General Services Administration
Federal Supply Service
Authorized Federal Supply Schedule Price List

Multiple Award Schedule
Federal Supply Group: Professional Services
Contract Number: GS-00F-071CA
Contract Period: March 18, 2015 – March 17, 2025

Price list current as of Modification # PS-0023 effective April 1, 2022

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at http://www.gsa.gov/schedules-ordering

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage®, a menu-driven database system. The Internet address for GSA Advantage® is: http://www.gsaadvantage.gov

BCE is a Small Business

Corporate Office Location
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907.272.5214 fax

Contract Administration
Anastasia Kharitonova
anastasia@bce-ak.com

Branch Locations
Wilsonville, Oregon
Tampa, Florida
877.844.5264 toll-free
www.bce-ak.com website

“We go above, beyond, and through, but never around.”
CUSTOMER INFORMATION

1a. **APPROVED SPECIAL ITEM NUMBERS (SINS):**
   - 541330ENG / 541330ENGRC  Engineering Services
   - 541370GIS / 541370GISRC  Geographic Information Systems (GIS) Services
   - 541380 / 541380RC  Testing Laboratories
   - 541420 / 541420RC  Engineering System Design and Integration Services
   - 541620 / 541620RC  Environmental Consulting Services
   - 541715 / 541715RC  Engineering Research and Development and Strategic Planning
   - 541690 / 541690RC  Technical Consulting Services
   - 541690E / 541690ERC  Energy Services
   - OLM / OLMSTLOCRRC  Order-Level Materials

1b. **LOWEST PRICED MODEL:**
   Please refer to our rates on Pages 5-6

1c. **LABOR CATEGORY DESCRIPTIONS:**
   Please refer to Pages 6-10

2. **MAXIMUM ORDER:**
   $1,000,000.00

3. **MINIMUM ORDER:**
   $100.00

4. **GEOGRAPHIC COVERAGE:**
   Domestic and Overseas

5. **POINTS OF PRODUCTION:**
   Same as Company Address

6. **DISCOUNTS FROM LIST PRICES:**
   Government Net Pricing

7. **QUANTITY DISCOUNTS:**
   None

8. **PROMPT PAYMENT TERMS:**
   Net 30 days.
   Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

9a. **NOTIFICATION THAT GOVERNMENT PURCHASE CARDS ARE ACCEPTED AT OR BELOW THE MICRO-PURCHASE THRESHOLD:**
   Yes

9b. **NOTIFICATION THAT GOVERNMENT PURCHASE CARDS ARE ACCEPTED OR NOT ACCEPTED ABOVE THE MICRO-PURCHASE THRESHOLD:**
   Will accept

10. **FOREIGN ITEMS:**
    None

11a. **TIME OF DELIVERY:**
    Specified in the Task Order

11b. **EXPEDITED DELIVERY:**
    Contact Contractor

11c. **OVERNIGHT AND 2-DAY DELIVERY:**
    Contact Contractor

11d. **URGENT REQUIREMENTS:**
    Contact Contractor
<p>| | |</p>
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<th></th>
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</thead>
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<tr>
<td>12.</td>
<td><strong>F.O.B. POINT(S):</strong></td>
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<tr>
<td>13a.</td>
<td><strong>ORDERING ADDRESS:</strong></td>
</tr>
<tr>
<td>13b.</td>
<td><strong>ORDERING PROCEDURES:</strong></td>
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<tr>
<td>14.</td>
<td><strong>PAYMENT ADDRESS:</strong></td>
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<td>15.</td>
<td><strong>WARRANTY PROVISION:</strong></td>
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<td>16.</td>
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<td><strong>RENTAL, MAINTENANCE, REPAIR TERMS:</strong></td>
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<td>20.</td>
<td><strong>REPAIR PARTS TERMS:</strong></td>
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<td>24a.</td>
<td><strong>ENVIRONMENTAL ATTRIBUTES:</strong></td>
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<tr>
<td>24b.</td>
<td><strong>SECTION 508 COMPLIANCE:</strong></td>
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<tr>
<td>25.</td>
<td><strong>UNIQUE ENTITY ID:</strong></td>
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<tr>
<td>26.</td>
<td><strong>SAM REGISTRATION:</strong></td>
</tr>
<tr>
<td>27.</td>
<td><strong>FINAL PRICING:</strong></td>
</tr>
</tbody>
</table>

**COMPANY PROFILE**

Bratslavsky Consulting Engineers, Inc. (BCE) is a **small business** that has been successfully serving government and commercial clients since 1985. Since its inception BCE has grown into a multi-discipline professional firm, providing professional services nationwide and internationally. BCE personnel holds clearances from various agencies.

BCE has a proven record of completing projects on schedule and within budget; these are projects that meet or exceed clients’ expectations. Professionals of BCE manage and execute projects with the approach to **maximize safety and quality** and **minimize project and life cycle costs**. The professional staff of BCE brings technical expertise, thorough knowledge of codes and regulations, construction and engineering practices, and hands-on field experience to each project.
BCE prides itself on its (over 90%) repeat business from current clients, who return to BCE because of high product quality and its staff personal attention. Customer satisfaction is of paramount importance to BCE. We go to great lengths to ensure positive experience of our clients. Close attention to project goals, details, schedules, and budgets assure success of very small and very large (up to $10 Million) contracts. Multiple task orders are handled simultaneously.

BCE offers a diverse range of engineering, environmental, quality control and assurance, value engineering, project management, scientific, technical, and management expertise and extensive experience previously successfully applied on federal government projects, including but not limited to the following areas:

- Concept Studies and Analyses
- Due Diligence and Condition Assessments
- Studies, Evaluations, and Reports
- Energy Audits and Consulting
- Commissioning
- Historic Preservation and Restoration
- Engineering and Design Review
- LEED and Sustainable Design
- Space Planning and Interior Design
- Computerized Design and Drafting
- Value Engineering/Analysis
- Cost Estimating and Life Cycle Costs
- Permitting and Negotiations with Regulators
- Environmental Consulting
- Environmental Restoration and Rehabilitation
- Environmental Assessment Plans
- Environmental Reviews and Audits
- Spill Prevention Plans
- Program and Project Management
- Owner Representation
- Construction Management and Inspection
- Quality Control and Assurance

website: www.bce-ak.com
<table>
<thead>
<tr>
<th>SIN</th>
<th>Labor Category</th>
<th>Min Edu</th>
<th>Min Exp</th>
<th>Rate/Hr. Contractor Site</th>
<th>Rate/Hr. Government Site</th>
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</thead>
<tbody>
<tr>
<td>All SINs</td>
<td>Principal Engineer</td>
<td>Bachelors</td>
<td>20</td>
<td>$162.89</td>
<td>$150.36</td>
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<tr>
<td>All SINs</td>
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<td>Bachelors</td>
<td>15</td>
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<td>All SINs</td>
<td>Construction Manager</td>
<td>Bachelors</td>
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<tr>
<td>All SINs</td>
<td>Assistant Project Manager</td>
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<td>$88.90</td>
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<tr>
<td>All SINs</td>
<td>Senior Engineer/ Architect</td>
<td>Bachelors</td>
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<td>$126.47</td>
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<tr>
<td>All SINs</td>
<td>Lead Engineer/ Architect</td>
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<td>5</td>
<td>$122.00</td>
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<tr>
<td>All SINs</td>
<td>Construction Inspector**</td>
<td>High School</td>
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<td>$117.35</td>
<td>$108.16</td>
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<tr>
<td>All SINs</td>
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<td>Bachelors</td>
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<td>$100.37</td>
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<tr>
<td>All SINs</td>
<td>Jr. Engineer/ Architect</td>
<td>Bachelors</td>
<td>0</td>
<td>$68.73</td>
<td>$65.23</td>
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<tr>
<td>All SINs</td>
<td>Cost Estimator</td>
<td>Bachelors</td>
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<td>$125.60</td>
<td>$113.04</td>
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<tr>
<td>All SINs</td>
<td>ACAD Technician**</td>
<td>Associates</td>
<td>10</td>
<td>$86.60</td>
<td>$78.95</td>
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<td>All SINs</td>
<td>Drafter**</td>
<td>High School</td>
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<td>All SINs</td>
<td>Engineering Intern**</td>
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<td>$52.26</td>
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<td>All SINs</td>
<td>Administrative Assistant**</td>
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<td>$53.79</td>
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<td>All SINs</td>
<td>Contract Administrator</td>
<td>Bachelors</td>
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<td>$80.24</td>
<td>$77.01</td>
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<td>All SINs</td>
<td>Special Inspector</td>
<td>High School</td>
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<td>$91.88</td>
<td>$87.11</td>
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<tr>
<td>All SINs</td>
<td>Specialty Consultant - Hydrologist</td>
<td>Bachelors</td>
<td>10</td>
<td>$149.14</td>
<td>$133.34</td>
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<tr>
<td>All SINs</td>
<td>Specialty Consultant - GIS/ Mapping Specialist</td>
<td>Bachelors</td>
<td>5</td>
<td>$108.24</td>
<td>$96.77</td>
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<tr>
<td>All SINs</td>
<td>Surveyor, RLS</td>
<td>Bachelors</td>
<td>10</td>
<td>$145.98</td>
<td>$130.52</td>
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<tr>
<td>All SINs</td>
<td>Value Engineer/ Facilitator</td>
<td>Bachelors</td>
<td>10</td>
<td>$229.15</td>
<td>$216.42</td>
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<tr>
<td>All SINs</td>
<td>Space Planner</td>
<td>Bachelors</td>
<td>2</td>
<td>$115.32</td>
<td>$108.92</td>
</tr>
</tbody>
</table>
Multiple Award Schedule
Contract #GS-00F-071CA

All SINs | Inspector I** | High School | 2 | $69.86 | $65.99
All SINs | Inspector II** | High School | 5 | $81.97 | $77.42
All SINs | Commissioning Agent | Bachelor | 10 | $156.88 | $147.99
All SINs | Staff Cost Estimator | Bachelor | 2 | $98.40 | $92.98
All SINs | Engineering Technician** | High School | 5 | $76.00 | $70.30

*Additional discounts are offered to clients. Please contact BCE for a quote.
** Positions that are subject to Service Contract Labor Standards.

SCLS MATRIX

<table>
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<tr>
<th>SCA Eligible Contract Labor Category</th>
<th>SCA Equivalent Code - Title</th>
<th>WD Number</th>
</tr>
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<tbody>
<tr>
<td>Inspector I</td>
<td>30081 - Engineering Technician I</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Inspector II</td>
<td>30082 - Engineering Technician II</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Construction Inspector</td>
<td>30084 - Engineering Technician IV</td>
<td>2015-5681</td>
</tr>
<tr>
<td>ACAD Technician</td>
<td>30061 - Drafter/CAD Operator I</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Drafter</td>
<td>99831 - Surveying Aide</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Engineering Intern</td>
<td>01112 - General Clerk II</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>01041 - Customer Service Representative I</td>
<td>2015-5681</td>
</tr>
<tr>
<td>Engineering Technician</td>
<td>30082 - Engineering Technician II</td>
<td>2015-5681</td>
</tr>
</tbody>
</table>

The Service Contract Labor Standards, formerly the Service Contract Act (SCA), apply to this contract and it includes SCLS applicable labor categories. Labor categories and fixed price services marked with a (**) in this pricelist are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCLS/SCA matrix. The prices awarded are in line with the geographic scope of the contract (i.e., nationwide).

BCE POSITION DETERMINATIONS

<table>
<thead>
<tr>
<th>GSA Title</th>
<th>Job Description</th>
<th>Education/Experience</th>
</tr>
</thead>
</table>
| Principal Engineer | Responsibilities and duties include but may not be limited to the following: contract administration and contract management, financial matters, price modifications and change orders, client contact and coordination, problem resolution, final project review and sign off. | • Bachelor’s Degree in the field  
• Professional Registration  
• 20 years of experience in related work |
| Project Manager       | PM is a senior professional assigned to manage the project. Duties and responsibilities include project planning and scheduling, coordination, and liaison with the client, | • Bachelor’s Degree  
• 15 years of experience in related work |
<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Construction Manager          | Scheduling and running meetings, problem solving and assignment of duties, responsibility for schedules and budgets, cost control, quality control and quality assurance, work reviews, and similar tasks. CM is a professional assigned to manage the construction project as the owner’s representative. Duties and responsibilities include construction contract administration; planning and scheduling; coordination and liaison with the client and public; problem solving; direction and supervision of inspector; budget and cost control; construction quality control and quality assurance; oversee construction contractor conformance with contract requirements; approve/reject material and workmanship; monitor labor and safety provisions; maintain daily log and review contractor logs. | • Bachelor’s Degree  
• 6 years of experience  
--- OR ---  
• HS Diploma or equivalent  
• 15 years of experience in construction management, quality control, and related work |
| Assistant Project Manager     | Assists Project Manager assigned to manage the project. Duties and responsibilities include assisting with project planning and scheduling, coordination, and liaison with the client, scheduling and running meetings, problem solving and assignment of duties, schedules and budgets, cost control, quality control and quality assurance, work reviews, and similar tasks.                                                                                                                                                                                                                                        | • Bachelor’s Degree  
• 2 years of experience in related field |
| Senior Engineer/Architect     | Responsibilities include actual professional services performed on a project, its correctness, quality, and may involve coordination with other trades, regular briefing of the management on the progress on the project, coordination with management of all issues having implications to cost and scheduling matters.                                                                                                                                                                                                                           | • Bachelor’s Degree in the field  
• Professional Registration  
• 15 years of professional experience |
| Lead Engineer/Architect       | Responsibilities include project design, document production coordination, requests management assistance in clarifications, problem solving, schedules, approval of tasks and expenditures, and briefing management on work progress and problems solved.                                                                                                                                                                                                                                          | • Bachelor’s Degree in the field  
• Between 5 and 15 years of professional experience  
• Professional Registration preferred, but not required |
| Construction Inspector        | Responsibilities include site visits, construction quality control, testing and/or inspections, testing of materials and/or coordination of samples and other submittals, and detailed daily reporting.                                                                                                                                                                                                                                                                                  | • HS Diploma or equivalent  
• 10 years of inspection experience  
• Industry recognized credentials & knowledge of applicable codes and construction standards |
<table>
<thead>
<tr>
<th>Position</th>
<th>Duties</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Engineer/Architect       | Duties include responsibilities for various tasks as requested by A/E, Senior A/E, or Project Manager, and related to design, planning, scheduling, or drafting, as well as other duties. Inspections or other responsible tasks can be performed by a junior A/E only under supervision of a senior engineer. | • Bachelor’s Degree in the related area  
  • 2 to 4 years of experience in the field  
  • EIT or equivalent (preferred, but not required) |
| Junior Engineer/Architect| Duties include design under supervision of a Senior Engineer.          | • Bachelor’s degree in the related area or field  
  --- OR ---  
  • Practical experience |
| Cost Estimator           | Responsibilities include material estimates, bill of materials, cost estimating, cost analysis, claims analysis, value engineering, and other similar tasks. | • Bachelor's degree in the related area AND/OR a minimum of 5 years of professional experience |
| ACAD Technician          | Duties include computerized drafting and similar assignments.         | • Associate’s Degree in related field  
  --- OR ---  
  • 10 years of related experience |
| Drafter                  | Duties include computerized drafting and similar assignments.         | • HS Diploma or equivalent  
  • Training Certifications OR a minimum of 2 years of work experience  
  • Knowledge of AutoCAD and other required drafting programs |
| Engineering Intern       | This person should have the intent of developing in the design or construction field to become an engineer/architect/estimator/etc. Responsibilities include design, drafting, and fieldwork under the supervision of an engineer or architect. | • HS Diploma or equivalent  
  • 2 years of post-secondary education in a Bachelor or Associate degree program |
| Administrative Assistant | Responsibilities include typing, travel arrangements, compiling data, assisting with marketing, contract administration, research, and computer database management. | • HS Diploma or equivalent  
  • 5 years of professional experience |
| Contract Administrator   | Responsibilities include contract administration, budgeting, scheduling, modifications and change orders, coordination and assistance to Principal Engineer and Project Manager. | • Bachelor’s Degree  
  • 2 years of experience in project file administration, business administration, or related fields |
| Special Inspector        | Responsibilities include site visits, inspections, and detailed reporting. | • HS Diploma or equivalent  
  • Inspections Certifications  
  • 3 years of experience in the field  
  --- OR ---  
  • 7 years of field experience  
  • Knowledge of applicable codes and standards |
| Specialty Consultant - Hydrologist | Responsibilities include field investigative work, analysis, calculations, report writing, and other related tasks. | • B.S. Degree in Civil Engineering, Hydrology, Hydrogeology, or related field  
• 10 years of professional experience |
| Specialty Consultant - GIS/Mapping Specialist | Responsibilities include development of GIS maps, layers, review and revision to GIS maps, and other similar tasks. | • Bachelor’s Degree in the related field  
• 5 years of professional experience in mapping utilizing ArcGIS |
| Surveyor, RLS | Responsibilities include overseeing fieldwork, review and verification of information collected in field, mapping, platting, land subdivision, and sealing survey drawings. | • Bachelor’s Degree in related field  
• Professional Registration in Land Surveying  
• 10 years of professional experience |
| Value Engineer/Facilitator | Responsibilities and duties include but may not be limited to the following: value engineering/analysis, functions and cost analysis, feasibility analysis, facilitation of workshops, charrettes, teamwork, and other related duties. | • Bachelor’s Degree in the related field  
• Registration as Certified Value Specialist or Associate Value Specialist  
• 10 years of experience in related field of work |
| Space Planner | Responsibilities and duties include but may not be limited to the following: space programming, planning, interior design, furniture layout, cost estimating, space utilization inventory and analysis. | • Bachelor’s Degree in the related field  
• 2 years of experience or training in computer/graphic design  
--- OR ---  
• 10 years of experience in the related field |
| Inspector I | Responsibilities and duties include quality assurance or condition survey inspections on daily/weekly basis under supervision of the higher ranked professional, findings report, photographic documentation, and other related duties. | • HS Diploma or equivalent  
• 2 years of field experience |
| Inspector II | Responsibilities and duties include quality assurance or condition survey inspections on daily/weekly basis, findings reports, photographic documentation, and other related duties. | • HS Diploma or equivalent  
• 5 years of field experience |
| Commissioning Agent | Responsibilities include implementation of commissioning processes and standards, review of project design documents, preparation of commissioning plans, inspection and functional testing of installed equipment and systems and preparation of commissioning reports. | • Bachelor’s degree in the related field  
• 10 years of direct field commissioning experience |
### Project Examples

#### Project Analysis and Concept Development

BCE provided an evaluation of CDC’s (Centers for Disease Control) facility that had outgrown its existing laboratories and office space. The existing laboratory did not fit all of the scientific processes and testing mandated by the government and had to be expanded to accommodate new equipment and new processes in accordance with Biosafety in Microbiological and Biomedical Laboratories regulations for level 2 and 3 laboratories, and to ensure safety of future operation for the laboratory. BCE performed scoping, analysis and planning for this project, design management services, cost estimating and budgeting for the client and prepared a preliminary feasibility report with recommendations on space requirements and utilization as needed to accommodate future laboratory and staff needs.

#### Storm Water Study and Watershed Analysis

BCE defined local watersheds and identified their limits, boundaries, and tributaries, as well as source and non-source pollutants. BCE provided the analysis of each watershed, drainage patterns, and storm water runoff effects. A map of watersheds was compiled by BCE (in ACAD and GIS) with the existing and new information that included: city storm drain system, collected GPS points, commercial, industrial, government, and residential facilities, street and road names, and other information. Total areas and point source pollution loads were estimated for each watershed. Environmental impacts and hazards were calculated, and future testing and sampling requirements were identified.

#### Space Planning

BCE provided in-house planning services under the contract with USCG CEU Oakland. BCE personnel worked closely with US Coast Guard staff, assisting in meeting the agency’s goals and objectives, mandated directives for better and more efficient space utilization, as well as sustainability and LEED EB goals. The goals for this work set by BCE for its staff included:
bringing the renovated spaces into the 21st Century, providing flexible workplaces that can be transformed if there is a need, consideration of LEED EB and LEED design principles, and aesthetics and open-to-private spectrum.

**Engineering and Project Management**

BCE provided evaluation of existing facilities, structural modeling, analysis of new and modifications of existing towers, construction administration, including on-site inspections, as-built drawings preparation, and other services on a design-built project at US Army bases in Germany. All towers had different antennae and equipment, including receivers and transmitters that met project requirements and specifications. BCE professionals oversaw the installation of new equipment, reviewed field changes, and material substitution requests (due to material availability in Germany), provided inspections of the new installations.

**Mechanical Engineering Support for Energy Efficiency Program**

BCE provided mechanical engineering and energy support for various GSA properties throughout the Pacific Northwest, including energy assessments and audits. Energy audits were performed at a number of facilities. One of the facilities, for example, was experiencing high energy use per square foot. Three years of average energy use was evaluated, showing relatively little change. The facility’s peak electric loads were also investigated. The electricity usage revealed an issue with the AC units and the natural gas heater. The suggested improvements outlined a settings plan for the thermostats to help prevent heat and air-conditioning running at the same time.

**Design Reviews and Value Engineering**

This Design-Build project included a single story Visitor Center with an Exhibit Hall, Community and Multipurpose Rooms, a Bookstore, and an outdoor exhibit within the surrounding forested habitat, parking, pedestrian walkways, and landscaping. The project was constructed with a goal of LEED Silver Certification, and also features a photovoltaic (PV) array along with an ecoroof, utilization of recycled materials, and energy and water conservation features. At the onset of the project, BCE conducted a design charrette, which brought together all stakeholders, designers, and the contractor, and accelerated and streamlined the design process. Throughout the design, BCE provided support via design reviews of the facility at interim and final design milestones. These included comprehensive architectural, civil, structural, electrical, mechanical, and landscape reviews. BCE had provided commissioning review of the lighting and controls, domestic hot water systems, central building automation system, heating and ventilation, emergency generator power, and solar photovoltaic energy systems.
Value Engineering

BCE was contracted by US Fish and Wildlife Service to provide cost estimating and Value Engineering (VE) for a bridge design project at a preliminary phase. The original construction cost estimate exceeded the project budget. Value Analysis (VA) that was conducted by BCE allowed to reduce the project costs by 20 percent (savings). The goals for this VE study were to identify component and planning alternatives that offered better functions while reducing the upfront costs and life cycle costs.

Navigability Study

BCE prepared 79 navigability reviews in support of USCG’s bridge permitting program, as required for waterways crossings, proposed routes, and Trans-Alaska Gas Pipeline. BCE inventoried 500 USCG waterways and sites, assessed each file’s data to identify patterns and navigability decisions. BCE developed a format and process for preparing a Navigability Review Summary (NRS) for each waterway and identified information and sources to aid in quick analysis and key data gathering.

Construction Management and QA/QC

BCE provided construction management and quality assurance services under an IDIQ contract with the US Army Corps of Engineers (USACE). BCE QA/QC representatives performed construction management services on major design/build capital improvement projects, including construction of battalion headquarters, new barracks with dining facilities, storm water detention facilities, and other supporting infrastructure, including roads and utility upgrades.

Construction Inspection

BCE performed construction inspection on a new headquarters and visitor center located at Audubon National Wildlife Refuge in Coleharbor, ND. This building was constructed using sustainable design and energy conservation technology and was certified through LEED process. This new headquarters and visitor center replaced the old 52-year old headquarters and visitor center that developed and exposed some serious health and safety problems. BCE conducted daily site investigations to ensure the work was performed in accordance with plans and specifications, prepared construction inspection and progress reports, and monitored safety of the construction site.
Energy Audit and Energy Conservation Measures

BCE performed an energy audit and analysis of the existing heating, ventilation, and air conditioning (HVAC), lighting and controls systems for this public facility. The facility was experiencing high energy use costs related to the existing systems and the recent integration of a new boiler system. The boiler was oversized for the facility and was not integrated into the existing control systems. BCE developed an energy model, identified energy conservation measures (ECMs), and recommended alternatives for accommodating the boiler. Work included analysis and economic feasibility of implementing the ECMs, analysis of alternatives for the boiler system, and preliminary design of new lighting, HVAC, and control systems upgrades, and life cycle cost analysis. At the end of the audit BCE presented the client with the list of ECMs which, if implemented, could cut the heating load of the building by more than half. The ECMs were prioritized with regard to greater energy savings to the costs of implementation.

Alternative Energy Consulting

The goal of this Design-Build project was to replace the entire existing steam heating system with a New Modernized Heating System. BCE engineers studied the building and evaluated its energy demands and equipment; performed an energy audit; performed a study to assess the condition of the existing plumbing (piping); analyzed the existing boilers; assessed the building DDC control system; and also performed an environmental study to assess hazardous materials presence, which would have an impact on project costs. The replacement system selected was a ‘zero’ carbon footprint, a “green” and sustainable biomass boiler. BCE evaluated and verified energy savings and potential benefits of using alternative and renewable fuels for the client.

Building Commissioning

This project involved upgrading a Border Patrol Station with energy efficient systems. BCE’s role was to monitor construction and perform commissioning. BCE prepared a dynamic commissioning plan, which was regularly updated throughout the project to reflect changes, such as personnel changes, system changes impacting the Equipment List, modifications to the schedule, process improvements discovered during the work, etc. The Final Commissioning Report was prepared in accordance with the pre-functional and functional on-site tests and checklists and included a log of any potential operational issues.