



GENERAL SERVICES ADMINISTRATION
Federal Supply Service
Authorized Federal Supply Schedule Price List



Facilities Maintenance and Management Schedule 03FAC

Contract Number: GS-21F-0176X

Special Item Numbers (SINs):

SIN 871 202 Energy Management Planning and Strategies
SIN 871 206 Building Commissioning Services
SIN 871 207 Energy Audit Services
SIN 871 210 Water Conservation
SIN 871 211 Energy Consulting Services

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at fss.gsa.gov.

Contract Period: September 6, 2011-September 5, 2016

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>.

Integral Group, LLC
225 Reinekers Lane, Suite 200
Alexandria, VA 22314
Phone Number: (703)310.1087
Fax: (703)310.1101
www.integralgroup.com

Business Type:
LJ-Limited Liability Company
VN-Contracts
2X-For-Profit Organization

1. FIRM PROFILE

1.1 WHO WE ARE

DEEP GREEN ENGINEERING:

- Mechanical
- Electrical
- Plumbing
- Energy

Technical accuracy
Quality control
Reliability
Longevity

Integral Group is an interactive global network of mechanical, electrical, plumbing, and energy engineers collaborating under a single deep green engineering umbrella. We specialize in the design of simple, elegant, cost-effective systems for a wide variety of project types: residential, mixed use, critical environments (cleanrooms, laboratories, and data centers) industrial facilities, office buildings, educational facilities, civic and commercial buildings. We also provide businesses and utilities with comprehensive analyses of installations that help prioritize their energy saving potential. With a staff of 200 located in twelve offices across the United States and Canada, Integral Group is regarded as an innovative leader in building system design.

Integral Group is committed to technical accuracy, quality control, and reliable high performance systems which are evidenced in each project. We recognize the importance of providing our clients with the necessary services and resources to increase efficiencies and longevity of their systems, while mitigating long-range costs. These services include design, feasibility studies, peer reviews, energy audits, construction administration, and commissioning.

Additionally, we implement a technically innovative approach to defining clients' requirements and providing a fully integrated product that supports their business objectives.

1.2 HOW WE ARE DIFFERENT

24 LEED Platinum Certified

15 LEED Gold Certified

31 Net Zero Project in Design

05 Living Building Challenge Projects

Our design approach differs dramatically from traditional MEP engineering firms. We focus primarily on creating highly energy efficient and sustainable design projects. We are the first building services engineering firm to achieve 7 LEED Platinum buildings and currently have 24 LEED Platinum Certified projects, as well as more than 80 LEED registered projects, 31 Net Zero, and 5 Living Building Challenge projects completed or in design.

An innovative leader in building MEP systems design, Integral Group designed the first zero carbon, zero energy commercial building in the United States, first laboratory with chilled beams, first laboratory to use radiant ceiling panel cooling, first net zero energy, zero carbon and LEED Platinum laboratory, first LEED Platinum rating for a laboratory in a historic building, first campus fuel cell installation, first LEED Gold microchip manufacturing plant, first pre-certified LEED Platinum data center, and first LEED Platinum office building in Canada.

1.3 BREAKING THROUGH THE COST BARRIER

The barriers we encounter in implementing sustainable design features in our projects are frequently those of actual or perceived cost premium for additional "green features." Our experience in many projects has taught us to find a way to break through these cost barriers and make sustainable buildings affordable. We have a long track record with affordable sustainability: the building (MEP) systems for all of our LEED Platinum buildings were delivered with no additional cost.

1.4 EXPERTISE AND REACH

200+ Team Members

80+ LEED AP

14 Office Locations

Licensed engineers across the US

With a staff of over 200 located in fourteen offices across the United States, Canada and in the United Kingdom, Integral Group is registered in all US States. We have over 80 LEED® Accredited Professionals.

United States	Canada	United Kingdom
Oakland, California	Vancouver, BC	London, England
San Jose, California	Kelowna, BC	Oxford, England
Los Angeles, California	Prince George, BC	
Seattle, Washington	Calgary, Alberta	
Richmond, Virginia	Toronto, Ontario	
Washington, DC		
New York, New York		

1.5 SERVICES

ENERGY ANALYSIS - We performed benchmarking studies for critical facilities throughout North America and set industry standards for various government and public entities. We provide comprehensive energy audit services to a wide range of recognized high tech customers. Our standard energy audit scope of services includes Site Inspection and Document Review, Data Collection, Review, and Recommended Energy Efficiency Measures.

The extensive experience we have gained by analyzing a wide variety of new and existing building and system types in critical, industrial environments has provided us with unique experience in both the design and analysis of a wide variety of highly efficient system types, including outside air economizer, radiant heating and cooling, chilled beams, and low-pressure drop design. We are able to view our buildings as whole-systems – this perspective allows us to find energy efficiency opportunities where other consultants cannot.

TOTAL BUILDING COMMISSIONING- (Commissioning, Re-Commissioning, Retro Commissioning, Existing Facilities Commissioning, Decommissioning, LEED Fundamental & Enhanced Commissioning)

Our commissioning services span all facets of the built environment. For new construction, our teams undertake a systematic process ensuring systems are designed, installed, functionally tested, and perform in conformity with the design intent. Our existing building commissioning services – re, retro, existing facility or decommissioning – applies a similar process for improving and optimizing a building's operations, then supports those improvements with enhanced documentation and operator training. The planning & execution of our commissioning methodology is grounded in industry reference guideline documents, including the ASHRAE Guideline 1.1 – HVAC&R Technical Requirements for The Commissioning Process, and with the CSA Standard Z320 – Building Commissioning.

At Integral Group, we understand that today's modern building systems can be very complex and that a performance deficiency in one system will result in less than optimal performance by other systems. The use of Total Building Commissioning (TBC) recognizes the integrated nature of all building systems' performances which impact sustainability, workforce productivity, occupant safety, and security.

Using Total Building Commissioning, our commissioning teams assist our clients from the beginning of the design stage right through to construction completion, and finally are there for support during the warranty phases. Total Building Commissioning gives our clients the comfort and knowledge that the building is complete and most importantly operational when it is handed over to them.

Communication and dedicated coordination are required to ensure that the building works properly at the end of construction. The TBC process uncovers deficiencies in design or installation using peer review and field verification. It serves as an "umbrella" process for all planning, delivery, verification and managing risk to critical functions performed in or by facilities. Ultimately this integrated process results in a fully functional, fine-tuned facility.

We help our clients operate healthy, living, breathing buildings with the comfort and efficiency that they may not have thought possible. Integral Group offers a wide range of commissioning services. You can benefit from our diverse experience and technical expertise to inspire and create customized solutions for your project.

Our services include:

- Whole Building Commissioning
- Commissioning Management
- LEED® Authority Commissioning
- Retro and Re-Commissioning
- Documentation
- Advanced Commissioning

Much more than a paperwork process, our commissioning services are focused around a Quality Assurance approach – meaning a proactive or preventative process that ensures buildings perform from the beginning and keep on performing for years to come. We firmly believe the success of the commissioning process rests with the

commissioning team's effectiveness to work together. Integral Group's in-depth experience with the design and construction process of high performance buildings combined with our effective communication skills and hands-on methods makes us one of the leading commissioning providers. Integral Group's commissioning experience consists of millions of square feet and a wide collection of building types – from retail, commercial, institutional, laboratories, and data centers with LEED® certified, Silver, Gold, Platinum, and Net Zero goals.

Commissioning is applicable throughout the lifecycle of a building to assure that the building is built and operates, as intended. This assurance is needed not only at the beginning of a building's life (i.e. design and construction), but also when any renovation work occurs, as well as periodically during the on-going operation of a building. Our Services Include:

- LEED® Fundamental and Enhanced
- New Construction Commissioning
- Existing Building (Retro or Re-Commissioning)
- Continuous Commissioning
- Monitoring-Based Commissioning
- Measurement & Verification

ENERGY MODELING AND BUILDING SIMULATION - Energy modeling is a rapidly evolving discipline that can play a crucial role in optimizing the design of the next generation of highly energy efficient buildings. We have developed a unique expertise in integrating the most advanced modeling tools with a highly innovative design process. In addition to using standard energy modeling tools such as EQuest, EnergyPro, Visual DOE, IES, Radiance, and Comfen, plus we have developed an extensive suite of proprietary modeling tools designed to handle the complex buildings and systems that off-the-shelf tools cannot. Most critical facilities such as labs and data centers require more sophisticated modeling tools to accurately project energy use and help owners, operators, and design teams make better design decisions for these project types. We have refined our software with over the years and have used knowledge gained from our work on hundreds of high technology projects across North America. We are also well-versed in CFD (Computational Fluid Dynamics) modeling and BIM energy modeling integration.

BUILDING OPTIMIZATION / COMMISSIONING

- **Building and System/Process benchmarking**- We perform the benchmarking studies for critical facilities in California that are used as the industry standard for PG&E's incentive programs. The baselines were done for both small and large facilities and are standardized for the CEC's 16 climate zones. Our models can also accept weather data from many other sources.
- **Integrated Energy Audits**: Since 2000, Integral Group has provided comprehensive energy audit services to a wide range of large high-tech customers. We have developed a standard energy audit scope of services that includes Site Inspection and Document Review, Data Collection, Review, and Recommended Energy Efficiency Measures.
- **Retro Commissioning**: We have extensive experience in analyzing a wide variety of new and existing building and system types in critical industrial environments; we have unique experience in both the design and analysis of a wide variety of highly efficient system types including outside air economizer, radiant heating and cooling, chilled beams, and low pressure drop design; we are able to view buildings as whole systems - this perspective allows us to find energy efficiency opportunities where other consultants cannot.
- **Design Assist**: When we perform design assist support services for design teams, we approach each project as design engineers talking to the Owners' design engineers, and we have been very successful in the kind of professional communication that facilitates better energy efficiency investment decisions. We bring our national credibility to the table when working with other design engineers.

EXISTING BUILDING RENEWAL- In recent years retrofitting and renewing existing buildings has emerged as a key sustainable strategy, when done correctly, as avoiding the embedded energy costs of new construction is inherently less impactful. Also, a significant part of sustainable design involves rediscovering many proven traditional building practices that prevailed before the advent of widespread mechanical systems in buildings. Many older buildings are

much more likely to include natural ventilation, daylight, thermal mass, thin floorplates, shading, and good window-to-wall ration—all characteristics that improve energy performance and user comfort without the need for mechanical systems. We have developed many successful design strategies that can maximize the inherent benefits of older buildings while taking advantage of current building technology and design practices.

- a. **Table of awarded special item number(s) with appropriate cross-reference to item descriptions and awarded price(s).**

Principal	\$222.50/Hour
Senior Associate / Engineer.....	\$146.85/Hour
Associate/ Senior Designer, Project Engineer	\$89.00/Hour
Designer/ Junior Engineer.....	\$66.75/Hour

**Labor rates to be escalated 3%/Year*

- b. **Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract.**

Prices shown in price list are net and do not vary by geographical location.

- c. **Hourly rates: See Labor Category and Course Descriptions, below.**

LABOR CATEGORY DESCRIPTIONS (SIN's 871-202, 871-206, 871-207, 871-210, and 871-211)

Labor Category: Principal
Minimum General Experience: 15 years of experience in engineering and energy consulting services including private sector companies, institutions and Architects. Acts as the Project Principal, Senior Mechanical Engineer or Project Manager as applicable on selected projects.
Functional Responsibility: Responsible for developing new business for Integral's key market sectors with a primary focus on Science and Technology. Assists in identifying and developing new clients, establishing project scope and fees, and the implementation of Integral's overall marketing and growth plans. Utilizes expertise and knowledge and participate in Integral's marketing effort through client interviews and presentations. Provides project design expertise, including participation in concept development, design documentation and design reviews. Provides input and assistance with design and sustainable standards. Provides QA/QC and progress reviews for key Integral projects. Assists in personnel matters including recruiting, staff development, staff mentoring and staff performance appraisals. Directs projects and project teams to maintain quality control, monitor performance and ensure client and firm objectives are being met. Conducts presentations for conference groups and author expert papers on relevant topics of personal expertise.
Minimum Education/Training: 4 Year-Bachelor's Degree in Engineering/PE/LEED AP
Rate: \$222.50/Hour
Labor Category: Senior Associate/ Senior Engineer
Minimum General Experience: 10 years of experience in preparing, reviewing, and recommending a variety of technical documents including engineering plans, technical drawings, specifications, designs, cost estimates, contract provisions, engineering permits, engineering calculations, and ensures compliance with applicable guidelines and standards.
Functional Responsibility: Responsible for directing and reviewing the work of the designers and engineer's staff. Coordinate their work with architects, contractors, and consultants. Prepares requests for proposals for contract services; ensure work completed is within outlined specifications.
Minimum Education/Training: 4 Year-Bachelor's Degree in Engineering/PE/LEED AP
Rate: \$146.85/Hour
Labor Category: Associate/ Senior Designer Project Engineer
Minimum General Experience: 7 years of experience as a project engineer is responsible to meet with clients to learn user needs, collaborate with architects, and develop engineering concepts, and recommendations.
Functional Responsibility: Responsibilities include training, and mentoring engineers and designer's team members. Project Engineering Support.
Minimum Education/Training: 4 Year-Bachelor's Degree in Engineering/ LEED AP
Rate: \$89.00/Hour

Labor Category: Designer/ Jr. Engineer
Minimum General Experience: 3 years of experience in preparation of AutoCAD drawings and providing engineering design support. Additional responsibilities include equipment and component sizing, selection and layout, coordination with other disciplines, shop drawings and product submittal review, assisting in preparation of solutions to unique engineering problems, engineering calculations, and cost estimating under the supervision of a senior engineer. A designer, Junior Engineer is responsible for conducting research for material and product selection and visit construction sites to observe work in progress.
Functional Responsibility: Project Design + AutoCAD
Minimum Education/Training: H.S. Degree + 2 Year Associate's Degree
Rate: \$66.75/Hour

2. MAXIMUM ORDER

\$1,000,000

3. MINIMUM ORDER

\$100.00

4. GEOGRAPHIC COVERAGE (DELIVERY AREA)

Domestic and Worldwide

5. POINT(S) OF OPERATION (CITY, COUNTY, AND STATE OR FOREIGN COUNTRY)

United States	Canada	United Kingdom
Alexandria, Virginia 225 Reinekers Lane, Suite 200 Alexandria, VA 22314 (703) 310-1095	Vancouver, BC Suite 180 – 200 Granville St Vancouver, BC Canada V6C 1S4 (604) 687-1800	London, England Mark House 9 - 11 Queens Road Hersham, Surrey KT12 5LU +44(0)1932 232277
Richmond, Virginia 11520 Nuckols Rd, Suite 110 Glen Allen, VA 23059 (804) 474-7800	Kelowna, BC Suite 213 - 1626 Richter Street Kelowna, BC Canada V1Y 2M3 (250) 869-1826	Oxford, England Unit 1, Library Avenue Harwell Oxford Didcot, Oxfordshire OX11 0SG +44(0)1235 820300
New York, New York 161 Bowery Street, 4th Floor New York, NY 10002 (914) 882-1840	Prince George, BC Suite 202 - 1378 5th Avenue Prince George, BC Canada V2L 3L4 (250) 562-5372	
Seattle, Washington 410 Occidental Avenue South Seattle, WA 98104 (510) 663-2070	Calgary, Alberta 1214 9th Avenue SE, 2nd Floor Calgary, AB Canada T2G 0T1 (587) 353-5141	
San Jose, California 1084 Foxworthy Avenue, Suite 150 San Jose, CA 95118 (408) 448-6300	Toronto, Ontario 800 - 111 Peter Street Toronto, ON Canada M5V 2H1 (416) 488-4425	
Oakland, California 427 13th Street Oakland, CA 94612 (510) 663-2070		
Los Angeles, California 4054 Del Rey Avenue, Suite 205 Marina Del Rey, CA 90292 (510) 663-2070		

6. DISCOUNT FROM LIST PRICES OR STATEMENT OF NET PRICE

Prices shown herein are net (discount deducted). A discount of 11% has been applied to all rates.

7. QUANTITY DISCOUNTS

Quantity/volume discounts for work orders in excess of \$150,000.00 at 7.5%. To obtain this discount the MFC must purchase a minimum of \$150,000.01.

8. PROMPT PAYMENT TERMS

Prompt payment discount terms of **0% at 30 days**

9. GOVERNMENT PURCHASE CARDS

- a. Government purchase cards are accepted at or below the micro-purchase threshold.
- b. Government purchase cards are not accepted above the micro-purchase threshold.

10. FOREIGN ITEMS (LIST ITEMS BY COUNTRY OF ORIGIN)

None

11. DELIVERY

- a. **Time of delivery:** To be determined on a Task Order level
- b. **Expedited delivery:** To be determined on a Task Order level
- c. **Overnight and 2-day delivery:** Generally services provided do not require overnight or 2-day delivery.
- d. **Urgent requirements:** To be determined on a Task Order level

12. F.O.B. POINT(S)

Not Applicable.

13. ORDERING:

a. Ordering address(es):

Bryan Robertson, PE, LEED AP
Associate Principal
Integral Group, LLC
225 Reinekers Lane, Suite 200
Alexandria, VA 22003
brobertson@integral-group.net

- ### b. Ordering procedures:
- For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's) are found in Federal Acquisition Regulation (FAR) 8.405-3.

14. PAYMENT ADDRESS(ES):

Bryan Robertson, PE, LEED AP
Associate Principal
Integral Group, LLC
225 Reinekers Lane, Suite 200
Alexandria, VA 22003
brobertson@integral-group.net

15. WARRANTY PROVISION:

Not Applicable.

16. EXPORT PACKING CHARGES:

Not Applicable.

17. TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARDS:

Not Applicable.

18. TERMS AND CONDITIONS OF RENTAL, MAINTENANCE, AND REPAIR

Not Applicable.

19. TERMS AND CONDITIONS OF INSTALLATION

Not Applicable.

20. TERMS AND CONDITIONS OF REPAIR PARTS

Not Applicable.

a. Terms and conditions for any other services: Not Applicable.

21. LIST OF SERVICE AND DISTRIBUTION POINTS

Not Applicable.

22. LIST OF PARTICIPATING DEALERS

Not Applicable.

23. PREVENTIVE MAINTENANCE

Not Applicable.

24. SPECIAL ATTRIBUTES

a. Special attributes such as environmental attributes: Not Applicable.

b. Section 508 compliance: Not Applicable.

25. DATA UNIVERSAL NUMBER SYSTEM (DUNS) NUMBER

96-174-6570

26. REGISTRATION IN CENTRAL CONTRACTOR REGISTRATION (CCR) DATABASE:

Integral Group, LLC is duly registered in the CCR database.

SIN	Description
871-202 Energy Management Planning and Strategies	<p>Energy Management Planning and Strategies - A four-phase Comprehensive Energy Management Solution consisting of all four phases of an energy project and could pertain to a variety of energy projects that include, but are not limited to, renewable energy, sustainable energy, and energy efficient buildings certification programs such as LEED.</p> <ol style="list-style-type: none"> 1. Consulting/Auditing/Energy Management Solutions - The strategic planning, energy assessments e.g. feasibility, vulnerability and other detailed assessments, developing and executing of energy audits, audit plans and energy management solutions. 2. Concept Development and Requirements Analysis - The analysis of the audit results and outlined requirements to design a detailed energy management project concept. 3. Implementation and Change Management - The implementation and integration of more energy efficient practices and systems and training in using them effectively. 4. Measurement and Verification - The performance assessment and measurement of the effectiveness and energy efficiency of the project and can include long term monitoring, verification of savings and benchmarking.
871-206 Building Commissioning Services	<p>Building Commissioning Services - Including, but not limited to, comprehensive building commissioning services on new construction, major modernization projects, and existing energy consuming buildings and facilities designed to ensure the building systems are designed and built to operate as efficiently as possible. This includes re-commissioning and retro-commissioning services. Energy efficient buildings certification programs such as LEED may be included</p>
871-207 Energy Audit Services	<p>Energy Audit Services - Including, but not limited to, developing, executing, and reporting on audit plans and/or perform energy and water audit services. Energy audits may range from cursory to comprehensive. Including, but not limited to data collection, data analysis, benchmarking with tools such as Energy Star, and written recommendations of suggested upgrades of electrical and mechanical infrastructure, including their impact on energy consumption and pollution can include recommendations for using alternative Energy Sources. Energy efficient buildings certification programs such as LEED may be included.</p>
871-210 Water Conservation	<p>Water Conservation - Water Conservation: Services and consulting related to the reduction of water usage, reduction of potable water consumption intensity, reduction of industrial, landscaping and agricultural water consumption, promoting, and implementing water reuse strategies, recycling of water for multiple purposes, retention of water, improvement of water quality and water flow. Also includes consulting on storm water run-off and property hydrology maintenance and restoration. These services can include, but are not limited to, consultation, facility water audits, water balance, and water system analysis.</p>

<p>871-211 Energy Consulting Services</p>	<p>Energy Consulting Services - Contractors shall provide expert advice, assistance, guidance or counseling on energy related projects or initiatives to assist agencies in adhering to energy legislation and policy such as EPACT 2005, Executive Orders 13423 and 13514. Consulting services covered by this SIN include:</p> <ul style="list-style-type: none"> • Energy management or strategy • Energy program planning and evaluations • Energy related studies, analyses, benchmarking and reporting such as feasibility studies, vulnerability assessments, and energy security • Assistance in meeting energy efficient building standards such as Leadership in Energy and Environmental Design (LEED), Green Globes and Energy Star. • Advisory services in obtaining alternative financing for energy projects such as Energy Savings Performance Contracts, Power Purchase Agreements or Enhanced Use Leases • Consulting on carbon emissions trading programs • Consulting on where to obtain renewable energy credits/certificates • Consulting on greenhouse gas measurement and management • Strategic sustainability performance planning • Consulting on obtaining high performance sustainable buildings • The implementation, testing and evaluation of networked energy management systems and services that utilize Internet Protocol - Next Generation (IPv6) enabled systems
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