STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition of BNE Energy Inc. for a Declaratory Ruling for the Location, Construction and Operation of a 3.2 MW Wind Renewable Generating Project on New Haven Road in Prospect, Connecticut ("Wind Prospect")

Petition No. 980

February 16, 2011

PRE-FILED TESTIMONY OF THOMAS L. KONING

Q1. Mr. Koning, please state your name and position.

A. Thomas L. Koning and I am the Senior Vice President for Engineering and Construction for Zapata Incorporated (ZAPATA). I am a licensed Professional Engineer in seven states. ZAPATA is located at 6302 Fairview Road in Charlotte, North Carolina.

Q2. Please state your qualifications.

A. I have a Bachelor of Science degree from the United States Military Academy at West Point with a concentration in Engineering. I have a Masters Degree in Geology and another Masters Degree in Civil Engineering from North Carolina State University. I also have a Masters Degree in Strategic Studies from the US Army War College. My background includes over 30 years of professional experience in the field of civil engineering; twenty-five of those years as an engineer officer in the US Army Corps of Engineers (USACE). I have been a project manager for more than 1,000 projects in my career. In my last assignment in the military, I was the Commander and District Engineer of the New England District located in Concord, Massachusetts, where I was responsible for all USACE supported federal engineering projects and USACE permitting actions in the six New England states. In that role I was the Federal Deciding Official for the Cape Wind wind farm project in Nantucket Sound. I led the team in following the National

Environmental Protection Act (NEPA) process from permitting of the meteorological tower to the completion of the Draft Environmental Impact Statement (EIS) for that project.

Q3. Please describe your involvement in this matter.

A. ZAPATA was responsible for the preliminary civil engineering drawings, Storm Water Management Plan with Storm Water Pollution Prevention Plan (SWMP), and the Erosion and Sediment Control (E&S) Plan, at the proposed site at 178 New Haven Road in Prospect (the "Property"). The original drawings and plans were prepared by Mr. Richard Shane Smith of ZAPATA and I had responsible charge over the preparation of the plans and drawings. Mr. Smith cannot be here for this testimony because he is currently serving his nation; having been called to active duty as a member of the Air National Guard in Afghanistan.

Q4. Please describe the data used to prepare the preliminary civil engineering drawings.

A. At the request of BNE, ZAPATA began the process of reviewing the specifications and guidelines required to prepare a proper layout of the job site. The review included information on the equipment used to transport the components to the erection location and their specific requirements for the road surface and the clearances required. Also information was obtained on the cranes used for the erection and installation process. The majority of this information was available from the turbine manufacturer GE, and specific to the 1.6MW units.

Site visits were conducted by Zapata personnel four times between December 2009 and June 2010. ZAPATA representatives walked the site to determine the optimal access points and road position to the proposed turbine locations. On June 23, 2010,

representatives from Vanasse Hangen Brustlin, Inc. ("VHB") were present to assist in the preliminary locating of potential environmentally sensitive areas that would need to be considered during civil design. Topographical data on the site was obtained from the State of Connecticut Department of Environmental Protection (DEP). A site perimeter survey was performed by Roirdan Land Surveying. VHB performed a wetland determination and all data was transferred to the plans using generally accepted survey adjustment methods. Construction companies with experience in the erection and installation of wind turbines were consulted as well as transportation engineering firms providing modeling assistance for blade transport vehicles.

Q5. Please describe the preparation of the SWMP and E&S plans.

A5. The SWMP and the E&S plans were prepared in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the 2004 Connecticut Stormwater Quality Manual. The Erosion and Sediment Control Plan and the Stormwater Management Plan are consistent with these guidance documents except where noted.

The E&S plan highlights existing conditions, proposed construction activities, temporary and permanent best management practices (BMP), and backup data. The plan mirrors what is on the engineering drawings by providing written descriptions of the installation of, inspection of, and maintenance of, the Connecticut approve BMPs in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. The plan provides information on erosion control BMPS such as: sediment fence, hay bale barrier, stone check dam, pipe slope drain, diversion, fill berm, sediment trap, construction entrance, tree protection, and erosion control blankets. The plan provides

information on soil stabilization BMPs such as: seeding, fertilizer, mulching, and topsoiling.

During construction, the plan requires erosion control features will be inspected once per week and after significant rainfall events of greater than one half inch to ensure that they continue to function as designed and installed. These inspections will be documented on an Erosion and Sedimentation (E&S) Control Site Inspection Form (Appendix B of the plan). This E&S control inspection procedure will help avoid erosion and sedimentation problems by ensuring that the erosion control devices are installed, maintained and functioning properly, thereby protecting nearby wetland and watershed resources.

Post-construction, an upland meadow seed mix containing native grasses will be used to stabilize exposed areas of the site. Erosion control blankets have been incorporated into the plans to prevent erosion and sedimentation and aid in the establishment of vegetation and permanent stabilization.

The SWMP highlights the stormwater management practices to be included in this project. The plan includes post construction stormwater treatment by a stormwater quality swale located along the access road. This swale is considered a primary stormwater treatment practice by the 2004 Connecticut Stormwater Quality Manual. The swale is expected to capture and treat the design water quality volume; capture and treat 80% of the average annual total suspended solid load; and remove 80% of floatable debris. Stormwater discharge from water quality swales will be properly dissipated (i.e., level spreader) in order to prevent erosion and sedimentation of adjacent wetland resources.

The SWMP also addresses hazardous substance and oil spill reporting. For example, the SWMP requires adherence to a spill prevention controls and countermeasures (SPCC) plan that will include precautions to contain and properly clean up any fuel or petroleum spill. The plan requires good housekeeping practices, material safety data sheets (MSDS) kept onsite, and a spill containment kit.

Q6. What steps were taken to ensure a design having the least amount of environmental impact?

A. The Project has been designed to minimize environmental impacts. The BNE team, including ZAPATA and VHB, worked carefully through numerous iterations of potential turbine locations and spacing to balance capturing optimum wind conditions while avoiding/minimizing effects to the existing environment and habitat. For example, one of the highest quality wetland resources on the property, Wetland 1, was avoided through relocation of the turbines to ensure that the project would not have a substantial adverse environmental effect. In fact, the Project will have minimal adverse environmental impacts including impacts on scenic, historic or recreational values.

Realizing the minimum requirements in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, in an effort to reduce the construction footprint as much as possible, we have designed many slopes as 1:1 vice 1:2. This will require more attention to slope stabilization during construction through the use of temporary seeding and erosion control blankets and other erosion control measures. This method will only be utilized after geotechnical evaluations including soil analyses indicate it can be done with no increased risk, otherwise Zapata can re-design at 1:2. This will be determined in the anticipated development and management stage of this petition. Additionally, we have located our soil stockpile in an open area so that removal of additional trees is not

required. Post construction, we plan to restore as much of the area as possible. The construction road will be reduced by half its width. The modified portion will be shaped and stabilized with permanent vegetation. Lastly, the soil stockpile area will be spread and reseeded as an upland meadow.

In addition every effort was made to balance the amount of earthwork required. This proved to be an extremely difficult task due to the strict requirements for size, slope and weight bearing capacity of the access and transport roads, laydown and assembly areas, and crane pads.

Q7. Have there been any modifications to the plans since the petition was filed at the Connecticut Siting Council?

A. After reviewing the petition, the Connecticut Water Company (CWC) expressed several concerns with the construction activities originally proposed for the site. ZAPATA prepared revised site plans, on January 31, 2011, by repositioning and reducing the blade assembly and tower laydown areas at Tower Location 2 to increase the buffer to the closest wetland. In addition, erosion control measures were modified to minimize their concerns related to the project's proximity to the wetlands tributary to the reservoir. A letter was forwarded to the CWC describing the proposed changes along with modified drawings. Subsequently, revised plans responding to the concerns of the CWC were filed with the Connecticut Siting Council on behalf of BNE dated February 16, 2011.

Q8. Please briefly summarize your testimony?

A. The biggest challenge in designing the proposed drawings was incorporating the general requirements of the turbine manufacturer for the layout of the project with topographical and environmental features of the site. Zapata worked closely with BNE, VHB and other members of the BNE team to ensure a proper design of the Project from a

civil engineering perspective while minimizing environmental impacts. Close cooperation between BNE, the transportation company, the installation contractor, the turbine manufacturer and ZAPATA will ensure a safe and timely execution of the project. ZAPATA made an effort to be as conservative as possible in the preparation of the civil engineering designs with the expectation that as we move forward to complete designs for construction even smaller environmental impacts than the minimal ones already expected will be realized.

Q9. Is this the end of your testimony?

A. Yes.

02/16/11
Date

/s/ Thomas L. Koning
Thomas L. Koning

EXHIBIT 1

Today's Date:

2/3/11

Name:

Thomas L. Koning, PE, LEED-AP

Years Experience:

Zapata Incorporated	08/01/05
Other	30 years

Employer List:

Zapata Incorporated, 2005-Present, Senior VP Engineering and Construction
US Army, USACE, 2002-2005, Commander and District Engineer, New England District
US Army, USACE, 2004, Commander Gulf Region Southern District, Basrah, Iraq
US Army, USA War College, 2001-2002, Student
US Army, US Pacific Command, 2000-2001, Strategic Planner
US Army, 62nd Engineer Battalion, 1998-2000, Commander
US Army, 157th Infantry Brigade, 1996-1998, Operations Officer
US Army, 36th Engineer Group, 1995-1996, Design Engineer
US Army, 317th Engineer Battalion, 1994-1995, Operations Officer
US Army, USA Command and General Staff College, 1993-1994, Student
US Army, Department of Geography and Environmental Engineering, 1989-1993, Assistant Professor
US Army, North Carolina State University, 1987-1989, Student
US Army, C Company, 92nd Engineer Battalion, 1985-1987, Commander
US Army, 92nd Engineer Battalion, 1984-1985, Assistant Operations Officer
US Army, B Company, 547th Engineer Battalion, 1982-1983, Company Executive Officer
US Army, C Company, 547th Engineer Battalion, 1980-1982, Platoon Leader

Education:

MA, Strategic Studies, USA War College, 2002
MCE, Civil Engineering, North Carolina State University, 1990
MS, Geology, North Carolina State University, 1989
BS, General Engineering, United States Military Academy, 1980

Special Training:

US Army Command and General Staff College, US Army, 1994
Combined Arms Services Staff School, US Army, 1987
US Army Engineer Advanced Course, US Army, 1984
Atomic Demolition Munitions Course, US Army 1980

US Army Basic Course, US Army, 1980

Licenses/Registrations/Certifications:

Professional Engineer, 1993, Commonwealth of Virginia, No. 0402-024285
Professional Engineer, 2006, Alabama, No. 27917-E
Professional Engineer, 2006, Colorado, No. 40148
Professional Engineer, 2006, Florida, No. 64883
Professional Engineer, 2006, Georgia, No. 031606
Professional Engineer, 2006, North Carolina, No. 301807
Professional Engineer, 2006, South Carolina, No. 25349
LEED 2.1 Accredited Professional, 2006
Georgia Sediment and Erosion Control, 2011, No. 63105

Professional Affiliations and Honors:

Member, Board of Advisors, Department of Environmental Engineering, West Point, NY, 2002-2005
President, Boston Post, Society of American Military Engineers, 2004-2005
Director, West Point Society of New England, 2004-2005
Chairman, US Section, St. Croix Watershed Board, International Joint Commission, 2002-2005
Director, Greater Boston Federal Executive Board, 2002-2005
Chair, Northeast Region, Coastal America, 2002-2005
Member, Board of Trustees, North Atlantic Division, US Army Corps of Engineers, 2002-2005

Honors:
EPA, Region 1, Environmental Merit Award, 2005
Wheeler Medal, Society of American Military Engineers, 2005
Legion of Merit, US Army, 2005
Bronze Star, US Army, 2004
Defense Meritorious Service Medal, US Army, 2001
Meritorious Service Medal (5 awards), US Army, numerous
Army Commendation Medal (3 awards), US Army, numerous
Joint Achievement Medal, US Army, 2001
Army Achievement Medal (3 awards), US Army, numerous

Foreign Languages:

None

Summary of Capabilities:

- Facilities Maintenance and Construction Management
- Field Construction Supervision, Inspection, and Testing
- Development and Execution of Quality Assurance and Quality Control Plans
- Execution of Construction Contracts

- Contract Administration and Compliance Oversight
- Environmental Assessments and Investigations
- Environmental Restoration and Remediation
- Complex Project Management
- Million $ Revenue Enhancement
- Customer Relationship Management
- Strategic Leadership
- Training Program Leadership
- Cost Avoidance
- Problem Analysis & Resolution
- International Experience
- Negotiated Settlements

Experience Overview:

Mr. Koning has more than 30 years of technical and executive-level experience in a combination of construction, engineering and project management assignments. Mr. Koning currently serves as the Senior Vice President Engineering and Construction responsible for all aspects of engineering design, construction, environmental services, munitions removal, company strategic planning, the enhancement of client relationships, and the expansion of the company's Design-Build program. He excels in rapidly assessing operations, assembling teams, establishing strategic goals and steering teams to execute plans for desired results. He is recognized as an astute tactical and strategic thinker who has made significant contributions to the attainment of shared corporate goals. Mr. Koning is accustomed to working directly with executives, military General Officers, Regional federal-level Department Heads, Congressional Members and their staffs, and senior-level Executive branch staff. He has an extensive background in public speaking and business writing.

Experience:

Senior Vice President Engineering and Construction – Charlotte, NC

Directly supervises 18 design professionals in the disciplines of Civil, Structural, Electrical, Environmental, Geotechnical and Mechanical Engineering; additionally supervises the Architect and Interior Designer. Supervises the Environmental and Munitions Response Divisions of the Company. Project management oversight includes review of internal budgets and schedules; oversight of manpower allocations and management; review scope of technical issues and outline of technical approach for solutions; review and approval of cost estimates for new projects; and project review and analysis at closure for lessons learned and development of corrective actions. Responsible for identification and development of new business in the construction arena focused on military, government and private sector clients. Assists in development and execution of Corporate Strategic Plans, identifies and develops new service areas, and provides leadership and technical oversight for project management.

Project Manager and Civil Engineer. FORSCOM/USARC Annex at the Old Bowley School Renovation, Fort Bragg, NC. ZAPATA designed the renovation and retrofit of the Old Bowley School to support the FORSCOM/USARC Headquarters relocation from Fort McPherson, GA to Fort Bragg. The renovated buildings will serve as the FORSCOM/USARC Annex during transition of the Command. The Old Bowley School is a historic, circa 1953, nine-building complex of 54,000 SF on a 14.5 acre plot. ZAPATA's design included converting all the classroom spaces into private and cubicle workspaces; renovating three conference rooms (one capable for SIPR), three training rooms, several storage spaces, and a large auditorium; and upgrading all buildings to be ADA accessible. We coordinated design details with SHPO as the buildings are eligible for the National Historic Register. We prepared a second design to divert the large auditorium into temporary office with additional cubicles. Site work included resurfacing the parking lot; new domestic water service with backflow preventer and meter; two new fire water lines; sidewalks and landscaping. The design provided for AT/FP through standoff. Our design included: demolition and replacement of all power, lights, telecom and data; overhead electrical feeds placed underground; new addressable fire alarm; new electrical and telecom rooms in each building; installation of new copper and fiber; exterior lighting; telephone and data cabling infrastructure system from distant manholes to the renovated cubicle space; and we upgraded walls and windows with higher R-values to meet EPAC2005. ZAPATA also added an innovative water-sourced heat pump system with underground utilities. Our design incorporated replica windows with a schoolhouse pattern that included low-e glass and insulated walls to achieved energy savings that exceed ASHRAE requirements by 30 percent. ZAPATA accelerated the design schedule by reducing the schedule 25% between the 95% and 100% submittals to meet new Government bid preparation timelines. ZAPATA was responsive to multiple design iterations to accommodate changing end user requirements, functional variations, and structural challenges. ZAPATA responded to numerous "what-if" scenarios as DA and ACSIM pressures altered initial design guidance. ZAPATA conducted substantial value engineering that resulted in cost savings and improved quality. Value engineering studies resulted in savings of over $500K without loss of function. Design was LEED-Silver. (Zapata Incorporated, 2010)

Project Manager. Warehouse Compex, Fort Bragg, NC. Designed a $38M Warehouse Complex at Fort Bragg. Project structures included a 51,700 SF general purpose warehouse, a 26,100 SF general purpose warehouse, an 11,200 SF Records Storage Facility, and 4,800 SF equipment shed. Supporting facilities included upgrading and widening three roads, an AST fuel facility, two parking lots (750 spaces and 70 spaces), and a gravel road. ZAPATA planned into the D/B RFP the diversion of the warehouses into temporary office spaces for 750 personnel during FORSCOM/USARC HQ relocation. This LEED Silver project was critical to the FORSCOM relocation occurring on schedule. We exceeded client expectations by engaging the design team, end users, and vendors/suppliers to solve the SIPR issues for this project; the solution may also provide options for other installations across the Army. ZAPATA aggressively pursued alternative solutions to get SIPR into systems furniture to meet accreditation standards. ZAPATA's success in resolving this challenge eliminated PDS requirements and saved the Government over $500K. (Zapata Incorporated, 2010)

Senior Project Manager. BNE Windfarm Design, Prospect and Colebrook, CT.
Preliminary civil designed for three wind farm projects in Prospect and Colebrook (2), CT. Civil engineering services including erosion control design, roadways, laydown, crane assembly and blade assembly areas. Work performed in preparation for Siting Council Hearings. (Zapata Incorporated, 2010)

Senior Project Manager. Utility Installation and Construction, Fort Jackson Lodge, Fort Jackson, SC. Designed the extension of and 8" water main and 8" sanitary sewer line to support construction of a new hotel facility at Fort Jackson, SC. Provided civil engineering services including erosion control design and permitting, and utility design. Conducted peer review of plans and specifications. (Zapata Incorporated, 2010)

Senior Project Manager. JSOMTC Medical Training Building (1342). Fort Bragg, NC.
Design of a new training facility at Fort Bragg. Reviewed the work of a team consisting of architects, and civil, mechanical and electrical engineers. The project site is located in a high security area. This resulted in several constraints on location and placement of the structure, grading, road access, and existing utilities. (Zapata Incorporated, 2009)

Senior Civil Engineer. Fort Jackson Hilton Field Latrines, Fort Jackson, SC. Design of approximately 1300 feet water main and 1500 feet of sanitary sewer line at the main parade field at Fort Jackson, SC. Coordinated permits with South Carolina Department of Health and Environmental Control. The utility expansion and upgrade included design of both gravity and force main sanitary lines, lift station, domestic water and fire lines which were to be coordinated with a new private utility that was established for Fort Jackson. (Zapata Incorporated, 2009)

Senior Project Manager. Repair Asphalt, Runway 05/23, Westover RARB, MA. Design for the repair and resurfacing design of a United States Air Force, C5 Runway at Westover RAFB. Prepared an engineering design solution for the construction of the repair and improvement of 9,000 ft of runway at Westover JARB. The new design specifically addressed safety concerns of the airfield regarding insufficient runoff at the intersection of two runways resulting in ponding. Along the remainder of the runway, analyses of the transverse and longitudinal slopes were performed and corrective measures implemented. The final design incorporated a best fit methodology given the constraints of the RFP, while ensuring safety concerns were adequately addressed. (Zapata Incorporated, 2009)

Senior Civil Engineer. Family Campground (FAMCAMP), Rehabilitation and Addition, Charleston AFB. Design includes the upgrade and expansion of a 45-spot RV park and camping area. Design components include: pavement design for a roadway addition; pavement design for improvements of an existing road; site drainage, development of construction erosion control countermeasures and best management practices, extension of utilities to include: fire, water, sewer and electrical service; and the addition of 25 new RV spaces. (Zapata Incorporated, 2008)

Senior Project Manager and Civil Engineer. Parking Lot Expansion, MOTSU, NC.
Designed a 110-space, $700K, new parking lot to support the community administrative area at

the Military Ocean Terminal at Sunny Point, NC. The existing parking facility to support the community was undersized for the new functions provided in the adjacent buildings. The design included a flexible pavement design, islands, state permitting, coordination with Coastal Zone Management, site clearing, earthwork, erosion control, landscaping, drainage, sidewalks, striping, ADA ramps and spaces, cost estimates, and specifications. Site surveying, electrical removal and replacement for existing lighting, and demolition of existing drainage and curbs were also required. To create room for the new 110-space lot, significant demolition of unused, but existing infrastructure was required. Demolition included a section of railroad load dock, small building, and severely damaged existing parking lot. Existing parking spaces were not demolished, but rather seal coated to preserve and extend their useful life. Project incorporated recycled oyster shells in the landscape features. Motorcycle and handicap spaces were provided along with three crosswalks to get to the adjacent community service area. (Zapata Incorporated, 2008)

Project Manager and Civil Engineer. GSA Office Complex, Charlotte, NC. Provided the civil engineering design for a $65M project to construct a new federal building in Charlotte, NC. The overall project includes three buildings: a five-story, 165,000 sf office building; a 1-story, 22,000 sf maintenance annex; and a three-story, 490-space parking deck. In addition to the parking deck, there was a additional 67-space, on-grade parking lot. This project included site City and County permitting, clearing and earthwork, drainage design, new asphalt pavement in accordance with NCDOT criteria, curbs, ADA parking and ramps, striping, lighting, specifications and cost estimates. Additionally at the load dock, concrete pavement was designed to support trash receptacles and tractor-trailer parking. Civil site work included the storm water capture, transportation and detention design. The storm water system tied into the adjacent development and detention pond. Grading plans were designed to maximize existing fill on site. A two-phased erosion control plan was developed. Site utilities included sewer, telephone, electric, water and fire water with required meters and backflow preventers. A separate perimeter and underslab drainage system was designed for the portions of the parking deck that were below the grade and the water table. As this facility was a high-security facility, the design included anti-terrorism/force protection components of security fencing, anti-collision gates, manbars on the storm water pipes, and the required perimeter standoff. (Zapata Incorporated, 2008)

Project Manager and Civil Engineer. Relocation of Underground Utilities, Charlotte, NC. A fast-track design project with teammate Syska-Hennessy to relocate twin 24" chilled water lines, hydraulic control lines, and data cables supporting the Bank of America Corporate Center from a skybridge scheduled for demolition to underground. The design was fast-tracked from inception to permit in 30-days. Responsible for the structural support of the 24" chilled water lines up the façade of a 9-story parking garage. Responsible for the design of a 6' diameter jack-and-bore tunnel under a road that could not be closed for construction in downtown Charlotte. Design included routing of communications conduit and water lines through separate underground conduit and utility vaults. Responsible for timely design, project permitting and construction oversight. (Zapata Incorporated, 2008)

Senior Project Manager. Mobilization Facility Design, Fort Gordon , GA. The facility was to process trucks and cargo including scales, outdoor storage, and three enclosed bays for training, loading and storage. The facility also included space for administrative functions. The

facility achieved a SILVER LEED Accreditation. The civil engineering included a storm water plan, erosion control plan, a grade plan, and appropriate details.
(Zapata Incorporated, 2008)

Senior Project Manager. Forensic Analysis and Remedial Design following a partial collapse of a Parking Garage in Charlotte, NC. The forensic investigation included the emergency response to the failure, collection of evidence, preservation of evidence, analysis of the failure mechanism, and photographic documentation. The analysis included laboratory support for the metallurgical analysis and a weld inspection by certified welding inspectors. The remedial design corrected the failure mechanism and resolved other potential failure locations, proactive repairs, and general maintenance.
(Zapata Incorporated, 2008)

Senior Project Manager. Parking Lot and Walking Mall Design at the Military Ocean Terminal at Sunny Point (MOTSU), NC. This project included demolition, new and resurfaced parking areas, curb and gutter, sidewalks and landscaping.
(Zapata Incorporated, 2008)

Senior Project Manager. Gravity and Forced Main Sewer Extension Design at the Hilton Field Parade complex at Fort Jackson, SC. The project included xx-ft of gravity sewer, a lift station, and xx-ft of forced main to support the upgrade of the basic trainee parade field. An xx-ft water line was also provided for fire protection.
(Zapata Incorporated, 2008)

Senior Project Manager. Rehabilitation Design of four company operations buildings (COF) at Fort Bragg, NC. The project will renovate 20,000 sf of storage space into office and training area for 16 platoons from eth Military Intelligence brigade. Renovations included: architectural, life/safety, mechanical, electrical, civil, and fire protection for the occupied space. Total project cost is: $2.7M.
(Zapata Incorporated, 2008)

Senior Project Manager and Civil Engineer. 5th Street Tunnel, Charlotte, NC. Mr. Koning was responsible for the civil engineering design for a new telecommunications tunnel under 5th Street in downtown Charlotte. Design included options for both a jack and bore approach and an open cut approach. Total project cost is $3M.
(Zapata Incorporated, 2008)

Senior Project Manager and Civil Engineer. GSA Charlotte Office Building, Charlotte, NC. Mr. Koning was responsible for the civil engineering design for a new 150,000 sf, high security GSA Facility in Charlotte, NC. Engineering plans included survey, geotechnical evaluation, site plan, grading, storm water design, and erosion and sediment control plan. Drawings included all details and utility plans. Total project cost is $65M.
(ZapataEngineering, 2007)

Senior Project Manager and Civil Engineer. Schematic Design of a new Shoothouse, AAR/ROC Building, Operations/Storage Building, and Latrine Building. Project involved

mechanical system design, distribution and latrine facility design. Project is programmed for LEED Silver. Total project cost is $3M.
(ZapataEngineering, 2007)

Program Manager. USCG Barracks and Galley Rehab, Charleston, SC. Scope included civil, electrical, mechanical, structural and fire protection disciplines for the rehabilitation of a 22,000 sf, two-story barracks and galley. Components included new mechanical with make-up air, new plumbing and fixtures, conversion of a gang latrine to ADA bathrooms, new electrical to include emergency generation, and lighting. Project Cost: $2.25M
(ZapataEngineering, 2007)

Senior Project Manager and Civil Engineer for multiple Task Orders including utility infrastructure upgrades, facility rehabilitation, and design for new construction at Charleston AFB, SC.

- The design of the rehabilitation of an existing aircraft maintenance facility. Scope included hangar door refurbishment and replacement, roof replacement, wall repairs, and extensive exterior skin rehabilitation. Construction Cost: $16.2M (ZE, 2006)
- The addition and renovation of an Air Force Family Camp Recreation Complex. The renovation includes the survey, soil testing, and design for the rehabilitation of one mile of road. Renovations also include upgrades to 25 sites, replacement of the water lines and electrical service upgrade. Facility additions include a mile of new roadway, addition of 17 sites to accommodate handicap and non-handicapped personnel, new utilities (water, sewer and electrical), and a new Convenience Center building. Project is programmed to be LEED Silver. Construction Cost: $2.5M (ZapataEngineering, 2007)

Senior Project Manager. Bank of America Corporate Center Renovation, Charlotte, NC.
Mr. Koning was responsible for oversight for the mechanical, electrical and plumbing systems. This fundamental and enhanced commissioning was conducted in accordance with the criteria for Leadership in Energy and Environmental Design for Commercial Interiors (LEED-CI). This involved designing of commissioning plans, stringent system testing, and re-evaluation until all system components were fully functional. He managed the commissioning agent for HVAC system, automated lighting, automated window shades, and instant water heater system for 132,000 SF of tenant upfit.
(ZapataEngineering, 2007)

Senior Project Manager. GSA Southeast Region-Strom Thurman Office Building, Columbia, SC. Project included space planning and interior design services to renovate tenant space within a GSA building (for Immigration and Custom Enforcement (ICE), Department of Homeland Security). Design issues included internal and external security (including detainee transfer, processing and detention areas), weapons storage and working within constraints of occupied spaces with "total access flooring" systems. ZAPATAENGINEERING provided mechanical and electrical design support for this project. Estimated Construction Cost: $900K.

Senior Project Manager. Zink's American Grille. Mr. Koning was responsible for oversight for the emergency repairs of the sinkhole that collapsed the floor in Zink's American Grille. This project involved emergency response for the structural evaluation and repair design for a sub-

grade failure that undermined the footing of the restaurant and encroached upon a 35-story building. Design and repair involved removal of the damaged slab, repair of a roof leader (the proximate cause of the failure), installing helical piers under the exposed footing, compaction of soil, installation of flowable fill, and replacement of the floor slab.
(ZapataEngineering, 2006)

Senior Project Manager. 5th Street Skybridge. Mr. Koning was responsible for the oversight for the inspection of the integrity of the 5th Street Skybridge connecting two parking decks in downtown Charlotte. The project consisted of the visual inspection of welds and connected joints on a heavily trafficked walkway, 30-feet in the air.
(ZapataEngineering, 2006)

Senior Project Manager. Perimeter Road Design at Shaw AFB, SC. Mr. Koning was responsible for quality control and programmatic oversight of design alternatives, design narrative and construction cost estimate, including multiple construction methods. Mr. Koning also had oversight of the design of a timber trestle bridge for wetland crossing; and of repairs and renovations to existing infrastructure in accordance with DoD AT/FP criteria. Design Cost $74,804 Project Cost $1.54M
(ZapataEngineering, 2007)

District Engineer, New England District of the US Army Corps of Engineers, Concord, MA. CEO of the U.S. Army Corps of Engineers' New England District with an annual budget of $270 million and a workforce of over 550 personnel. Directed planning, engineering, construction, real estate and regulatory missions in support of civil works, military and interagency customers in the six New England states. Coordinated with senior military, congressional, federal, state and local officials. Chaired the New England – Coastal America Principals Group, U.S. Chairman of the International Joint Commission - St. Croix River Board and sat on the Board of the North Atlantic Division. Results were: 1) Client Relationship Management: Improved military client satisfaction (moved from a 31st to 10th ranking out of 35 like Districts) by listening to their concerns and providing solutions at a reasonable cost, thereby generating a moderate increased revenue flow. 2) New Business: Generated $6 million in revenue by analyzing the unmet needs of our federal and state customers, and developing new business lines in military construction planning, combined sewer overflow and small dam removal. 3) Cost Management: Achieved and maintained a General & Administrative rate of 3% lower than the Corps average. Achieved over $1.3 million in recurring savings through a systematic evaluation of individual line-item business processes for cost avoidance. 4) Public Relations: Maintained the public's perception of the organization as a neutral, honest broker during highly emotional and politically charged debates by keeping focus on the correct application of law and regulations, coupled with a plan to be inclusive with our federal, state and local coordinating partners; interest –group stakeholders; and the general public. 5) Project and Program Management: Managed a planning, engineering and construction and real estate program of over 250 simultaneous projects with an annual budget of over $250M. Conducts numerous design charettes to provide best value to customers in both design-build and design-bid-build contracts. Executed contract actions for design-build, design-bid-build, performance based contracting and indefinite delivery-indefinite quantity contracts. Have exceeded forecasted execution rates for construction placement for the last three years (averaged 105%).

Routinely utilized value engineering to provide increased options to the customer on multiple projects. 6) Strategic Planning: Lead the Strategic Planning Group the develops long range plans that improve program performance through setting strategic vision, operations objectives and achieving annual tactical goals in the areas of business processes, contracting, people programs, and customer outreach.
(US Army, 2002-2005)

District Engineer, New England District of the US Army Corps of Engineers, Concord, MA. Federal deciding official for the Cape Wind wind farm project in Nantucket Sound. As the District Engineer, COL Koning permitted the installation of the meteorological data collection tower on Horseshoe Shoals in Nantucket Sound. COL Koning oversaw the preparation of the 8,000 page Draft Environmental Impact Statement for the full 140MW wind farm. The EIS was prepared under the authority provided to USACE by the Rivers and Harbors Act or 1899 as amended by the Outer Continental Shelf Lands Act of 2000. The plan was prepared IAW NEPA. This plan was subsequently approved by the Secretary of the Interior in 2010.
(US Army, 2002-2005)

Senior Project Manager. Rehabilitation of Building 1614, Hanscom AFB, MA. Mr. Koning was responsible for the oversight for the $34M, Design-Build, rehabilitation of a vacant commissary and five attached warehouses into an 1,100-person office complex. One quarter of the building was in a two-story configuration and the building contained five, Top-Secret-level Sensitive-Compartmented-Information-Facilities (SCIF). The project was broken into two-Phases and the end-user received beneficial occupancy of the first Phase midway though the construction effort. The project was complicated by the fact that there was a central core of the building that contained an existing SCIF that had to remain operational 24/7 during the rehabilitation. I had daily control of the difficult construction and scheduling, bonding, commissioning, and quality issues that could not be resolved with junior project managers or on-site field personnel. My junior project manager was selected as the AFMC Project Manager of the Year for 2004.
(US Army, 2002-2005)

Senior Project Manager. Fitness Facility, Hanscom AFB, MA. Mr. Koning was responsible for the oversight for the $8.7M, Design-Build, construction of a new 14,000 sf Fitness Facility. The project included the demolition of two existing structures, removal of unsuitable soils, dewatering of a portion of the planned site, and the construction of the new facility. He had daily oversight of the project from Charrette through 95% design reviews, to budgetary eprogramming at the AF-MAJCOM level, through demolition and dewatering.
(US Army, 2004-2005)

Senior Project Manager. Rehabilitation of the Cape Cod Railroad Bridge, Bourne, MA. Mr. Koning was responsible for oversight for the $25M Design-Bid-Build of a 544-foot vertical lift railroad bridge across the Cape Cod Canal. It was built in 1935, and is the third longest vertical lift bridge in the world. This project was broken in to two phases. In the first phase, the bridge was cleaned and repainted. The entire bridge was encapsulated to prevent lead paint exposure, sandblasted, 12-tons of steel replaced, and repainted with a salt-water resistant epoxy-coating. This phase was complicated in that the bridge had to remain in operation for two train

crossings every day. Additionally, when trains were not crossing, all the work had to be accomplished while the bridge was in the "up" position, because at no time during either phase could the Cape Cod Canal be closed. In the second Phase, we had a 90-day congressionally authorized shutdown in which to do a complete mechanical rehabilitation of the bridge's internal mechanical workings and electrical controls. This involves refurbishment of eight, 34-ton shives; rehabilitation of two 200-hp motors and their pony engines; jacking of two, 1,110-ton counterweights; temporary shoring to hold the bridge in the "up" position; replacement of the four-inch diameter cables; and replacement of the 1935 electrical switches. All the work was conducted over-the-water in five-foot seas, in the winter. Phase Two was completed under budget and on the 89th day – one day ahead of schedule.
(US Army, 2002-2004)

Senior Project Manager. Smelt Hill Dam Removal, Falmouth, ME. Mr. Koning was responsible for oversight for the removal of the Smelt Hill Dam to open a seven-mile reach and 640 square miles of the Presumpscot River watershed to anadromous fish. The dam was 151-feet long, 31-feet wide and 15-feet tall; stone-filled, timber crib that had been encapsulated in concrete with an attached powerhouse, turbine generator, and inoperative fish passage. This was the subject of a CBS special report in 2002 and won the 2003 Coastal America Partnership Award.
(US Army, 2002-2003)

Senior Project Manager. Providence River Dredging, New Bedford, RI. Mr. Koning was responsible for oversight for the $45M maintenance dredging of the Providence River. This project brought the 16.5-mile federal navigation channel in the Providence River back to its congressional authorized dimensions of 40-feet deep and 600-feet wide. The project removed over 6M cy of sediment that had filled the channel, to less than 8-feet in some places, and deposited it in the newly approved Rhode Island dredge disposal site – 69b. This project also disposed of 1.1M cy of contaminated sediment in innovative confined-aquatic-disposal (CAD) cells dug 120-feet into the bottom of the Providence River. Additionally, 52,000 CY of clean sand and gravel was beneficially reused in an upland location on the campus of Johnson and Wales University to prepare for future expansion.
(US Army, 2003-2005)

Senior Project Manager. Border Patrol Stations for DHS, ME. Mr. Koning was responsible for oversight for three new Border Patrol Stations planned for construction in Jackman, Calais and Van Buren, ME. He led the project thru the initial design for three $6M facilities, real estate acquisition, and environmental permitting. For the station at Jackman, he oversaw the clearing and grubbing, initial road cuts, and installation of underground utilities.
(US Army, 2003-2005)

Strategic Planner. USA Pacific Command, Camp Smith, HI. Mr. Koning was Senior Planner on the Joint Staff of the U.S. Command-in-Chief Pacific for engineering war-fighting and facilities planning issues. **He coordinated $1.2 billion Host Nation Funded Construction programs in South Korea and Japan. Performance resulted in being selected for early promotion to Colonel** (over 57 peers).
(US Army, 2000-2001)

Battalion Commander, 62nd Engineer Battalion, Fort Hood, TX. Mr. Koning led a 1,100-soldier Combat Engineering Battalion (Construction) with attached Multi-Role Bridge and Combat Support Equipment companies assigned missions of bridging, construction, combat engineering and general engineering in support of the warfighting missions of III Corps. Results included: 1) Operational Results: On two occasions, deployed parts of the unit overseas on a no-notice basis. In one instance, **led a team of 150 people and 130 pieces of heavy construction equipment that responded to hurricane recovery in Honduras in 8 days**. When alerted for Kosovo, directed the units' effort to redeploy from field locations, conduct refit operations, maintenance, upload and were prepared to load equipment on railcars within 7 days. 2) Training Management: **Increased proficiency of the unit to achieve the highest rating on 6 of 8 mission essential tasks and reduced the required post-alert training days by 50%.** 3) Personnel Management: Improved morale and commitment to Army Values of the 1,100 soldiers as measured by **exceeding the voluntary reenlistment rate of the total of 6-like units combined**. He resolved 15 discipline and performance situations.
(US Army, 1998-2000)

Operations Officer, 157tyh Infantry Brigade, Fort Jackson, SC. Mr. Koning provided training support to over 85 Reserve Component units in South Carolina, North Carolina, Georgia and Florida. **He supervised the growth of the organization from 50 to 300 people** in all areas of personnel support, operations, training, logistics and resource management. **He synchronized the activities of over 300 evaluators from nine different organizations** into a coherent operation that provided detailed support and evaluation for a 5,000-man combat brigade over a 6-week training cycle.
(US Army, 1996-1998)

Operations Officer and Design Engineer, 317th Engineer Battalion and the 36th Engineer Group, Fort Benning, GA. Responsible for the worldwide contingency deployment and combined arms mobility, counter-mobility, and survivability operations. As Design Group Engineer, he supervised a 17-man design/management section. **Provided technical engineering advice for subordinate construction elements and supervised the quality assurance of designs and construction**.
(US Army, 1994-1996)

Various Developmental Leadership Assignments, various assignments and locations. Mr. Koning performed in various positions of leadership and staff work that continually increased in responsibility.
(US Army, 1980-1994)

Publications:

Commissioning of Repetitive Floors in a High-Rise Building, (Thomas L. Koning, PE, LEED-AP and L. Vincent Pratt, PE, LEED-AP, GC, CCE), Proceedings of the National Conference on Building Commissioning, 2007

Iraqi Reconstruction is Changing Lives and Transforming Country, Modesto Bee, July 25, 2004

Proposed supplemental guidance for the Department of Defense's Critical Infrastructure Protection Plan, (Thomas L. Koning), U.S. Army War College Strategic Research Paper, Carlisle Barracks, PA, 2002.

Multiloader-Truck Fleet Selection Using Simulation, (Thomas L. Koning and Foad Farid), Computing in Civil Engineering and Symposium on Data Bases, ACSE, NY, 1991