

Commissioning Services

Protect Your Investment



Design Phase



Construction Phase



Post-Occupancy



Retro-Commissioning



FSE Four Seasons
Environmental, Inc.
Facilities Performance Services

School Building
Job Number: 762321

GES
GENERAL ELECTRICAL SYSTEM

Finding Date: Tue 01/21/20
Location: BUILDING
Finding ID: 200121.131250.23
Finding: Circuit directory has not been filled out
Risk: Maintenance and operations staff will not know how to turn off breakers without troubleshooting
Recommendation: Fill out circuit directories and test for accuracy
Reference: Contract Document

Trade: E
By: NAM
Most Recent Inspection Date: 01/21/20

Inspection Type: FUNCTIONAL
Inspection Status: Complete



Findings Summary Report (Filtered)

School Building

Finding ID	Date	By	Type	Equipment/System	Asset Name	Location	Priority	Trade	Status
190815.172722.16	08/14/19	mhp	F	BUILDING ENVELOPE	BE	BUILDING	3-Other	G	Unresolved
Finding: DINING RM 304: N. side of room has several stained ceiling tiles, many feet apart, in a line running E/W Risk: water infiltration of matls; growth Recommendation: Determine source of leak (Roof? Mech?) & stop same; Remove & replace damaged finish matls 10/10/19, MHP, FSE - Reinspection: Contr has been chasing down leaks from condensate lines, roof, etc., but before replacing damaged ceiling tiles... to ensure the leaks have stopped, the stained tiles are left in place to see if they will again get hit with leak water. 11/22/19, MHP, FSE - Reinspection: Not yet addressed. Asst Supt indicated he needed to check with Trane to see they had completed their fix... before replacing tiles; Appear to be (4) ceiling tiles damaged by water infiltration or moving around to access equip above the ceiling									
190819.000709.58	08/15/19	djd	F	BUILDING ENVELOPE	BE	BUILDING	2-Energy Penalty	CM	Unresolved
Finding: Location: Near rm 212: Attic drywall ceiling section has collapsed and insulation has fallen below onto drop ceiling. Risk: Energy penalty. Airborne fiberglass is also health concern. Recommendation: Repair condition. Put insulation back in attic 10/10/19, MHP, FSE - Reinspection: Not yet addressed. 11/22/19, MHP, FSE - Reinspection: Not yet addressed.									
190905.115117.85	09/04/19	djd	F	BUILDING ENVELOPE	BE	BUILDING	2-Energy Penalty	CM	Unresolved
Finding: Several drywall ceiling panels have been damaged as a result of the piping supports' installation which proved to be insufficient for the overall weight. Risk: Damage to existing ceiling structure. Cost to owner to repair. Attic insulation will fall inside the mech room resulting in an energy penalty. Recommendation: CM to assign repair prior to insulation falling. 10/10/19, MHP, FSE - Reinspection: Not yet addressed. 11/22/19, MHP, FSE - Reinspection: Not yet addressed.									
180808.162713.39	08/07/18	mhp	F	BUILDING ENVELOPE	BE	BUILDING	3-Other	G	Resolved
Finding: Water from rains was entering near the mech unit shown (roof area 27) & causing quite a pond in the corridor, etc. below Risk: water infiltration into materials that absorb same; mold Recommendation: keep demo areas weather proof 08/31/18, MHP, FSE - Reinspection: Minimal leakage inside being caught with large trash cans; Mech unit on roof has been removed & temporary plastic weatherproofing being installed today. 11/04/18, MHP, FSE - Archt replied on 11-02-18 w/ memo on .pdf of FPR saying "Contractor to contain roof leaks throughout and provide temporary means as required to protect material inside the building while new roof is being installed per specifications."; FSE CxA B.E. Rep will check monitor installation on-site as follow-thru. 12/03/18, MHP, FSE - Reinspection: Minimal water infiltration was noted on this review.									

Post-Occupancy Commissioning

Just because the construction stops, we don't. FSE stays by your side as you occupy the building, verifying staff is well trained and systems are still functioning appropriately.

- FSE tests equipment in opposite season.
- Ensures maintenance staff is equipped to manage the new, state-of-the-art systems.
- NEBB certified staff oversees test and balance.

What is Retro-Commissioning?

We tune up our cars, why not our buildings? Fifty percent of buildings fall out of calibration within the first five years of operation, causing increased energy and operating costs, decreased occupant comfort. Improve the efficiency of your existing building, resolving problems that may have occurred during design or construction, or correct issues that often develop as equipment ages or the building's use changed.

- FSE reviews major systems, looking for problem areas, as well as efficiency improvements.
- FSE develops a scope of corrective actions and oversees work.
- Functional tests confirms all work is complete and systems are operating efficiently.

Your Building Better

Whether new construction or a 30-year-old facility, your building can be better. Through commissioning and retro-commissioning, see reduced energy output, decreased maintenance costs and improved occupant comfort.



Ensures equipment and systems are installed and operating correctly.



Increase equipment lifespan, occupant comfort and energy efficiency.



Decrease unexpected and emergency repair and replacement costs, and energy spikes.



Resulting in a high-performing, comfortable and efficient building.



FSE's Commissioning Team

Why FSE?

As a Certified Commissioning Firm (BCCB), FSE successfully commissioned more than 550 projects, ranging from small office spaces to complex laboratories. This two decades of experience gives our agents valuable expertise, which results in high-functioning, efficient buildings.

16

TRAINED STAFF

Our team of 16 Cx employees are certified in commissioning, energy management, DDC controls, test and balance, and infrared thermography.

5

DISCIPLINES

Our team is comprised of seasoned professionals with hands-on MEP experience and licensed contractors in five disciplines.

473

FINDINGS

Through system verification and quality-assurance testing, FSE has found an average of 473 findings on our last 10 projects.

Not Your Average Commissioning Team

BUILDING ENVELOPE

Our registered architect, roofing specialist and thermal infrared thermographer work in concert to ensure your building enclosure is resistant to water and air infiltration, improving your building's overall durability and longevity.

TEST AND BALANCE

Fifty percent of buildings fall out of calibration within the first five years of operation. Certified by NEBB, FSE provides TAB services to extend your equipment life cycles and provide proven energy savings and comfort results.

REAL-TIME REPORTING

Never feel out of the loop with your construction project. FSE's web-based reporting allows all members of the construction team to view inspection findings, allowing for quick resolution.

RETRO-COMMISSIONING

Not undergoing construction? Improve your existing building's operation and efficiency. Retro-commissioning successfully identifies deficiencies: saving energy and increasing occupant comfort.

