC's pre-selected contractors. Typically local procurement rules govern and as long as DPMC follows state requirements in a competitive process, this requirement should be met as well.

Another critical component is compliance with the separate environmental review process required by the National Environmental Policy Act (NEPA). Called Environmental Review Records (ERR) by HUD, it is critical that this process be completed prior to initiation of demolition activities to assure full reimbursement. As indicated above, since CDM Smith has been involved with assisting the State of New Jersey with these ERR activities then this process is already being performed per 24 CFR Part 58 for properties throughout New Jersey.

The last critical element is to incorporate into the bidding documents the proper FEMA and HUD requirements during the implementation of construction. For both FEMA and HUD funded demolitions, Davis-Bacon prevailing wage requirements will not apply. However, it is recommended that the contractor be required to comply with Section 3 of the HUD requirements which describe the hiring of employees for the demolition related construction activities. Outside of the above described requirements, the remaining needs are to assure proper documentation of fair and reasonable costs for implementation of the program for both CDM Smith's services and for the demolition contractors. By implementing the procedures outlined in this approach, full reimbursement of FEMA and HUD funds should be realized.

NJDEP, DPMC AND OTHER REGULATORY REQUIREMENTS

Given the magnitude of Superstorm Sandy, the need to demolish homes is on a magnitude that New Jersey has not previously faced. From CDM Smith's experience when programs of this magnitude are implemented close coordination with regulatory agencies is needed. Almost every program CDM Smith has embarked upon after a large disaster has resulted in some change of the implementation of existing regulations to facilitate its effective implementation. Accordingly, although we have a firm understanding of existing regulations, close coordination with NJDEP is recommended to address any issues that may arise.

Asbestos and Lead Abatement

Asbestos can be found in many of the properties in any residential demolition inventory and LBP is expected to be found in a number of homes based on the average year of construction preceding the date LBP containing materials were banned from use in residential home structures (1978). A specific skill set is required for asbestos management along with New Jersey Department of Labor (NJDOL) accreditation for management and inspectors. CDM Smith has assembled a strong team of qualified personnel capable of inspecting, reporting and coordinating all aspects of the asbestos management program for the Blue Acres Program. Without question, our team has provided reliable and accurate asbestos management for more properties than any other entity. We have obtained samples from tens of thousands of properties. Within Louisiana, post-Katrina, CDM Smith personnel were respected and frequently consulted by state of Louisiana staff on asbestos management and compliance.

As indicated in Section 3.1.4 above, the handling of LBP in residential home definition is defined by both NJDEP and USEPA guidance and regulations and will be followed by the CDM Smith team for the Blue Acres project.

Erosion Control/Stormwater Management

The CDM Smith team through our variety of demolition programs has experienced varied approaches to address the regulation of storm water management. Often this can come from the definition or interpretation of what is considered the project site. As indicated by DPMC, stormwater permitting should not be required under this program given the limited size of the areas involved. Although most individual home sites may not be considered of sufficient acreage to warrant the full regulatory requirements, demolition of numerous homes in the same area could present challenges to stormwater quality. Accordingly, we would recommend the bid documents include active procedures to provide erosion control at the individual sites. Our team is experienced in

implementing a variety of approaches to minimize impacts to stormwater quality. Whether the use of silt fences, proper grading, proper fill selection, installation of grass barriers, etc., the CDM Smith team is experienced in developing bid requirements and oversight to assure contractors minimize impacts to stormwater quality. A critical lesson learned is to provide unit price quantities for measures to assure storm-water quality is maintained long after the initial demolition, such as additional sodding or seeding measures, additional fill, etc. This will assist with long-term maintenance of the site if required and will minimize aesthetic problems as well

Above and Below Ground Fuel Oil Tanks, Drinking Water Wells and Septic Tanks

NJDEP and local requirements for closure of fuel oil tanks, drinking water wells and septic tanks were discussed in Sections 3.1.4 and 3.1.5 of this proposal and for this reason will not be repeated in this section.

SECTION 4:
Rate Schedule

The CDM Smith team proposes to complete the work under this contract in accordance with the rate schedule presented in the TC-008 Term Contract Rate Schedule by Personnel Level form presented on the following pages.

TC-008 TERM CONTRACT RATE SCHEDULE
BY PERSONNEL LEVEL

NAME OF FIRM: **CDM Smith**

INSTRUCTIONS

Provide a **LOADED** hourly rate ($ per hour; no cents please) below for all **Personnel** included in each of the **Levels** listed. Please refer to the RFP for a description of each of the personnel types by level. Your proposal may be considered unresponsive if you leave blanks.

PERSONNEL TYPE/DISCIPLINE	TERM CONTRACT HOURLY RATES PER CONTRACT PERIOD		
	BASE (3 YEARS)	EXTENSION OPTION – YR 4	EXTENSION OPTION – YR 5
LEVEL 7	$209.55	$215.83	$222.31
LEVEL 6	$181.87	$187.33	$192.95
LEVEL 5	$161.84	$166.69	$171.69
LEVEL 4	$122.55	$126.23	$130.01
LEVEL 3	$91.71	$94.46	$97.30
LEVEL 2	$86.04	$88.62	$91.28
LEVEL1	$74.34	$76.57\	$78.87
AVERAGE RATE (ALL LEVELS) Please calculate for Levels 7 -1	$132.56	$136.53	$140.63

RETURN THIS COMPLETED DOCUMENT TO DPMC

Authorized Signature: Mi Watt

TC-008 PERSONNEL LEVELS with EXAMPLES

LEVEL 7
Title: **Principal, partner or officer of the firm**
Duties: Overall responsibility for the legal, technical and financial obligation of the firm.

Qualifications: Current License in applicable discipline, if required by law.
Experience: N/A

LEVEL 6
Title: **Project Executive;**
Duties: Under direct leadership of principal, controls project scheduling and management.

Qualifications: Current license in applicable discipline, if required by law.
Experience: N/A

LEVEL 5
Title: **Project Manager; Discipline Manager;**
Duties: Under direction of Project Executive, directs day-to-day operations of the project, scheduling deadlines, group work activities, etc.

Qualifications: BA, BS degree or equivalent experience; Current license in applicable discipline, if required by law.
Experience: Minimum 7 years.

LEVEL 4
Title: **Senior Engineer; Senior Designer;**
Duties: Under supervision of Project Manager, reviews project elements to conform to project requirements, directs designer and others on projects.

Qualifications: BA, BS degree or equivalent experience; Current license in applicable discipline, if required by law.

Experience: Minimum 5 years

LEVEL 3
Title: **Discipline Engineer; Designer;**
Duties: Under supervision performs basic engineering tasks, analysis or elements of project scope; Takes designed systems and layout data and sketches and translates into usable construction documents.

Qualifications: BA, BS degree or equivalent experience; including appropriate licenses and certifications if required.
Experience: Minimum 3 years

LEVEL 2
Title: **Senior Technical Support; Senior CADD Operator/Draftsperson;**
Duties: Oversees of the preparation of site maps, Takes simple systems and layout data and sketches and translates into usable information; Performs drafting as required for construction documents.

Qualifications: High School Graduate, Technical School, or equivalent, with courses in discipline.
Experience: Minimum 3 years direct work experience within discipline.

LEVEL 1
Title: **Computer or CADD Draftsperson; Technician; Office Assistant**
Duties: Performs all entry level tasks: Assembles tracings for review, printing; keeps logs of tracings, shop drawings; performs tracing, drafting and other technical tasks; performs various office functions.

Qualifications: High School Graduate, Technical School or equivalent with courses in discipline.
Experience: N/A

TC - 008
DEMOLITION CONSULTANT
MULTIPLE AWARD TERM CONTRACT

CONSULTANT AFFIDAVIT

IMPORTANT - PLEASE READ, SIGN AND PROVIDE INFORMATION REQUESTED BELOW

Affidavit: I, being duly sworn upon my oath, hereby represent and state the foregoing information contained in the Term contract Proposal and any attachments thereto the best of my knowledge are true and complete. I acknowledge that the State of New Jersey (Owner) is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the Owner, or its contractors, to notify the Owner in writing of any changes to the answers or information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreements(s) with the Owner and that the Owner, at its option, may declare any contract(s) or sub-contract(s) resulting from this certification void and unenforceable.

Signature of the Consultant below attests that the Consultant has read, understands and agrees to all terms, conditions and specifications set forth and referenced in the TC – 008 Term Contract Request for Proposal (RFP) including the General Conditions to the Demolition Consultant Term Contract TC-008. Signature of the Consultant signifies that a contract is established immediately upon notice of award by the State of New Jersey for any or all of the items and the length of time indicated in the proposal. Failure to accept a contract award, to hold prices or to meet any other terms or conditions as defined in the Request for Proposal and subsequently the Notice of Award, during the term of the contract, shall constitute a breach of contract and may result in termination, suspension or debarment from further contractual agreements with the Owner.

Signature and Title of Principle or Individual of the firm authorized to sign contractual documents:

Firm Name:

Signature: Maria Watt Print Name: Maria D. Watt

Title: Principal Date: January , 2014

ATTESTED: Sworn and subscribed to before me on the 7th day of January, 2014 ~~1998~~.

Signature: _____
(Notary Public-Not an Officer of the Firm)

Sworn to and subscribed before me
this 7th day of January 20 14

DAVID M. GADDIS
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES SEPT. 24, 2014

RETURN THIS COMPLETED DOCUMENT TO DPMC