HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 1. Qualifications

1.1

FIRM PROFILE

Craftsmanship. It's not a word usually associated with engineering services, but this quality unites our diverse group of experts. It also sets HESM&A apart. Both a science and an art, our work blends innovative technology with professional skill to create comfortable, safe and welcoming environments.

Mechanical, electrical and fire protection systems are the backbone of daily life and work. From shopping malls to churches, hospitals to resorts, HESM&A's technical designs are seamlessly engineered to provide healthy and visually appealing environments. Our clients experience a strong sense of well-being as our designs induce both inspiration and serenity. Our commissioning expertise validates the design so that the building systems are operating at peak efficiency on Day One of building occupation.

HESM&A was founded in 1989 by Thad W. (Pete) Hudson, Jr. P.E., Stanley R. Everett, P.E., James R. Simonson, and J. Bart Mullis, P.E. Currently, our company is comprised of over 40 skilled engineers and designers. Our offices, located in Atlanta, Georgia, Ridgeland, Mississippi, and our affiliate in Charlotte, North Carolina bring together an innovative group of qualified professionals. We pride ourselves in exceeding our clients' expectations by coordinating our talents and areas of expertise. This unique synergy motivates and empowers our staff thereby promoting creativity and precision, two essential qualities of a successful design.

Our firm has been in business for almost 20 years. We have a strong financial background and are well funded. We have long, excellent relationships wit the banking industry. In addition to our working capital with our bank, we have reserve capital set aside for the long-term financial health of the company. We pay all of our bills on time and fund our payroll costs on a consistent basis. We have a strong financial basis for continuing operations.

MISSION STATEMENT

HESM&A is dedicated to providing high quality, innovative and timely engineering and commissioning services to a diverse clientele, while always prioritizing the best interest of the stakeholders.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

INTERNAL QUALITY CONTROL

To ensure internal quality control, HESM&A assigns a Principal to guide each project for commissioning services from design to completion of the Warranty Phase. In addition, we appoint a Project Manager to assist the Principal in processing all commissioning activities, field work, commissioning forms, and all other aspects of the commissioning process. In this way, we oversee the resolution of design issues among disciplines, which significantly reduces the number of errors or omissions.

By attending project meetings, participating in the design process, and overseeing the project through to construction completion and end of warranty, the HESM&A Principal ensures that a client's project receives the consistent, dedicated attention it deserves. We assign a commissioning team of MEPFP commissioning agents and engineers to perform our detailed reviews of the design documents and document the findings of these Peer Reviews into a "Drawing/Specification Review" spreadsheet so that each comment can be easily tracked for resolution by the Owner and the design and commissioning teams.

SERVICES PROVIDED

As consulting engineers, we create state-of-the-art systems through careful planning, creative problem solving and detailed quality control.

We tailor our commissioning capabilities to each client, thereby allowing the opportunity to coordinate services through a single source. This flexibility, coupled with skilled application of the most current design software, enables us to efficiently and cost-effectively develop custom projects. We excel in "hands-on" commissioning problem solving, always thinking ahead to prevent design and construction problems.

Building Commissioning

Mechanical Systems
Electrical Systems
Life Safety Systems
MEP & FP Design Peer Review
Plumbing Systems
Fire Protection Systems
DDC Control Systems
Systems Testing for Building Occupancy Certification
LEED® Commissioning

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 2. Experience

2.1

Commissioning Experience

As consulting and commissioning engineers, we create state-of-the-art systems through careful planning and application of our commissioning expertise, creative problem solving and detailed quality control. Offering a breadth of services, we are one of only a few consultants with experienced expertise in building commissioning, specialty lighting and network technology in addition to our engineering design capabilities which makes us uniquely qualified for our role as building commissioning agents. We have been providing commissioning services **over** the last **9 years** for over **50 projects**. We have completed and/or are currently working on **nineteen (19)** LEED commissioning projects.

HESM&A, Inc. has staff members that are LEED certified and have performed commissioning services for high-rise office buildings, the Georgia Tech Regional Engineering Program Campus in Savannah, Georgia, Georgia Tech Food Processing Technology Building in Atlanta (LEED criteria was implemented as much as possible with the available budget), Classroom and Convocation Center at Kennesaw State University, Social Science Building and Multi-purpose Building at Kennesaw State University (LEED project), Lander University Student Housing Building in South Carolina (LEED project), Calloway Lodge and Spa at Calloway Gardens (LEED project), two completed GSFIC projects for DTAE (Dekalb Tech Classroom Building and KIA Plant Training Center) plus one (1) current DTAE project at Columbus Tech (78,263 square foot Health Sciences Center) and the 79,751 square foot Life Sciences Center Classroom Building at Gwinnett Technical College for the Technical College System of Georgia. We have also performed commissioning services for several projects constructed for Sprint PCS, Inc. (see below). We have performed two (2) LEED commissioning projects at Emory University in Atlanta and Oxford, GA. The Emory Psychology Building is a 120,000 square foot, $37.5 million project which opened in the spring of 2009, and the Emory Oxford Residence complex dormitory is a 3 story, 350 bed, 106,000 square foot dormitory building which opened in August 2008. We are currently performing LEED Fundamental building systems commissioning for the GA Tech Basketball Practice Facility and building commissioning for Rich Computing Data Center Infrastructure upgrades.

Over the last few years, we performed commissioning services for many Sprint Switch facilities that process cell phone calls in their "PCS" network. Many of these projects were concurrent in their construction as noted below:

> Boston, MA Site #1; Boston, MA Site #2; Manhattan, NY; Teterboro, NY; Miami, FL #1; Miami, FL #2; Nashville, TN; Pittsburgh, PA; Philadelphia, PA; Rochester, NY; Long Island, NY; Norfolk, VA; Knoxville, TN; Albany, NY.

Our team of certified commissioning agents serviced these projects in a timely, efficient manner which not only included review of design documents on some projects but also field work on other projects which were under construction at the same time. With this experience, we are confident we can support multiple projects. Please review our list of attached commissioning projects.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Building Commissioning

GEORGIA TECH FOOD PROCESSING

ATLANTA, GEORGIA

Beginning Date: 09/2003

End Date: 08/2006

Gross Total Square Footage: 39,000 square feet

Total Construction Cost: approx. $5,500,000

Main Program Elements: This project consisted of MEPFP Building Commissioning 24 hour research facility having laboratories, research and testing areas, large presentation auditorium, faculty offices and conference rooms, and environmental testing functions. A 2 story hi-bay testing area with multiple MEP utilities strategically placed allows flexible space for companies to rent for product and equipment testing. Faculty Research projects also utilize this flexible testing area. Scope included design drawing peer review services, shop drawing review, field site observations, installation verification, commissioning startup and functional MEP test reports, smoke evacuation system tests, final punch list, and warranty phase work including a re-commissioning plan.

Owner's Project Manager:
Gary Petherick
404-894-4235 (p)
404-894-9028 (f)
gary.petherick@facilities.gatech.edu
Georgia Institute of Technology
955 Fowler Street, NW
Atlanta, GA 30332-0410

Architect's Project Manager:
Bill Polk
404-688-2200 (p)
404-688-2400 (f)
bill@rplusw.com
Richard & Wittschiebe Architects
15 Simpson Street, NW
Atlanta, GA 30308

Contractor's Project Manager:
W.G. Yates and Sons Construction
770-399-1919 (p)
678-443-9652 (f)
1200 Abernathy Road, NE, Ste. 300
Atlanta, GA 30328
*It is our understanding that their project manager is no longer with the firm.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

EMORY UNIVERSITY, PSYCHOLOGY BUILDING

ATLANTA, GEORGIA

Beginning Date: Spring 2007

End Date: In Progress; estimated completion 2009

Gross Total Square Footage: 120,000 square feet

Total Construction Cost: $37,500,000

Main Program Elements: Currently performing LEED Fundamental and Enhanced complete MEPFP commissioning services for this new 5-story, 120,000 sq ft Psychology Building with an approximate construction cost of $45 million. The project is currently in the Warranty Phase.

Owner's Project Manager:
Stuart Adler
404-210-4758 (cell)
404-727-2127 (f)
sadler@fmd.emory.edu
Emory University
Facilities Management
301 FM Drive
Atlanta, GA 30322

Architect's Project Manager:
David Nilsson
404-439-9000 (p)
404-439-9001 (f)
david.nilsson@hok.com
HOK
191 Peachtree St., NE
Ste. 4100
Atlanta, GA 30303

Contractor's Project Manager:
Brad Hutto
404-373-8550 (p)
404-373-5822 (f)
bhutto@holder.com
Holder Construction
36 Eagle Row
Atlanta, GA 30322

Cx Project Manager:
Eric Gregory
404-727-1388 (p)
404-727-2127 (f)
eric.gregory@emory.edu
Emory University
Facilities Management
301 FM Drive
Atlanta, GA 30322

OXFORD AT EMORY, RESIDENCE HALL COMPLEX

NEWTON COUNTY, GEORGIA

Beginning Date: Spring 2007

End Date: August 2008

Gross Total Square Footage: 106,000 square feet

Total Construction Cost: $22,500,000

Main Program Elements: Performed LEED Fundamental and Enhanced Commissioning services. Project consisted of approximately 106,000 square foot 3-story building with a basement with 350 dorm beds.

Owner's Project Manager:
Mitsu Parker
404-888-3000 (p)
404-888-3006 (f)
mparker@carterusa.com
Carter Development
171 17tth Street
Suite 1200
Atlanta, GA 30363

Architect's Project Manager:
Andy Akard
404-879-6800 (p)
404-879-6858 (f)
akard@jova.com
Jova/Daniels/Busby
400 Colony Square
Suite 700
1201 Peachtree St, NE
Atlanta, GA 30361

Contractor's Project Manager:
Frederick Nilsson
404-443-4000 (p)
404-443-4100 (f)
fnilsson@newsouthconstruction.com
New South Construction
1132 West Peachtree Street
Atlanta, GA 30309

Commissioning Project Manager:
Eric Gregory
404-727-1388 (p)
404-727-2127 (f)
eric.gregory@emory.edu
Emory University
Facilities Management
301 FM Drive
Atlanta, GA 30322

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

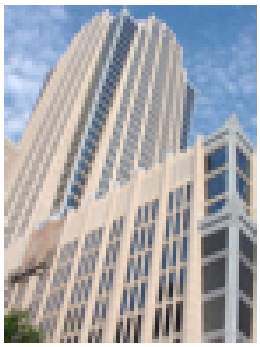
HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

HEARST CENTER

CHARLOTTE,
NORTH CAROLINA



Beginning Date: 2002

End Date: 2003

Gross Total Square Footage: 550,000 square feet (11 floors) of elevated parking and 1,100,000 square feet of lease space

Construction Cost: $150,000,000

Main Program Elements: Building commissioning services for this 48-story Trammell Crow Hearst Center. Provided mechanical life safety commissioning for the stair and elevator pressurization, atrium smoke evacuation, and garage ventilation.

Owner's Project Manager:
704-549-3914 (p)
Trammell Crow
10101 Claude Freeman Drive
Suite 200W
Charlotte, NC 28262
*Note: their project manager left the firm in 2004

Architect's Project Manager:
Jim Van Duys
404-233-5453 (p)
404-264-0929 (f)
jvanduys@srssa.com
Smallwood, Reynolds, Stewart, Stewart
3565 Piedmont Road, Suite 303
Atlanta, GA 30305

Contractor's Project Manager:
Scott Evers, VP
813-221-7575 (p)
813-221-5790 (f)
severs@batson-cook.com
Batson Cook
101 E. Kennedy Blvd., Suite 3100
Tampa, FL 33602

CALLAWAY GARDENS
LODGE

PINE MOUNTAIN,
GEORGIA

Beginning Date: Spring 2006

End Date: Spring 2008

Gross Total Square Footage: 103,700 square feet

Total Construction Cost: $22,800,000

Main Program Elements: Performed fundamental and enhanced building commissioning services per the LEED criteria for certification of the 230 room 4-story lodge and first class spa facility. This high profile project is the first hotel facility constructed at Calloway Gardens in over 25 years. The scope included commissioning of all HVAC equipment and systems along with all lighting controls and domestic heating systems.

Owner's Project Manager:
Kevin Grass
404-401-9013 (p)
404-262-9244 (f)
kevin.grass@nobleinvestment.com
Noble Investment
3424 Peachtree Road, NE
1100 Monarch Tower
Atlanta, GA 30326

Architect's Project Manager:
Laura Earman
214-468-7550 (p)
214-871-7023 (f)
learman@rtkl.com
RTKL Associates
1717 Pacific Ave.
Dallas, TX 75201

Contractor's Project Manager:
Charles Crosby
404-287-6000 (p)
404-287-6060 (f)
ccrosby@juneaucc.com
Juneau
3715 Northside Parkway
300 Northcreek, Suite 750
Atlanta, GA 30327

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

LANDER UNIVERSITY

GREENWOOD,
SOUTH CAROLINA

Beginning Date: April 2005

End Date: June 2007

Gross Total Square Footage: 90,100 square feet

Total Construction Cost: $13,500,000

Main Program Elements: Performed fundamental building systems commissioning per the LEED criteria for the new 4-story, 320 bed dormitory building. Services were performed in two phases; the design review for systems performance criteria and the installation verification/functional performance testing.

Owner's Project Manager:
Jeff Beaver
Director of Facilities
864-388-8335 (p)
jbeaver@lander.edu
Lander University
320 Stanley Ave.
Greenwood, SC 29649

Architect's Project Manager:
Peggy Brock
864-370-0058 (p)
864-542-9451 (f)
pbrock@mcmillansmith.com
McMillan Smith & Partner Architects
127 Dunbar Street
Spartanburg, SC 29306

Contractor's Project Manager:
Tom Baer
864-229-7777 (p)
tbaer@triangleconstruction.com
Triangle Construction
1626 Rivers Street
Greenwood, SC 29649

KENNESAW STATE UNIVERSITY,
SOCIAL SCIENCE BUILDING

KENNESAW,
GEORGIA

Beginning Date: 2004

End Date: Summer 2007

Gross Total Square Footage: 166,000 square feet

Total Construction Cost: $21,500,000

Main Program Elements: Performed fundamental building commissioning services per the LEED criteria for certification of the 166,000 square foot 5-story social science classroom and faculty office buildings.

Owner's Project Manager:
Paul Underwood
770-449-3602 (p)
770-423-6522 (f)
punderwood@kennesaw.edu
Kennesaw State University
1000 Chastain Road #3602
Kennesaw, Georgia 30144-5591

Architect's Project Manager:
John Abbott
404-522-8888 (p)
404-521-6204 (f)
jabot@sw-sn.com
Stevens & Wilkinson Stang & Newdow
100 Peachtree Street, Ste. 2500
Atlanta, GA 30303

Contractor's Project Manager:
Greg Brown
770-437-2700 (p)
770-435-5997 (f)
greg.brown@facilitygroup.com
Facility Group
2233 Lake Park Drive, SE
Smyrna, GA 30080

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

KENNESAW STATE UNIVERSITY, CLASSROOM AND CONVOCATION CENTER

KENNESAW, GEORGIA

Beginning Date: Spring 2005

End Date: Spring 2006

Gross Total Square Footage: 160,790 square feet

Total Construction Cost: $14,600,000

Main Program Elements: Building MEPFP Commissioning services per LEED criteria for 166,000 sq ft classroom and assembly area building located on KSU campus. The HVAC system consists of 4-pipe chilled and hot water, smoke evacuation system, constant and VAV air handling systems, and DDC controls. The electrical system consists of a 3,000 amp 480 volt electrical service with main switchboard and associated distribution system, emergency generator, fire alarm system and lighting controls.

Owner's Project Manager:
Glenn La Vine, AIA
770-499-3602 (p)
70-499-3589 (f)
glavine@kennesaw.edu
Kennesaw State University
1000 Chastain Road #3602
Kennesaw, Georgia 30144-5591

Architect's Engineer Project Manager:
Harris Sheinman
404-881-9880 (p)
404-946-2398 (f)
hsheinman@heery.com
Heery International
999 Peachtree Street, NE
Atlanta, GA 30309

Contractor's Project Manager:
Michael Tallent
404-812-8600 (p)
404-812-8691 (f)
takllentm@kajimausa.com
Kajima Associates
3500 Piedmont Road, Ste. 700
Atlanta, GA 30305

KENNESAW STATE UNIVERSITY, MULTI-PURPOSE BUILDING

KENNESAW, GEORGIA

Beginning Date: Winter 2006

End Date: Fall 2007

Gross Total Square Footage: 35,000 square feet

Total Construction Cost: $8,200,000

Main Program Elements: Performed fundamental building commissioning services per the LEED criteria for certification for the 35,000 square foot performing arts multi-purpose building.

Owner's Project Manager:
Paul Underwood
770-449-3602 (p)
770-423-6522 (f)
punderwood@kennesaw.edu
Kennesaw State University
1000 Chastain Road #3602
Kennesaw, Georgia 30144-5591

Architect's Project Manager:
John Abbott
404-522-8888 (p)
404-521-6204 (f)
jabot@sw-sn.com
Stevens & Wilkinson Stang & Newdow
100 Peachtree Street, Ste. 2500
Atlanta, GA 30303

Contractor's Project Manager:
Greg Brown
770-437-2700 (p)
770-435-5997 (f)
greg.brown@facilitygroup.com
Facility Group
2233 Lake Park Drive, SE
Smyrna, GA 30080

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

2000 AVENUE OF THE STARS

LOS ANGELES, CALIFORNIA

Beginning Date: 2005

End Date: Spring 2007

Gross Total Square Footage: 750,000 square feet

Total Construction Cost: $180,000,000

Main Program Elements: 12 story office building for Trammell Crow with 8 levels of underground parking. Provided building commissioning services. Work also included commissioning of the MEPFP main and redundant systems for a 2,500 sq ft Data Center for the building's major tenant (Creative Artists Agency).

General Contractor MEP Project Manager:
Marc Saphir (retired)
970-946-4646 (cell)
msaphire@srrsq.com
Hathaway Dinwiddie
811 Wilshire Blvd.
Suite 1500
Los Angeles,
CA 90017

Architect's Project Manager:
Albert Sawano
310-449-5833 (p)
310-449-5850 (f)
albert_sawano@gensler.com
Gensler
2500 Broadway
Suite 300
Santa Monica,
CA 90404

Owner's Project Manager:
Greg Ames
310-407-1612 (p)
310-407-1656 (f)
games@trammellcrow.com
Trammell Crow Company
2049 Century Park East
Suite 2600
Los Angeles, CA 90067

Engineer:
Ken Morrison
310-312-0200 (p)
310-473-7468 (f)
kmorrison@ssyska.com
Syska-Hennessy Group
11500 w. Olympic Blvd.
Suite 680
Los Angeles, VA 92651
Alireza Hadian, Project Manger
ahadian@syskaa.com

COLUMBUS TECHNICAL COLLEGE HEALTH SCIENCES BUILDING DTAE-201

COLUMBUS, GEORGIA

Beginning Date: Winter 2009; End Date: Summer 2011

Gross Total Square Footage: 78,215 square feet

Total Construction Cost: $20,395,000

Main Program Elements: LEED Silver 3 story Health Sciences Building for programs for dental hygiene, nursing, radiologic technology, surgical, pharmaceutical, health infrastructure, sonography, respiratory care, medical office management, etc.

Architect's Project Manager:
Al Collins
404-524-2200 (p)
404-524-8610 (f)
al.collins@sbs-architecture.com
Stanley Beaman & Sears Architecture
180 Peachtree Street
Atlanta, GA 30303

GSFIC Project Manager:
Bob Johns
404-463-5751 (p)
404-463-5779 (f)
bjohns@gsfic.ga.gov
GSFIC
270 Washington Street
Atlanta, GA 30334

Engineer P.M.:
Todd Mowinski
404-730-8400 (p)
404-730-8401 (f)
tmowinski@newcomb-boyd.com
Newcomb & Boyd
303 Peachtree Center Ave., NE
Suite 525
Atlanta, GA 30303

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

GEORGIA TECH

SAVANNAH, GEORGIA

Beginning Date: 07/2002

End Date: 06/2004

Gross Total Square Footage: 100,000 square feet

Total Construction Cost: approx. $16,000,000

Main Program Elements: The project consisted of MEPFP Building Commissioning for three buildings; two Collegiate Laboratory and classroom facilities, totaling approximately 80,000 square feet; and a one story building Collegiate Center of about 20,000 square feet. Commissioning services included development of design/build criteria for contractor/A-E bidding, construction documents peer review of engineering design, submittal review, field observations during construction and punch list reports, installation verification and functional performance testing and commissioning of MEP systems.

Owner's Project Manager:
Don Alexander
404-894-4235 (p)
404-894-9028 (f)
don.alexander@facilities.gatech.edu
Georgia Institute of Technology
955 Fowler St., NW
Atlanta, GA 30332

Architect's Project Manager:
Jim Van Duys
404-233-5453 (p)
404-264-0929 (f)
jvanduys@srssa.com
Smallwood, Reynolds, Stewart, Stewart
3565 Piedmont Road
Suite 303
Atlanta, GA 30305

Contractor's Project Manager:
Chris Webb
404-264-0404 (p)
404-264-3514 (f)
cwebb@hardinconstruction.com
Hardin Construction
1380 West Paces Ferry Rd., NW
Atlanta, GA 30327

Program Manager:
Brint Smith
404-350-9988 (p)
404-351-6153 (f)
bsmith@brookwoodpm.com
Brookwood Group Program Management
1819 Peachtree Rd, NE
Suite 201
Atlanta, GA 30309-1854

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

ENTERGY TRANSMISSION HEADQUARTERS

JACKSON, MISSISSIPPI

Beginning Date: 05/2008

End Date: 08/2009

Gross Total Square Footage: 78,000 square feet

Total Construction Cost: approx. $16,500,000.00

Building commissioning services for this new Transmission Headquarters consisting of a three-story building with a two-story entrance lobby. The building contains 80,000 sf and includes open areas, executive offices, 24 hour emergency management conference rooms, teleconferencing capabilities, warming kitchen and cafeteria dining facilities.

Owner's Project Manager:
Lloyd Keller
601-260-2242 (p)
601-351-4225 (f)
Lkell91@entergy.com
Cushman & Wakefield
M-Tomb-24C, P.O. Box 16
Jackson, MS 39215

Architect's Project Manager:
Rob Hoyt
601-948-7337 (p)
601-948-7336 (f)
rob@ccdarchitects.com
Canizaro Cawthon Davis
129 South President Street
Jackson, MS 39201

Contractor's Project Manager:
Jason Parkes
601-956-9500 (p)
601-497-9350 (m)
jparkes@msconst.com
Mid-State Construction
300 Briarwood West Dr.
Jackson, MS 39206

RENAISSANCE 200 AT COLONY PARK

JACKSON, MISSISSIPPI

Beginning Date: 01/2008

End Date: 08/2009

Gross Total Square Footage: 300,000 square feet

Total Construction Cost: approx. $61,000,000.00

Building commissioning services for this new high rise, 12 story, shell and core office building of approximately 300,000 SF with 3 floors of open parking of approximately 350,000 sf (1,038 cars) and approximately 17,000 sf of leasable on the first floor.

Owner's Project Manager:
Chris Wheeler
601-853-8000 (p)
chris@hcbailey.com
H.C.Bailey
1022 Highland Colony Pkwy, Ste 300
Ridgeland, MS 39157

Architect's Project Manager:
Mike Service, AIA
404-240-9570 (p)
404-237-0276 (f)
mikservice@coopercarry.com
Cooper Carry Architects
3520 Piedmont Road, Suite 200
Atlanta, GA 30305

Contractor's Project Manager:
Mark Cameron
205-803-2121 (p)
205-423-2323 (f)
mcameron@hoarllc.com
HOAR Construction
2 Metroplex Dr.
Birmingham, AL 35209

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 3. Commissioning Approach

3.1

Our team of certified commissioning authorities and professional engineers will review the project programming and ensure that the design approach corresponds to the owner's criteria provided and coordinate with the USGBC LEED criteria as required for certification. We will perform the detailed LEED documentation requirements for Fundamental commissioning and coordinate with the Owner, and the construction and design teams to assure a smooth certification process. We will review the design team's completed design development documents and two submittals of construction documents (50% and 95%) including MEP systems designed, including overall systems capacities, outside air delivery systems, code compliance, life safety systems, building automation systems and improvement of the commissioning process, MEP specifications and indoor air quality assurance. Our review will include efficiency of delivery systems, completeness of systems required by the programming, building automation system scope and sequences, constructability, energy conservation improvements, accessibility and maintainability of equipment locations.

Our goal when commissioning a project is to ultimately improve not only the operation of the building systems, but to ensure that the building occupants enjoy a more comfortable, better quality working environment, and a highly productive daily experience.

We accomplish these goals through our detailed periodic design reviews, seamless scheduling of commissioning activities, timely jobsite observations and our ability to assist the project design and construction team in solving building systems installation and operational problems early, before they may cause change orders and completion delays.

Building commissioning is a planned and systematic team effort. We define the role of each member at the design development phase and conduct our initial Cx team meeting following through with implementing our proven successful commissioning approach.

The key to our commissioning success can be defined by one word – **communication**.

Our design review process focuses on ensuring that the owner's project requirements are met by the design teams construction documents. Another primary focus is the constructability and maintainability provided by the direction of project documents. HESM&A feels that the ability to maintain the building environmental and operating systems is essential for continued optimum building performance.

Our approach to commissioning involves the detailed planning of all phases of the process from Design Phase through the Warranty Phase. Our commissioning specifications will be project specific and integrated into the construction documents. Our commissioning plan will include the required scope of services for all team members to execute our approach for a project of this complexity. Functional testing and verification procedures will be compiled and distributed for review by the team and implemented accordingly.

Because of our team experience in actual building construction, we are able to integrate our commissioning activities into the project master construction schedule without extending or delaying the project milestones or finish date with a "can do", pro-active attitude.

Our jobsite progress reviews are scheduled and distributed to the construction and design teams. These site inspections are tailored to the requirements of the project design documents as well as local building codes. All deficiencies found in the equipment or systems that are to be commissioned are documented and coordinated with

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

the design/construction team and Owner. This documentation is transmitted to the appropriate parties the next day so that the deficient items can be corrected before any delays in construction can result.

Our team's collective experience in construction of a wide spectrum of building types and usages, affords us the opportunity to assist in the solution to many of the problems that arise in the complex building systems employed today. This approach to commissioning a project is not entirely unique, however, the specialty skills that HESM&A brings to this project team certainly are.

Throughout the drawing review process, our focus is the completeness of the documents with respect to scope, constructability, accessibility, and ease of commissioning while minimizing the need for later change orders in the project. We will attend design team review meetings to discuss our document review comments which will include a commissioning kick-off meeting to review the commissioning process and its coordination of the design efforts.

We will prepare Commissioning Specifications for all systems and equipment to be commissioned indicating the required process along with contractor responsibilities. This will also include "draft" functional test procedures for review by the design team. We will review bids of contractor pricing for Commissioning activities with our comments submitted to the Project Manager.

We will meet with the construction and design team along with their major sub-contractors to outline their contractual responsibilities and involvement required during the on-site commissioning process. We will develop a detailed commissioning plan for the installation, checkout, startup, and equipment and system testing for verification of their function in accordance to the contract documents. During the physical construction phase of the project, we will make appropriate jobsite visits with the intent of assuring jobsite quality with future building indoor air quality as a priority. Our function during this phase is to ensure that the design is followed and the quality of construction is that which the owner is expecting and has contracted.

We will develop a commissioning schedule for implementation into the contractor's overall construction schedule with major milestones identified and coordinated. We will review and approve contractors' submittals for commissioned equipment and systems. We will issue a pre-commissioning checklist of the equipment and systems that will be monitored and verified for operation. The contractors will use this checklist to initial each line item as complete and meeting the contract requirements and sequences of operation prior to our verification of same.

We will perform periodic site visits during rough-in of systems and equipment during the construction phase of the project.

When the contractors have signed off a sufficient number of equipment and systems, our on-site commissioning process will proceed into the verification stage. A commissioning schedule will then be issued that outlines the date when each piece of equipment or system will be verified for operation.

Deficiency and resolution reports will be generated for each piece of equipment or sequence that does not comply with the contract documents and local code requirements. The deficiency and resolution reports are then signed and returned to us when the items have been corrected.

We will witness a sample of the pipe and ductwork testing and cleaning procedures performed by the contractor during specific site visits for HVAC installation/verification. We will witness a sample of the end-to-end testing and calibration of controls.

We will attend on-site meetings during construction for commissioning coordination with the contractor for progress review and resolution of field issues.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

We will review the test and balance execution plan along with witnessing their work in the field for critical systems and major components, and 100% of all equipment testing. Review of test and balance reports, including any deficiencies and their corrections, is also included as a function of our commissioning effort.

When all systems and equipment have satisfied the contract and code requirements, a final commissioning report is generated that will summarize the on-site process.

After the on-site testing process is complete, we will also review and approve the contractor's coordination of the systems training including overseeing this effort for the owner's building operating staff. We will review the O&M documentation for completeness. We will perform seasonal testing and checkout of systems. Each piece of equipment and system will be assigned a number of hours of training, often specified by design documents, and documented by us to insure that the owner's personnel are adequately educated on the building systems.

We will provide re-commissioning activities per LEED Fundamental criteria such as warranty phase services including a seasonal HVAC system testing (opposite from the seasonal testing performed at building turnover to the Owner), a site visit 10 months after building occupation, review of system operations with building staff, identify deficiencies and recommended corrections, review system efficiencies and make recommendations for improvements and update in the O&M manuals, provide additional training for the building staff, prepare a building evaluation and status of warranty issues and attend an on-site meeting to review warranty issues.

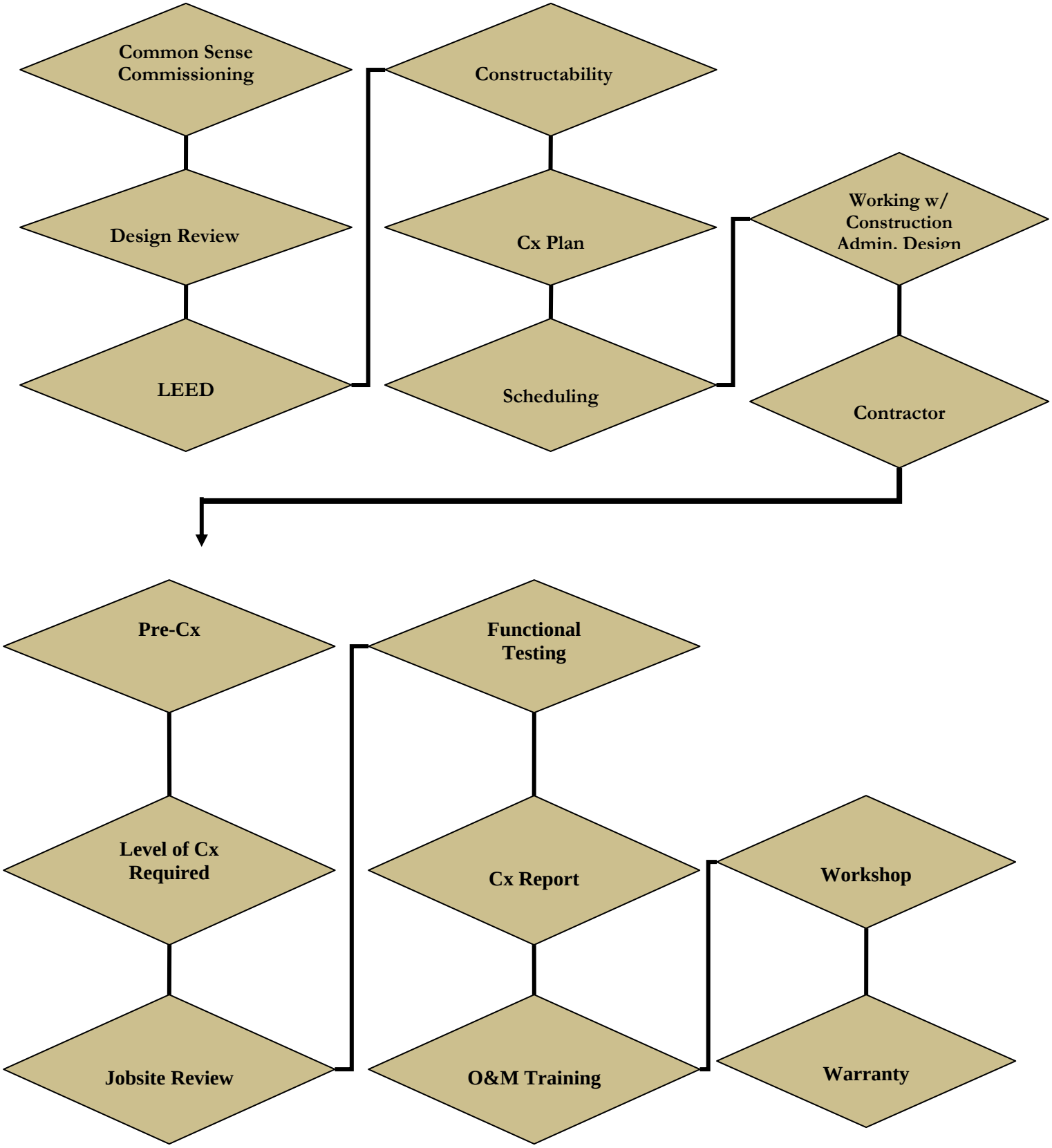
Fundamental Commissioning will be performed for the MEP systems.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909



HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

3.2

Commissioning methodology of interfacing with Owner, Design Professionals, and Design Builder – We will interface with all project team firms and key project leaders as a team facilitator of commissioning activities. Our communication protocol is keyed upon keeping all project team members in the loop as graphically illustrated on the next page. Our reporting preferences are to direct all communication to the Owner with copies to each major team member.

Phase One – Design Phase Performance Criteria / Design Review

- Review the performance requirements developed by the Owner (OPR) and design team (BOD) for MEPFP and low voltage / Special systems with design team and Owner
- Review the design development and construction documents for design performance, programming and match criteria
- Develop commissioning scope: match scope to budget, needs based, past experience, end-user needs, maintenance priorities
- Review systems "constructability" issues for clearance, maintenance and replacement; code compliance, Issue and maintain "Document Review Log"
- Add commissioning requirements into construction documents including commissioning specifications
- Draft Functional Test Procedures for team review
- Review bids for commissioning scope inclusion

Phase Two – Construction Phase - Installation Verification

- Develop Commissioning Plan for MEP systems and identify Contractor responsibilities
- Partnering meeting with Owner, Contractor and design team to review commissioning procedures
- Coordinate with the project construction schedule to implement commissioning activities
- Review Contractor submittals and O&M manuals
- Perform site observations for proper systems installation and develop corrective "punch lists" in our Deficiency and Resolution Logs
- Regular meetings with the Construction Team to Monitor Contractual Responsibilities
- Review/approve Commissioning Pre-functional Checklists
- Finalize Functional Test Procedures
- Review / approve Test and Balance Execution Plan
- Witness sample of ductwork testing, monitor duct cleanliness
- Witness sample of pipe pressure tests and flushing
- Witness sample of data network checkout and testing
- Perform "pre-start-up" / pre-functional tests of MEP equipment
- Witness and document factory representative start-up of major MEP equipment
- Verify Building Automation System (BAS): installation complete per design and per submittal/drawings, start-up performed and documented, project specific programming, point-to-point checklists, safeties tested and documented

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Phase Three – Acceptance Phase

- Update / coordinate with construction schedule
- Obtain pre-functional checklists from contractor and back-check
- Oversee test and Balance and witness airside / waterside balance of major HVAC system
- Test 10% of copper installed – special systems
- Maintain Testing Equipment Log
- Review HVAC Test & Balance Report
- Review O&M Manuals
- Perform functional performance testing / troubleshoot as required / re-test
- Issue and Maintain Deficiency and Resolution Logs
- Review "Controls" system graphics and points mapping, review Trending Logs
- Project close-out review, O&M review, and equipment warranties
- Assist in contractor training / building operations training for Owner
- Update Commissioning Plan and issue Commissioning Report
- Develop a systems manual for the operations staff with the necessary information to easily understand how to optimally operate the commissioned systems
- LEED meetings and documentation uploads online

Phase Four – Warranty Phase

- Perform Off-season testing
- Perform quarterly "warranty" site reviews of facility, sample systems operations, issue a Commissioning Report with a resolution plan to complete outstanding commissioning items prior to full retainage payment to contractor
- Facility staff interviews and system adjustments
- Additional user training
- Deficiency and Resolution Log Completion sign-off
- LEED documentation uploads online

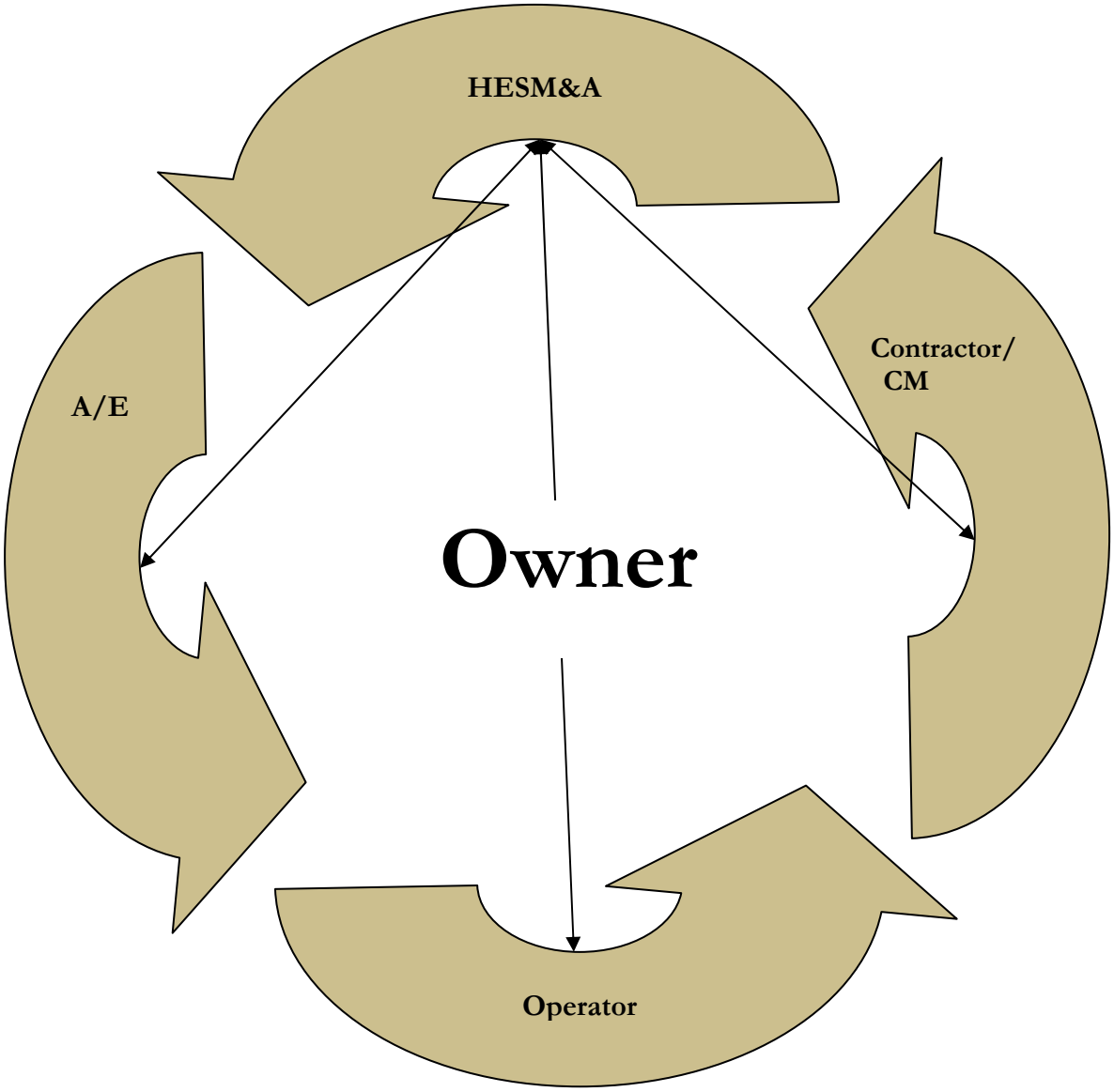
HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Communication



HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

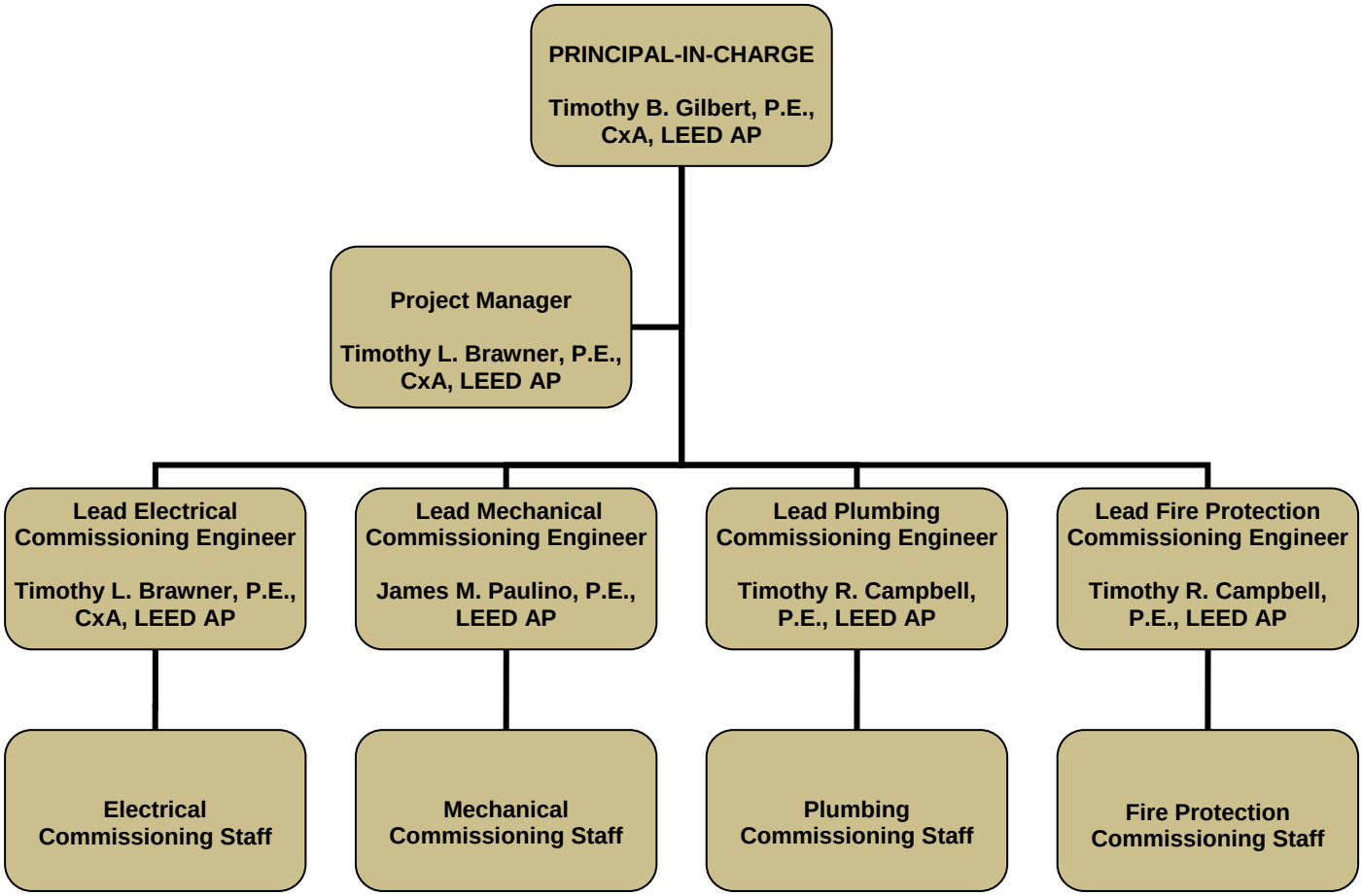
1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 4. Commissioning Team

4.1, 4.2

Our team has all the resources to meet all the commissioning requirements for expertise and manpower.



As indicated in the organization chart and subsequent resumes of the key individuals on our commissioning team HESM&A, Inc. will provide a strong multi-discipline team with vast field experience for the project. The organization chart indicates our structure which consists of the Principal-in-Charge, the Project Manager and lead engineers in each discipline. We will also have support staff in each discipline as required to maintain project manpower requirements for maintaining project completion schedules. The Principal-in-Charge is responsible for contract negotiations and legal agreements with the client, structuring each project team, overall client service responsibility/main contact and final quality control and assurance aspects of the project. He will perform several of the field activities required during the commissioning project as the overall team leader and mechanical commissioning of the HVAC systems. The Project Manager is responsible for the overall project scheduling, including manpower assignments, communications, meetings, reporting, field supervision and response plans. In addition, the Project Manager will also be the Lead Electrical Engineer and will be responsible for the review and commissioning of the electrical systems. The Lead Plumbing Engineer is responsible for the review and commissioning of the plumbing systems.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Timothy B. Gilbert, PE, CxA, LEED® AP
Principal-In-Charge

EDUCATION

Georgia Institute of Technology

- Bachelor of Mechanical Engineering / 1978
- Certificate in Energy Engineering (Minor) / 1978

REGISTRATIONS

Professional Registered Engineer in the following states:

Alabama	Georgia	North Carolina	Texas
Arizona	Louisiana	Oregon	
California	Maryland	South Carolina	
Florida	New Mexico	Tennessee	

MEMBERSHIPS

- American Society of Heating, Refrigeration & Air Conditioning (ASHRAE)
- Building Commissioning Association
- AABC Commissioning Group (Certified Commissioning Agent)

AWARDS

- Member of 1985 Energy Efficiency Award Team
  Winning design team for shading element design for a west facing eight-story full height glass atrium in a commercial building.
- Army Corps of Engineers Value Engineering Workshop #83013
  Team Leader with the largest cost savings value engineering design of any of the Workshop teams.
- Design Award for Centennial YMCA - Atlanta, Georgia

EXPERIENCE

Mr. Gilbert serves as a Principal and Vice President of HESM&A (Atlanta). He has been with HESM&A for 13 years. He is directly responsible for management and direction for our Commissioning group. He has over 30 years of experience in the mechanical engineering field. Tim supervises and directs the commissioning activities for the commissioning group along with the mechanical engineering aspects for design activities from initial design concepts by researching competitive approaches to the final design with adherence to applicable codes and design standards. He also coordinates the scope of work for projects with all other disciplines in a pro-active team-oriented manner, stressing the prompt exchange of information required for an efficient commissioning process.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Timothy L. Brawner, P.E., CxA, LEED® AP
Lead Electrical Commissioning Engineer

EDUCATION

Georgia Institute of Technology
- Bachelor of Electrical Engineering / 1981

REGISTRATION

Professional Registered Engineer in the following states:

Alabama	District of Columbia	Maryland	New Mexico
Arizona	Florida	Massachusetts	North Carolina
Colorado	Georgia	Mississippi	Tennessee
Delaware	Louisiana	Nevada	Texas

MEMBERSHIPS

- ACG Certified Commissioning Agent
- National Society of Professional Engineers (NSPE)
- Association of Energy Engineers (AEE)

EXPERIENCE

Tim is a Principal at HESM&A and has 28 years of electrical design and project management experience in power distribution, lighting, fire alarm and security systems. Nine of those years were spent working for a design-build contractor which afforded invaluable insight into pre-design, construction and value engineering activities. He has been with HESM&A for 12 years.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

James M. Paulino, PE, LEED® AP
Lead Mechanical Commissioning Engineer

EDUCATION

Georgia Institute of Technology
- Bachelor of Mechanical Engineering / 1984
- Co-operative Education Program

REGISTRATIONS

- Registered Professional Engineer in Georgia
- LEED Accredited Professional

MEMBERSHIPS

American Society of Heating, Refrigeration & Air Conditioning (ASHRAE)

EXPERIENCE

Jim serves as a senior mechanical and commissioning engineer at HESM&A. He is responsible for management and execution of commissioning activities for several commissioning projects. He has over 24 years of experience in the mechanical engineering field. Jim supervises and directs the mechanical engineering services from initial design concepts to project completion. This involves contact with owners, operators, and building officials. Jim has twenty-four years of design and field experience and two years commissioning experience.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Timothy R. Campbell, PE, LEED® AP
Lead Plumbing/Fire Protection Commissioning Engineer

EDUCATION

Georgia Institute of Technology
Bachelor of Science in Mechanical Engineering, 2000

Fire Alarm Systems Design
Society of Fire Protection Engineers, 2001

REGISTRATIONS

Professional Registered Engineer in GA.

Engineer in Training (Fundamentals of Engineering)
National Council of Engineering Examiners, October 2000

National Institute for Certification in Engineering Technologies (NICET), Satisfied all testing elements for Fire Alarm Systems and Automatic Sprinkler Systems, Level I, Certification

MEMBERSHIPS

- National Fire Protection Association, Application under review.
- Society of Fire Protection Engineers SFPEs

EXPERIENCE

Tim designs and commissions plumbing and fire protection systems for HESM&A, Inc. for a variety of facilities including hotels, retail, general and rack storage, warehouses, office space, high rise structures, and sensitive data storage areas. He has been with HESM&A for 12 years. The applications to which he has contributed include wet and dry sprinkler, preaction sprinkler, fire pumps, standpipes, fire alarm initiation and notification systems, and special extinguishing agents including FM-200, Halon, and Inergen. Mr. Campbell is involved with conducting water supply evaluations and performing hydraulic calculations to determine fire pump sizing and underground piping requirements. He also commonly inspects and tests sprinkler systems, fire pumps, and fire alarm systems for compliance with design drawings, applicable code requirements, and good practice. Tim has eight years commissioning experience.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Commissioning References

Mr. Don Alexander Facilities Engineering Manager	Georgia Institute of Technology 955 Fowler Street, NW Atlanta, GA 30332-0410 Phone: (404) 894-4235 Fax: (404) 894-9028 don.alexander@facilities.gatech.edu
Mr. Glenn LaVine Project Manager	Kennesaw State University 1000 Chastain Road MB # 3602 Kennesaw, GA 30144-5591 Phone: (770) 499-3602 Fax: (770) 423-6522 glavine@kennesaw.edu
Mr. Greg Ames Vice President	Trammell Crow Company 2049 Century Park East Suite 2600 Los Angeles, CA 90067 Phone: (310) 407-1612 Fax: (310) 407-1656 games@trammellcrow.com
Mr. Michael Tallent Senior Project Manager	Kajima Associates 3500 Piedmont Road, Ste. 700 Atlanta, GA 30305 Phone: (404) 812-8600 Fax: (404) 812-8691 tallentm@kajimausa.com
Mr. Paul Parker Principal	CM Associates P.O. Box 2187 Fairhope, AL 36533 Phone: (215) 517-4518 Fax: (215) 517-0148 paulparker@cmapm.com
Ms. Peggy Ann Brock Senior Project Architect	McMillan Smith & Partners P.O. Box 5331 Spartanburg, SC 29304 Phone: (864) 585-5678 Fax: (864) 542-9451 pbrock@mcmillansmith.com

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 5. Statement of Why HESM&A Should Be Selected

- CxA certified, unparalleled extensive technical expertise in construction and commissioning services for projects including university dormitories and classrooms, high-tech laboratories, medical, office buildings, hotels, and condominiums.

- Our proven excellent verbal and written communication skills give us the ability to communicate with the entire team (Owner, design team, and contractor) in a "team goal" approach that assures the project's success.

- Our "common sense" approach and positive "can-do" team attitude with the design and construction teams during the commissioning process assures the Owner a quality installation with the building fully functional for its occupants on Day One.

- Vast resources of experienced, professional staff available to commit to this project from start to finish.

- Our proven commissioning track record on previous local and State of Georgia projects, institutional facilities, and regional and national projects such as the Los Angeles Avenue of the Stars commissioning high-rise office building.

- Our detailed expertise in trouble shooting systems operations and understanding how exactly they are supposed to work leads to prompt resolution of field problems which assures efficient systems operation.

- Our knowledge and experience in monitoring and analyzing building operations provides for a well trained maintenance staff, assuring efficient and maintainable building systems.

- We have a documented successful track record of true "value engineering" in working with design and construction teams on these types of projects.

- Our engineering expertise brings added value to the team during the design review process and development of the construction documents.

- Our commissioning team is knowledgeable in Test & Balance and has written detailed balancing procedures for complicated pumping systems.

- Experience in writing specifications and expertise in overall MEPFP and special systems specifications.

- We excel in field coordination and site meetings in a "team driven" partnership environment.

- We are charter members of the Southeast Chapter of the Building Commissioning Association; Certified Commissioning Agents of the AABC Commissioning Group; members of USGBC, ASHRAE, ACG, and NFPA.

- We are active participants in both local and national BCA and AABC Commissioning Group conventions, meetings and seminars. We have LEED AP certified staff.

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Common Sense Commissioning

- Team Approach
- Practical
- Appropriate
- Constructable
- Maintainable
- Efficient
- Thorough & Reasonable Verification
- Cost-Effective
- Communications
- Problem Resolution

Why HESM&A?

- Expertise
- Experience
- Personnel/Resources
- Commitment

Commissioning Expertise

- Air Delivery – VAV/CV/Under floor, ductwork/air distribution
- Hydronic / Chilled/Hot/Steam / Domestic Water
- Power Generation/UPS
- Stairwell / Zone Pressurization
- Smoke Evacuation / Life Safety
- Security
- Data / IT
- Indoor Air Quality
- Redundant Systems
- Lighting Control
- Sprinkler / Fire Protection
- Fire Alarm
- BAS/BMS
- Re-Commissioning
- Fume hoods/lab air valves
- Lightning Protection
- TVSS
- Grounding
- Geothermal
- Lab exhaust/make-up
- Metering systems
- Emergency power
- UPS

HESM&A
CONSULTING ENGINEERS
CELEBRATING 20 YEARS OF SERVICE

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 6. Statement by the Commissioning Authority

We believe in a "common sense" commissioning approach which involves practical type assessments of the development of the design documents for the constructability/maintainability of the MEPFP and special systems and components. This assures a smooth construction installation for ultimate project turnover to the Owner and their facility maintenance staff. Each system is reviewed prior to commencing construction to determine the exact level of "common sense" commissioning work required to match its intended function and performance. This approach does not over burden the design and construction teams since it requires only the necessary documentation required for an efficient commissioning process. We plan our work for each phase of the project and coordinate this information with the Owner and design/construction teams and incorporate the team's feedback into a finalized commissioning plan. We develop a team spirit and rapport with all team members with a "can-do" attitude to facilitate the communication between the Owner, design team, local building officials and the construction team throughout the project. Our "common sense" approach has proved to be very successful while minimizing punch lists at the end of construction and performing seamless interface with the construction schedule that eliminates hindrances to the contractor with unnecessary delays, and completing the functional performance testing on schedule. We are very flexible with the construction schedule based on our staffing availability, and will be on-site when the contractor needs us there. We understand the fluidity of construction schedules and coordinate closely with the contractor as needed. Our goal is to support the completion schedule to help the contractor finish on time with a fully functional building on day One.

HESM&A, INC.
CONSULTING ENGINEERS

1255 COLLIER ROAD
ATLANTA, GA 30318

PHONE 404-881-5300
FAX 404-881-0909

Section 7. M/WBE Participation and Nondiscrimination

7.1

As needed, we hire subconsultants for electrical engineering commissioning to supplement team as requested by owners to strengthen our team's position against our competition on key projects. Our Charlotte, NC affiliate office is a separate company, which is a certified WBE that has electrical commissioning staff.

7.2

HESM&A Consulting Engineers, Inc. was founded in 1997 as an affiliate of HESM&A, Inc., and independently operates with headquarters in Charlotte, North Carolina. HESM&A Consulting Engineers, Inc. was certified as a Women's Business Enterprise in 2008.

7.3

If necessary, we will utilize our WBE for a portion of the electrical systems commissioning.

7.4

Commissioning References

Mr. Chris Squier	Crosland 227 West Trade Street Suite 800 Charlotte, NC 28202 Phone: (704) 676-1557 Fax: (704) 523-7110 csquier@crosland.com
Mr. David Rey	URS Corporation Raleigh, NC Phone: (919) 564-6675 David_Rey@URSCorp.com