



August 8, 2025

Joel Jones
Durham County
201 East Main Street
Durham, NC 27701
Transmitted via e-mail: jtjones@dconc.gov

RE: Proposal to Provide Fundamental and Enhanced Commissioning Services for the New Durham County EOC, Backup 911 and Sheriff's Call Center Project

Dear Mr. Jones:

FST Technical Services, LLC (FST) is pleased to offer the following proposal to provide fundamental and enhanced commissioning services for the New Durham County EOC, Backup 911 and Sheriff's Call Center project. As FST is recognized by the Building Commissioning Certification Board (BCCB)/Building Commissioning Association (BCxA) as a Certified Commissioning Firm (CCF), our proposed scope of services are intended to meet both the requirements of the project specific Request for Proposal (RFP) and the BCxA Building Commissioning Best Practices. As a result, the rigor of our proposed services will adhere in principle to the BCxA Building Commissioning Best Practices for all requested services.

These services are per the RFP and are designed to meet your project's sustainability goals including:

- LEED Fundamental Commissioning
- LEED Enhanced Commissioning Option 1, Path1

SCOPE OF WORK – MECHANICAL, ELECTRICAL, PLUMBING (MEP) COMMISSIONING

Our scope includes the following services:

DESIGN/PRE-CONSTRUCTION PHASE

Owner's Project Requirements (OPR) Development. FST will develop the OPR for the project. The development of this document will require support from the owner and/or the Architectural and Engineering (A&E) Team. The OPR will define the overall needs of the building, LEED requirements, sustainability and energy efficiency goals, equipment and system operational expectations, building occupancy schedules and Operation and Maintenance (O&M) and training requirements. An electronic draft will be provided for review and comment by the owner's team prior to finalizing.

Basis of Design (BoD) Review. FST will conduct a review of the BoD. A list of comments and recommendations will be submitted within approximately two (2) weeks of receipt of the documents.

Commissioning Plan. FST will develop the commissioning plan for the commissioning process. The plan will outline the key projects components to include the following:

- Building Information
- Scope and Description of Commissioning Services
- Commissioning Team Members
- Roles and Responsibilities
- Systems to be Commissioned
- Standard Forms and Reports
- Explanation and Use of Facility Grid for Developing and Tracking Testing and Issues

Commissioning Specifications. FST will develop the specifications to be included with the contract documents. They will outline roles and responsibilities of the contractors, vendors, owner and Commissioning Authority (CxA) throughout the commissioning process. This will include the necessary testing and which parties are to be responsible and present during such time.

Design Reviews. FST will conduct focused reviews of the design documents. Our reviews will occur at the following intervals:

- 60% Construction Development (CD) Review
- 100% Construction Development (DD) Review

For each of the reviews listed above, a list of comments and recommendations will be submitted within approximately two (2) weeks of receipt of the documents. Our review will focus on the following items:

- Confirm that the documents conform to the OPR and BoD.
- Verify that the systems include all necessary components required for functional testing.
- Verify that performance information is identified, complete and correct.
- Review accessibility of all necessary components.
- Confirm that commissioning work required by all participating parties in the project is accurately reflected in the contract documents.
- Develop recommendations regarding improvements, refinements or operational procedures that may maximize and improve long-term operational performance.
- Verify inclusion of operator and occupant training requirements and systems manual into CDs.

Back Check of CDs. Upon issuance of the “For Construction” documents, we will perform a back check to ensure that all agreed upon updates have been incorporated into the final set. Any issues will be documented and submitted to the owner. We will provide a list of unresolved comments approximately one (1) week after receipt.

Design Phase Meetings. During the design phase, FST will attend meetings, as appropriate, to support the process. We have allocated attendance at two (2) design review meetings during the design phase of the project.

Controls Integration Meeting. FST will conduct a controls integration meeting based on the equipment selected as the basis of design to ensure all sequences for packaged equipment meets the design intent, all BACnet I/O points have been addressed, and ensure seamless integration of miscellaneous Mechanical, Electrical, Plumbing (MEP) equipment.

CONSTRUCTION PHASE

Construction Phase Commissioning Kick Off Meeting (KOM). A commissioning KOM will be held with the appropriate team members at the beginning of construction. FST will review our scope of services for the project, define roles and responsibilities and introduce our approach to project execution, including the use of the web-based software Facility Grid.

Commissioning Plan Update. FST will review the plan that was developed during the design phase and will update all pertinent equipment, scope and team member information. The updated plan will be issued to the team for review and comment.

Shop Drawing and Submittal Review. FST will review appropriate shop drawings and submittals from an operational standpoint, in addition to determining the most feasible way to install the equipment for both performance and serviceability. Upon completion of our review within the necessary timeline, FST will coordinate with the design engineer to collaborate on creating one unified comment for the contractors. We will concentrate on reviewing the shop drawings and submittals that pertain to the requirements. FST typically only reviews the initial submittal for a piece of equipment or a system.

Pre-Functional Checklist (PFC) and Functional Performance Test (FPT) Development. In accordance with the project documents and the approved submittals, FST will develop PFC and FPT procedures. These procedures will document all information that is to be verified as part of the commissioning process.

Witness Static Tests. FST will witness a sample of the hydrostatic tests, duct leakage tests, electrical tests or any other testing as required in specification. Typically, FST will witness the first test to confirm that the tests are being executed properly and will review test reports for the remaining tests. For this project FST assumes that a maximum of seven (7) tests will be witnessed.

PFC Execution. FST will execute all PFC's. Prior to executing, FST will coordinate with the Construction Manager (CM) and installing contractors to ensure that the equipment and systems have been adequately installed, piped, ducted and wired to allow for a thorough inspection. When ready, FST will thoroughly inspect items, to ensure they are installed according to the design specifications and approved submittals. FST will submit a Field Observation Report (FOR) and the current issues list after each visit(s).

Start Up Support. FST will witness, as appropriate, selected startups. A FOR will be provided for documenting each visit. Installing Contractors and/or Equipment Manufacturers will be responsible for providing start up reports, per the Project Specifications.

Flushing and Cleaning. FST will review the flushing and cleaning requirements and confirm with the Construction Team. We will witness a portion of the process and review all reports to confirm that all appropriate flushing and cleaning has been completed.

Testing, Adjusting, Balancing (TAB) Verification. FST will review the report(s) submitted by the TAB Contractor, concurrent with the design team, as the TAB Contractor completes work on individual systems (i.e., not all systems need to be balanced before the reporting process begins).

FST will verify that all required data has been collected, that the measured results are in compliance with the specification and that any non-compliant items have been resolved and retested prior to the start of FPT. FST will coordinate a session with the TAB Contractor to verify a sample of the measurements listed in the TAB report. The TAB Contractor will re-measure selected TAB report data at the request of and witnessed by FST. Any items requiring action will be added to the Commissioning Action List.

FPT Execution. FST will field-direct, witness and document the FPT for each system to be commissioned. The work will progress from tests of individual components of the central equipment to tests of the overall systems that contain those pieces of equipment. FST will ensure that correct procedures are implemented and all systems function properly. For each visit, a FOR will be issued.

Deficiency Management. FST will document all issues identified in the required systems during the verification process and report them to the construction team. FST and the responsible contractor(s) will schedule re-testing of these items. FST will also manage and administer any and all issues for the duration of the project. The issues log will be maintained in real time using Facility Grid, with regular updates and notifications provided to the team. Open issues will be reviewed regularly during scheduled commissioning meetings.

O&M Manual Reviews. Prior to submission of the final O&M's, FST will perform a review to ensure that they meet the intent and requirements of the project. A report will be submitted documenting any issues or concerns.

Training Coordination. FST will review the specifications and provide a matrix defining the training requirements for to be commissioned systems. The matrix will be reviewed with the construction team and used to verify that all training has been completed. As appropriate, FST will review training agendas, participate in selected sessions and confirm training completion through review of each training sign in sheet.

Construction Phase Commissioning Meetings. FST will lead and conduct all commissioning meetings. Meetings will be held during the construction process and will increase in frequency and duration as the project moves forward. The commissioning meetings will identify testing schedules, resolve conflicts and discuss deficiency resolution. The meeting minutes will be distributed by FST to the commissioning team for review and comment. FST will lead and/or attend up to thirty (30) meetings during this project.

- Ten (10) – Commissioning Meetings
- Sixteen (16) – Construction Progress/OAC Meetings held by GC.
- Three (3) – LEED Coordination Meetings held by consultant.
- One (1) – Lessons Learned Meeting

POST ACCEPTANCE PHASE

Current Facilities Requirements (CFR) and O&M Plan. Per LEED Fundamental Commissioning v4 requirements, a CFR and O&M Plan must be submitted. Its components are:

- As-built sequence of operations for all equipment; control drawings.
- A list of building occupancy schedules and equipment run time schedule frequency to review for relevance and efficiency.
- A list of all user adjustable set points and reset schedules with a brief discussion of the purpose of each.
- Outside air requirements and interior lighting levels for the building as a baseline for future re-commissioning activities.
- Seasonal start-up and shutdown, manual and restart operation procedures and recommendations regarding seasonal operational issues that affect energy use.
- Systems narrative describing the mechanical and electrical systems and equipment.
- Preventative maintenance plan for building equipment described in the systems narrative.
- Plans for a continuous commissioning program that includes periodic commissioning requirements, ongoing commissioning tasks and continuous tasks for critical facilities.

Commissioning Final Report. FST will furnish a commissioning report that will include the following:

- A summary of the services provided, the issues found, open or deferred activities and recommendations for improvement
- A copy of all services provided including:
 - Each deliverable
 - Executed PFC and FPT
 - FORs
 - Commissioning deficiency list
 - Reports provided by trade contractors such as startup reports, TAB reports, etc.Deficiencies that were discovered and measures taken for correction

Systems Manual. Per LEED Enhanced Commissioning v4 requirements, a systems manual must be submitted. Its components are:

- Executive summary of project turnover and documents here within.
- Final version of the OPR and BoD.
- System single-line diagrams.
- Construction record documents and specifications.
- Approved submittals.
- As-built drawings of all commissioned systems.
- As-built sequence of operations for all equipment; control drawings.
- Original set points for all commissioned systems and recommended schedule for sensor recalibration.
- Recommended schedule for re-commissioning of building systems.
- Equipment O&M manuals and preventive maintenance schedules.
- Confirmation of completed training for the owner and occupants.
- Ongoing system optimization procedures.
- Final commissioning report.

Deferred or Seasonal Testing. FST will assist and coordinate any deferred testing that has arisen from the functional test procedures. FST will also schedule seasonal testing on the systems that require in season testing to demonstrate performance under or close to design conditions.

Warranty Review. FST will coordinate a review of the building prior to the expiration of the warranty, occurring approximately ten (10) months after substantial completion. The review will include a walkthrough of the facility, an interview of available staff and a review of the BMS to evaluate trending and alarm data, as applicable. FST will furnish a report documenting all issues found so that the owner may have corrected as part of the project's warranty.

Ongoing Commissioning Plan. FST will submit an ongoing commissioning plan that will provide the building's operating staff with procedures, blank test scripts and a schedule for ongoing commissioning activities. This plan can be executed by either the building operators, in addition to their normal preventive maintenance activities, or can be contracted to an independent Commissioning Authority, for which FST is eligible under the LEED requirements. The plan will include the following:

- Definition of the ongoing commissioning process.
- Defined roles and responsibilities.
- Recommended schedule for re-commissioning as-built systems.
- Continuous documentation and updating of building operating plan and CFR throughout the building's lifetime.
- Blank testing materials, including functional performance tests for all commissioned as-built systems in the building, as well as an issues log.
- Direction for testing new and retrofitted equipment

EQUIPMENT LIST

Systems to be commissioned will include:

EQUIPMENT NAME	PROJECT QTY	CX QTY
VENTILATION SYSTEM		
Ductwork	System	System
Fire Smoke Dampers	7	3
Air Handler Air Handling Unit (AHU)-1	1	1
Terminal Units (S102 - S224)	43	22
Make Up Air Unit (MUA)-1	1	1
Fan Coil Unit (FCU)-1	1	1
Fixed Speed Exhaust Fans (EF) (EF-4, 5)	2	2
Variable Speed EF (EF-1, 2, 3)	3	3
Kitchen Exhaust Hood	1	1
Ductless Split (DSS-1, 2, 3, 4, 5)	5	5
Duct Mounted OA Filter for AHU-1	1	1
MECHANICAL COOLING SYSTEM		
Mechanical Piping – Chilled Water	System	System
Air Cooled Chillers (CH-1, 2, 3)	3	3
Chilled Water Pumps (P-S-1, P-S-2, P-P-1, P-P-2, P-P-3)	5	5
Computer Room AC Units (CRU) (CRU-1, 2, 3, 4)	4	4

EQUIPMENT NAME	PROJECT QTY	CX QTY
PLUMBING SYSTEM		
Plumbing Piping	System	System
Domestic Hot Water Heater	3	3
Domestic Hot Water Pump	2	2
Sump/Elevator Pumps	1	1
ELECTRIC HEAT SYSTEM		
Electric Unit Heater (UH) UH-1	1	1
BUILDING AUTOMATION SYSTEM		
BMS	System	System
ELECTRICAL SYSTEMS		
Variable Frequency Drives (VFDs)	System	8
Normal Power Panels	22	22
Switchboards/Main Distribution Panel (MDP)/ Motor Control Center (MCC)	2	2
Transformers	12	12
Generator	2	2
Automatic Transfer Switch (ATS)	1	1
Uninterrupted Power Supplies (UPS)	2	2
Pull The Plug (PTP) Test	1	1
PV Array	1	1
FIRE ALARM SYSTEM		
Fire Alarm System (Witness)	1	1

SCOPE OF WORK – BUILDING ENVELOPE COMMISSIONING (BECX)

FST will provide LEED Enhanced Commissioning services for the project with respect to the building envelope – the moisture, air, vapor and thermal control layers. This includes the waterproofing at the foundation systems, the exterior wall systems, fenestration systems and roofing to form a complete building envelope. The systems which are expected to be commissioned include:

- Waterproofing systems, below and above grade with associated flashings
- Air Barrier systems including vapor and moisture barriers integral to the exterior envelope
- Thermal insulation
- Roofing systems with associated flashing and trims
- Exterior wall cladding systems, with associated insulation, support systems and air and vapor barriers
- Fenestration systems, including curtain walls, windows, storefronts and other glazed openings
- Sealant, expansion and control joints related to the exterior envelope
- Exterior louvers

Our BECx services are modeled on the guidelines set forth by ASTM E2947: Standard Guide for BECx in conjunction with ASTM E2813: Standard Practice for BECx. The BECx services provided will fulfill the LEED requirements for Enhanced Commissioning, to ensure that all LEED Credits for the project are fulfilled. FST will work together with the design team and building owner to ensure that all of the systems which form the comprehensive building envelope as outlined above meet and exceed the project requirements for both performance and longevity of materials. This will be accomplished by integrating ourselves into the team and by providing the services listed herein throughout the various phases of the project.

DESIGN/PRE-CONSTRUCTION PHASE

OPR Development. FST will develop the OPR for the project. The development of this document will require support from the Owner and/or the Architectural and Engineering Team. The OPR will define the overall needs of the building, LEED requirements, Sustainability and Energy Efficiency Goals and O&M and Training Requirements. One (1) draft will be provided for review and comment by the owner's team prior to finalizing.

BoD Review. FST will conduct a review of the BoD. A list of comments and recommendations will be submitted within approximately two (2) weeks of receipt of the documents.

Develop BECx Specification. FST will establish the BECx specification to be included with the contract documents. It will outline roles and responsibilities of the contractors, vendors, owner and CxA throughout the commissioning process. BECx requirements will be incorporated into the project specifications to form a standalone specification.

BECx Plan and Testing Matrix. FST will develop a BECx plan, which identifies and outlines the following minimum requirements:

- Requirements for laboratory testing and mock-ups
- Requirements for field testing
- Related construction and post-construction/occupancy phase requirements and activities
- Development of construction checklists
- Development of preliminary testing schedule

Design Reviews. FST will perform a technical review of documents prepared by the Architect/Engineer (A/E) team, including drawings and specifications, at the following milestones:

- 60% CD
- 100% CD

For each of the reviews listed above, a list of comments and recommendations will be submitted within approximately two (2) weeks of receipt of the documents. Our review will focus on the following items:

- Confirm that the documents conform to the OPR and BoD.
- Verify that all of the systems which form the comprehensive building envelope meet and exceed the project requirements for both performance and longevity of materials.
- Review project specifications to ensure testing, performance and installation procedures are being properly established.
- Confirm that commissioning work required by all participating parties in the project is accurately reflected in the contract documents.

Back Check of CDs. Upon issuance of the 100% CD documents, we will perform a back check to ensure that all agreed upon updates have been incorporated into the final set. Any issues will be documented and submitted to the owner. We will provide a list of unresolved comments approximately one (1) week after receipt.

Design Phase Meetings. During the design phase, FST will attend meetings, as appropriate, to support the process. We have budgeted for attendance at two (2) virtual meetings during the design phase of the project.

CONSTRUCTION PHASE

Construction Phase Commissioning KOM. A KOM will be held with the appropriate envelope team members at the beginning of construction. FST will review our scope of services for the project, define roles and responsibilities and introduce our approach to project execution.

Pre-Construction/Pre-Installation Meetings. FST will participate in the pre-construction KOM and pre-installation meetings with the various envelope trades. These meetings will be to coordinate the work of the trades responsible for installing the various envelope systems, to identify gaps or overlaps in scope and to discuss the integration of the various trades' work to establish continuity in the environmental control layers of the envelope. FST has budgeted for three (3) virtual meetings.

BECx Meetings. FST will lead and conduct all BECx meetings. Meetings will be held during the construction process and will increase in frequency as the project moves forward. The BECx meetings will identify testing schedules, resolve conflicts and discuss deficiency resolution. The meeting minutes will be distributed by FST to the commissioning team for review and comment. FST will lead and/or attend up to eight (8) virtual meetings during the construction phase of this project.

BECx Plan Update. FST will review the plan that was developed during the design phase and will update all pertinent scope and team member information as the project progresses. The performance testing matrix will also be updated during the construction phase to reflect changes in scope and identify project specific criteria and test locations. The updated plan will be issued to the team for review and comment.

Review of Project Submittals. FST will review and comment on submittals pertaining to the exterior envelope including, but not limited to, the following items (only one (1) review will be included per each submittal):

- Product data
- Shop drawings
- Quality Control (QC) and Quality Assurance (QA) submittals
- Test reports
- Mock-up submittals
- Construction schedule

Systems Installation Observation. During construction, FST will be present to evaluate the installation process at the beginning of all critical envelope component installations and at appropriate, regular intervals. This will include observation of installed systems to ensure they are installed in accordance with the manufacturers' standards and contract documents.

Site reports will be completed and submitted after each visit. FST has included a total of four (4) site visits to verify the installation of the exterior envelope systems in scope. In the event construction schedules are extended, FST reserves the right to provide additional site visits as an additional service.

Some of the tasks that FST will perform during this phase are as follows:

- Observation that envelope systems are installed to design specifications, via site visits and field reports.
- Conductance of BECx meetings.
- Documentation of the construction process, including verification that construction checklists are being utilized and are properly completed.
- Develop and maintain a Construction Open Items Log for items related to the Exterior Envelope. The log will be submitted as part of the final BECx report.
- Maintenance of Performance Testing Matrix as required.

Witness On Site Testing. During the construction phase of the commissioning process, FST will witness performance testing of key construction assemblies at various milestones defined by the project specifications, including an on-site mockup if necessary. FST personnel will witness testing to be performed by others, unless otherwise defined in the project scope. After each test, a report will be compiled and submitted to the project team and owner. FST has included a total of two (2) site visits to witness the In the event that systems are modified or added, FST reserves the right to reassess testing fees prior to start of construction onsite. This proposal does not include conducting any onsite or offsite testing, which is to be paid for by others.

- *Onsite Testing.* FST will witness the installation and testing of the specified mock-up and onsite QA testing. FST will ensure that correct testing procedures are implemented and will work to assist the contractor(s) in achieving the specified performance of all envelope systems.
- *Identification of Deficiencies.* FST will document all issues identified with the envelope systems during performance testing and report them to the construction team. FST and the responsible contractor(s) will schedule re-testing of these items. We will also manage and administer any and all issues for the duration of the project. An issues log will be made available and updated regularly. We will also document the issues in a report format during regular commissioning meetings with the trades or sooner as required.

POST ACCEPTANCE PHASE

BECx Report and Logs. FST will furnish a BECx report that will include the following:

- Final version of the OPR and design basis narratives, including brief descriptions of each envelope system.
- Evaluation of the performance capacity of the envelope.
- Log of deficiencies that were discovered and measures taken for correction.
- Log of uncorrected deficiencies that were accepted by the owner.
- Performance testing procedures and results.
- Reports that document all field commissioning activities as they progressed.
- A schedule of any deferred testing.
- Plans for continuous commissioning or recommended frequency for re-commissioning by envelope system type.
- LEED Online documentation.

Warranty Walk Through. FST will conduct a walkthrough of the building during the warranty period. The walk through is expected to occur with the appropriate trades and building personnel after substantial completion and ten (10) months post occupancy, prior to the end of the first year of the warranty period. We will document any warranty issues if they arise and set forth the necessary plan of action to rectify the warranty situation.

LEED Reporting. BECx services will be managed and led by FST's accredited professionals experienced in providing LEED Fundamental and Enhanced Commissioning services for the building envelope as defined by LEED. FST will provide the necessary commissioning procedures and support services to the project team and help to document the project's sustainability goals from design phase reviews through the ten (10) month post-occupancy warranty walk-through. FST will be responsible for uploading the required documentation in LEED Online and manage the commissioning related credits including responding to comments from United States Green Business Council (USGBC) reviews.

ADD ALTERNATE

Field Testing. FST will provide AMAA 501.2 Water Spray Nozzle Testing on the Storefronts and Curtain Walls as mentioned in the specifications. FST has allocated up to four (4) days of field testing. A report will be submitted after each test with results. If any additional testing is required due to failures, lack of power, water pressure or assemblies not being ready, additional fees will be incurred.

FEE INFORMATION

Our proposed lump sum fee, including expenses, to provide fundamental and enhanced commissioning services for the New Durham County EOC, Backup 911 and Sheriff's Call Center project, is as follows:

MEP COMMISSIONING

PROJECT TASKS	FEE (\$)	HOURS
DESIGN/PRE-CONSTRUCTION PHASE		
Write OPR	\$1,617.00	10
Review BoD	\$323.00	2
Commissioning Plan	\$647.00	4
Commissioning Specifications	\$647.00	4
Design Review – 60% Construction Development	\$1,940.00	12
Design Review – IFC Construction Development	\$1,293.00	8
Back Check	\$323.00	2
Design Phase Meetings	\$485.00	3
Controls Integration Meeting	\$970.00	6
Project Management	\$2,587.00	16
CONSTRUCTION PHASE		
Commissioning KOM	\$672.00	4
Commissioning Plan Update	\$336.00	2
Submittal Reviews	\$6,048.00	36
PFC Development	\$7,057.00	42
FPT Development	\$7,897.00	47
Witness Static Testing	\$2,184.00	13
PFC Execution	\$13,273.00	79
Start Up Support	\$4,872.00	29
Flushing & Cleaning	\$840.00	5



PROJECT TASKS	FEE (\$)	HOURS
CONSTRUCTION PHASE		
TAB Verification	\$1,344.00	8
FPT Execution	\$15,121.00	90
Deficiency Management	\$4,200.00	25
O&M Reviews	\$1,008.00	6
Training Coordination	\$1,680.00	10
Meetings	\$8,737.00	52
Project Management	\$3,697.00	22
POST ACCEPTANCE PHASE		
CFR & O&M Plan	\$1,743.00	10
Final Report	\$1,743.00	10
Systems Manual	\$2,092.00	12
Deferred/Seasonal Testing	\$1,918.00	11
Warranty Review	\$1,569.00	9
On Going Commissioning Plan	\$1,569.00	9
Project Management	\$1,047.00	6
MOBILIZATION		
Mobilization	\$2,560.00	16
EXPENSES		
Reimbursable Expenses	\$2,770.00	--
MEP TOTAL	\$106,809.00	620

BECX

PROJECT TASKS	FEE (\$)	HOURS
DESIGN/PRE-CONSTRUCTION PHASE		
Review OPR	\$440.00	2
Review BoD	\$440.00	2
BECx Plan & Matrix	\$880.00	4
BECx Specifications	\$220.00	1
Design Review 1 – 100% DD	\$1,760.00	8
Design Review – 50% CD	\$1,760.00	8
Back Check	\$440.00	2
Design Phase Meetings	\$440.00	2
Project Management	\$660.00	3
CONSTRUCTION PHASE		
Pre-Construction Meetings	\$660.00	3
Commissioning KOM	\$690.00	3
BECx Plan Update	\$460.00	2
Submittal Review	\$5,060.00	22
System Installation Observation	\$11,040.00	48
Witness On Site Testing	\$5,520.00	24
Issues	\$1,832.00	8
Meetings	\$2,070.00	9
Project Management	\$2,990.00	13

PROJECT TASKS	FEE (\$)	HOURS
POST ACCEPTANCE PHASE		
Final Report	\$1,923.00	8
Warranty Review	\$1,202.00	5
LEED Reporting	\$2,164.00	9
Project Management	\$240.00	1
MOBILIZATION		
Mobilization	\$1,320.00	6
EXPENSES		
Reimbursable Expenses	\$5,650.00	--
BECX TOTAL	\$49,861.00	193
ADD ALTERNATE		
Field Testing	\$16,828.00	70

Please note: FST has provided a schedule of values for informational purposes; however, FST reserves the right to change the allocations based on the needs of the project, as long as, the total does not exceed the overall lump sum value.

PROJECT TOTAL

SERVICES	FEE (\$)	HOURS
MEP Commissioning	\$106,809.00	620
BECx	\$49,861.00	193
PROJECT TOTAL	\$156,670.00	813
BECx Add Alternate – Field Testing	\$16,828.00	70

PROPOSAL BASIS

Our scope of work and fee was developed based on Durham County Request For Qualification (RFQ) No. 25-042 dated March 23, 2025; Addendum No. 1 dated April 23, 2025; 2023-04-30 100% DD Combined Specifications; and 2025-04-30 100% DD Drawing Set. From the provided information, we have concluded that the overall project duration is twenty six (26) months, with a substantial completion date of November 1, 2027. Our fee is based on the project achieving the substantial completion date. If the project extends past November 1, 2027, FST may require additional time and funding to manage the completion of the commissioning of the project.

We develop our fees based on the equipment and systems to be commissioned on a project. For your project, we have included an equipment list that is based on the project information provided. If equipment types and/or quantities are modified during the project or if we are requested to modify any sampling strategies noted in our list, then FST may provide a change order to cover the costs of those changes.

FST will confirm the readiness of systems and availability of contractor support, as required, prior to performing any FPT. If issues are found during testing, FST will note the issue and log it into our commissioning software system, Facility Grid. The issue will be clearly explained and will define which contractor is responsible for correcting. Once the contractor confirms they have corrected the issue, FST will re-inspect once to confirm that the issue has been corrected. Same day cancellations of confirmed testing and multiple re-inspections of an issue are not included in our scope and fee.



Our review of the drawings and FST provided commissioning specifications will include language to clarify these issues and notify the contractors that the costs for our “lost time” will be their responsibility.

EXCLUSIONS

FST will require a retainer equal to 5% of the fee for services to be rendered. If we find that a client is a delinquent payer with us, we may request a retainer be issued along with payments of all outstanding invoices.

TERMS

Acceptance. If you would like to proceed with this work, please address your order to FST Technical Services, LLC, 450 E. Warner Road, Suite 1, Chandler, AZ 85225. You may submit your order hard copy to the address listed or electronically to contracts@fsttechnical.com.

Payments. Invoices for basic services, reimbursable expenses and additional services shall be submitted monthly on our normal monthly billing cycle. Unless otherwise stipulated, invoices will be submitted electronically. Payments are due and payable thirty (30) days from the date of the invoice. If we are not paid within sixty (60) days of the invoice, we have the right to stop work without notice or liability. If any payment is not made within thirty (30) days of the due date, we may begin charging interest at the rate of PRIME+5% until payment is received. If any payment remains unpaid for a period of sixty (60) days following the due date, FST may add an additional 10% penalty to the full outstanding amount delinquent. After ninety (90) days, client may be sent to collections and client is responsible for actual collection costs.

Expenses. Reimbursable expenses are included in our lump sum fee and will include:

- All reproduction costs for plotting, prints and specifications, as well as, creating the required drawings.
- All final reports will be submitted electronically, unless requested by the client. Any production cost associated with the report will be billed to the client.
- Mailing express delivery, courier service, messenger services and other communication expenses incurred in connection with the project.
- Test equipment rentals that are required to satisfy project requirements.
- Any expenses associated with transportation incurred by the engineer due to travel.
- Fees paid for expediting and securing approvals of authorities having jurisdiction over the project.
- Re-calibration of required test equipment associated with the project when necessary.



Compensation for Additional Services. It is understood that, where there are approved changes to work already completed or additional services required not specifically outlined in the scope-of-work, FST shall be paid additional compensation, equal to the following hourly billing rates:

Principal/Director	\$ 300.00
MEP Senior Engineer	\$ 200.00
MEP Senior Project Engineer	\$ 175.00
MEP Project Engineer	\$ 150.00
MEP Field Engineer	\$ 125.00
BECx Associate	\$ 250.00
BECx Senior Engineer	\$ 200.00
BECx Senior Project Engineer	\$ 175.00
BECx Project Engineer	\$ 165.00
BECx Field Engineer	\$ 155.00
Project Coordinator	\$ 90.00

Please note, if the services go beyond our estimated completion date, we reserve the right to increase our additional compensation rates.

Validity. This quotation is valid for sixty (60) days for work commencing within six (6) months.

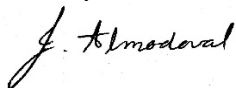
If you are in acceptance of this proposal please sign and date in the space indicated below and return to my attention.

Joel Jones, Durham County

Date

If you have any questions or would like more information, please do not hesitate to contact me at (929) 235-0581 or james_almodoval@fsttechnical.com. We look forward to working with you on this important project.

Sincerely,



James Almodoval
Engineering Manager
FST Technical Services, LLC (FST)