

(ATTACHMENT 2) ACTION ON REQUEST TO ENTER INTO PHASE TWO OF PERFORMANCE CONTRACTS FOR ENERGY-EFFICIENCY PROJECTS AT TWENTY-SIX MPS SITES

Purchase Requisition Number:
Contract Number:
Vendor Number: V0201847

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
PROFESSIONAL SERVICES CONTRACT FOR PERFORMANCE CONTRACTING SERVICES**

[131 - Dover Street Elementary School, 143 - Eighty-First Street Elementary School, 199 - Green Bay Elementary School, 006 - Lincoln Center of the Arts, 008 - Marshall High School, 071 - Milwaukee School of Languages, 024 - North Division High School]

This Professional Services Contract (“Contract”) is being entered into this 25th day of May, 2017, by and between Johnson Controls, Inc. (“Contractor”) and Milwaukee Board of School Directors (“MPS”).

1. SCOPE OF SERVICES

Contractor shall specifically perform the following tasks:

Contractor shall perform the “Work” set forth in **Appendix B** attached hereto. After the Work is Substantially Complete (as defined below), Contractor shall provide the assured performance guarantee (the “Assured Performance Guarantee”) and the measurement and verification services (the “M&V Services”) set forth in **Appendix C** attached hereto. Collectively, the Work and M&V Services shall be referred to as the “Project.”

Contractor shall provide, at its own expense, all resources required to perform the Work and M&V Services under this Contract. The Work and M&V Services shall be provided in accordance with the additional terms and conditions provided in **Appendix E** and **Appendix G** attached hereto, and all federal, state and local laws, ordinances, rules, regulations, permits relating to the Project and lawful orders of public authorities applicable to the Project and the performance thereof (collectively, “Laws”).

Laws include the requirement of bonds. Contractor shall execute and deliver to MPS a 100% Performance Bond and 100% Payment Bond in an amount equal to the full Contract Price at the time this Contract is executed. The bond will be written with a company licensed to transact business in the State where the work is located and has a minimum A.M. Best Rating of A VII.

Notwithstanding anything to the contrary in this Contract or otherwise, these Bonds shall not guarantee or secure any of the Contract obligations that concern: (1) any guarantees or warranties with a term beyond one (1) year from the date of completion of the installation portion of the Contract; (2) any efficiency or energy savings guarantees without regard to the term of such guarantee obligations; and (3) any support or maintenance service agreements or obligations related to the Contract.

MPS shall perform the obligations set forth in **Appendix F** attached hereto.

2. TERM

This Contract shall be in effect from the date of the last signature on the signature page below.

No Work shall commence before a Contractor receives (a) a fully executed Contract and (b) MPS’ executed Notice to Proceed. Any Work performed by the Contractor prior to obtaining a fully-executed Contract and fully executed Notice to Proceed shall not be compensated pursuant to this Contract.

Contractor shall achieve Substantial Completion of the Work based on timeline outlined in the project schedule shown in Appendix D after Contractor’s receipt of the executed Notice to Proceed from MPS, subject to adjustments as provided in this Contract (the date that Substantial Completion is achieved shall be the “Substantial Completion Date”).

For purposes of this Contract, “Substantial Completion” is as defined in Section 3 below.

The M&V Services shall commence on the first day of the month following the month in which the Substantial Completion Date occurs, and shall continue throughout the Guarantee Term (as such term is defined in **Appendix C**), subject to earlier termination of the Assured Performance Guarantee as provided in **Appendix C**.

Any continuation of the Contract beyond the terms described above must be set forth in writing and signed by the original signatories to the Contract.

Attached hereto as **Appendix D** is the initial Construction Progress Schedule for the project (the “**Progress Schedule**”), which shall be updated by Contractor from time to time as the need arises during the Term for MPS’ approval. The Progress Schedule shall (a) clearly indicate the tentative schedule for the completion of the design and construction documents, with document reviews by MPS at the 75%, 95% and 99% completion stage of such documents (allowing one week for each MPS review); (b) identify the starting and completion dates for construction work.

3. **COMPENSATION**

Contractor’s total compensation for the Work under this Contract shall be Five Million Six Hundred Forty-Two Thousand Four Hundred Ten Dollars (\$5,642,410.00), subject to adjustments as set forth herein (the “**Contract Price**”). MPS shall also make payments to Contractor for the M&V Services in accordance with the pricing and payment terms set forth below and in **Appendix A** attached hereto. Compensation does not include amounts indicated in the “Environmental Contingency” column in **Appendix A**.

Within ten (10) days of execution of the Contract, MPS shall pay to Contractor five percent (5.0%) of the Contract Price as a mobilization fee. Thereafter, the balance of the Contract Price shall be paid to Contractor in monthly progress payments within 20 days of receipt of an accepted invoice for the value of Work completed plus the amount of materials and equipment suitably stored, either on site or off-site the previous month, less the aggregate of previous payments to Contractor. Contractor may also submit a separate invoice for Contractor’s design and project development costs. There shall be 2.5% retainage withheld from all payments made under this Contract for the Work (but excepting payments for M&V Services). MPS retains the right to negotiate the payment schedule based on the actual project schedule.

Prior to submitting its first progress payment invoice, Contractor shall submit to MPS a schedule of values allocating the entire Contract Price to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as MPS may require. This schedule of values shall be used as a basis for reviewing Contractor’s invoices. Final payment, constituting the entire unpaid balance of the Contract Price, shall be due 30 days after the Work described in this Contract is Substantially Complete, except for 150% of the value of any agreed upon punch list items remaining at that time (the “**Holdback**”).

“**Substantial Completion**” is defined as the stage in the progress of the Work when the Work is sufficiently complete in accordance with the Contract Documents so that MPS can occupy or utilize the Work for its intended use, and is accepted via signature by MPS through the execution of a Certificate of Substantial Completion. Upon Substantial Completion of individual Facility Improvement Measures (FIMs), the cost of such FIMs can be invoiced in full, subject to any Holdbacks. Holdbacks shall be due and payable 30 days after the punch list items are completed.

The Assured Performance Guarantee, as provided in **Appendix C**, shall not commence or become effective until such final payment is received by Contractor. No back charges or claim of MPS for services shall be valid except by the agreement in writing by Contractor before work is executed. In the event that MPS fails to make any monthly progress payment or is otherwise overdue in making such payment, and upon fourteen (14) days written notice to MPS, Contractor shall be entitled to stop work without prejudice to any other remedy it may have, and MPS shall be responsible to Contractor for any increased costs in demobilization and remobilization in stopping and re-commencing the Work. In the event of such work stoppage and start up, Contractor and MPS agree to cooperate in adjusting any schedule requirements so as to endeavor to minimize the impact on MPS’s operations of its facility.

MPS reserves the right to withhold all or a portion of a payment to Contractor to the extent reasonably necessary to protect MPS if the Work and/or M&V Services have not been fully and adequately delivered in accordance with the Contract. When the reasons for withholding payment are removed, amounts previously withheld shall be promptly paid to Contractor.

Milwaukee Public Schools does not pay in advance for services. No payment shall be made until a properly submitted invoice is approved. Invoices shall be submitted to:

MPS - Dept. of Facilities and Maintenance Services
Attn: Linda Dahl, Contract Clerk
P.O. Box 05259
Milwaukee, Wisconsin 53205-0259

A properly submitted invoice must include a detailed description of the Work completed, and the M&V Services performed. As a matter of practice, MPS attempts to pay all invoices in 30 days. It is mutually agreed that State Prompt pay law does not apply to this Contract. Final invoices must be marked as such.

4. NON APPROPRIATION OF FUNDS AND LEGAL AUTHORITY

This Contract is contingent upon the appropriation of sufficient funds by the Milwaukee Board of School Directors. If funds are not appropriated, Contractor agrees to take back any commodities furnished under the Contract, terminate any services supplied to MPS under the Contract, and relieve MPS of any further obligations under the Contract. This Contract is also contingent upon MPS possessing the legal authority to exceed the revenue limit to pay for the Work, including payment of debt service on any debt incurred to pay for the Work. If at any time after the signing of this contract MPS loses the legal authority to exceed the revenue limit to pay for the Work, including payment of debt service on any debt incurred to pay for the Work, Contractor agrees to take back any commodities furnished under the Contract, terminate any services supplied to MPS under the Contract, and relieve MPS of any further obligations under the Contract.

5. NON-DISCRIMINATION

In the performance of work under this Contract, Contractor shall not discriminate in any way against any employee or applicant for employment on the basis of a person's sex, race, age, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, disability, or socio-economic status. This prohibition includes but is not limited to employment; promotions, demotions and transfers; recruitment; advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. Contractor is required to include a similar provision in all subcontracts to this Contract.

If MPS determines Contractor has violated this non-discrimination policy, MPS may terminate this Contract in accordance with Section 12 below without liability for undelivered services or materials. MPS may also deem the Contractor ineligible to participate in future contracts with MPS.

6. INDEMNITY

Contractor assumes full liability for all of its acts or omissions in the performance of this Contract, as well as the acts or omissions of its Subcontractors. Contractor shall indemnify and hold harmless MPS, its agents, officers and employees against all liabilities, losses, judgments, decrees, costs, and expenses that may be claimed against MPS by third parties as a result of the willful misconduct or the negligent actions or omissions of said Contractor, its agents, or employees. If judgment is recovered against MPS in suits of law or equity as a consequence of the willful misconduct or negligent actions or omissions of the Contractor, the Contractor assumes full liability for such judgment, not only as to any monetary award, but also as to the costs, attorneys' fees or other expenses resulting therefrom.

In accordance with applicable laws, MPS shall be responsible for defending and paying judgments on behalf of its officers, employees and agents while acting within the scope of their employment or agency for any claims that may arise out of MPS's negligence for acts, policies, or directives that affect the activities covered by this Contract.

7. BACKGROUND CHECKS

Contractor will conduct, at Contractor's expense, a criminal information records background check, (hereinafter referred to as "background check"), through the Wisconsin Department of Justice and other appropriate states' agencies, on all current and potential administrators, board members, officers, and employees who have, or who are anticipated to have, "direct, unsupervised contact" with MPS students in the performance of this Contract.

An out of state background check should be completed in the state(s) in which the individual resided for at least six months within the last two years and was eighteen years or older at the time.

Contractor will submit to MPS's Department of Employment Relations (DER), (via mail to Milwaukee Public Schools Background Checks, Attn: Department of Employment Relations, Room 116, 5225 West Vliet Street, Milwaukee, WI 53208, or via email at 564@milwaukee.k12.wi.us), all completed background checks. Such records will be reviewed and MPS will notify Contractor of any individual(s) who, based on MPS standards, are unfit and should not have contact with MPS students. All determinations made by MPS with regards to whether an individual is fit to provide services pursuant to this Contract are made in MPS's sole discretion.

The following will each be a material failure to comply with the terms of this Contract and cause for immediate termination of this Contract by MPS: failure to perform background checks as outlined in this Section 7; failure to submit

background checks to MPS as outlined in this Section 7; allowing services to be provided by an individual who has not been subjected to a background check; and allowing services to be performed by an individual who has been determined to be unfit by MPS as outlined in this Section 7.

8. INSURANCE AND PROOF OF FINANCIAL RESPONSIBILITY

Contractor and its subcontractors shall effect and maintain the following types of insurance coverage in the limits shown below: Workers' Compensation, Employers' Liability, General Liability, Contractual Liability, Professional Liability, Automobile Liability and Umbrella Liability. Contractor's indemnification obligation, however, shall not be reduced in any way by existence or non-existence, limitation, amount or type of damages, compensation, or benefits payable under Workers' Compensation laws or other insurance provisions.

The limits of insurance required of the Contractor by MPS shall be:

Workers' Compensation	Statutory Limits
Employers' Liability: -Bodily Injury by Accident -Bodily Injury by Disease -Bodily Injury by Disease	\$100,000 per each accident \$100,000 per each employee \$500,000 policy limit
Commercial General Liability: -General Aggregate Limit -Products/Completed Operations Aggregate Limit -Personal and Advertising Injury Limit -Each Occurrence Limit -Fire Damage Limit (any one fire) -Medical Expense Limit (any one person)	\$2,000,000 \$2,000,000 \$1,000,000 \$1,000,000 \$100,000 \$5,000
Professional Liability	\$1,000,000 per occurrence
Auto Liability (Owned, Hired and Non-Owned)	\$1,000,000 per occurrence
Umbrella (excess) Liability: -General Aggregate Limit - Products Completed Operations Limit - Each Occurrence Limit	\$5,000,000 \$5,000,000 \$5,000,000
Builder's Risk	Sufficient to cover the project costs at risk

The Milwaukee Board of School Directors shall be listed as an additional insured under Contractor's and subcontractors' general liability insurance and umbrella liability insurance pursuant to a Certificate of Insurance and applicable additional insured policy endorsements. Evidence of all required insurances of Contractor shall be given to MPS. Contractor shall endeavor to provide MPS with a thirty (30) day written notice of cancellation, non-renewal or material change by any of Contractor's insurers providing the coverages required by MPS for the duration of this Contract.

Contractor shall purchase Builder's Risk coverage sufficient to cover project costs at risk. Contractor shall submit the policy and/or the policy's declarations page and invoice for the actual cost of Builder's Risk coverage, which shall be passed through to and reimbursed by MPS up to a maximum reimbursement amount of \$25,000. Such reimbursement shall be in addition to the Contract Price stated above.

All materials and equipment shall be bid, purchased, and transferred to the Owner tax free upon installation in accordance with WI Act 126 "Sales and Use Tax Exemption for Building Materials That Become Part of a Nonprofit or Government

Facility” and the subsequent statutory language contained in WI Statute 77.54 (9m). MPS shall provide Contractor a WI Department of Revenue form S-211 WISCONSIN SALES AND USE TAX EXEMPTION CERTIFICATE, for this purpose.

9. SHIPPING / TAXES

MPS is exempt from Federal Excise and Wisconsin Sales Taxes. All vendor quotes, bids and invoices must include delivery FOB destination to the MPS location receiving the goods and freight must be prepaid. This means any freight, shipping, processing, handling or like charges must be part of Contractor’s compensation hereunder. Any separate line items for freight, shipping, processing, handling or like charges listed on an invoice will be deleted and NOT PAID.

MPS shall provide reasonable evidence to Contractor of the tax exempt nature of MPS and the Project.

10. IRREPARABLE HARM

It is mutually agreed the breach of this Contract on Contractor’s part shall result in irreparable and continuing damage to MPS for which money damages may not provide adequate relief. Therefore, the breach of this Contract on Contractor’s part shall entitle MPS to both preliminary and permanent injunctive relief and money damages insofar as they can be determined under the circumstances.

11. TERMINATION BY CONTRACTOR

Contractor may, at its option, terminate this Contract upon the failure of MPS to pay any amount which may become due hereunder for a period of sixty (60) days following submission of appropriate billing and supporting documentation. Upon said termination, Contractor shall be paid the compensation due for all services rendered through the date of termination including any retainage.

12. TERMINATION BY MPS - BREACH BY CONTRACTOR

If Contractor fails to fulfill its obligations under this Contract in a timely or proper manner, or violates any of its provisions, MPS shall thereupon have the right to terminate it by giving ten (10) working days written notice before the effective date of termination of the Contract, specifying the alleged violations, and effective date of termination. The Contract shall not be terminated if, upon receipt of the notice, Contractor promptly (a) cures the alleged violation within ten (10) working days, or (b) commences to cure such alleged violation within the ten (10) working day period, if the nature of the alleged violation is such that a complete cure cannot be reasonably be expected within the 10-working day period, and continues such cure until complete. In the event of termination, MPS will only be liable for services rendered through the date of termination and not for the uncompleted portion, or for any materials or services purchased or paid for by Contractor for use in completing the Contract.

13. TERMINATION BY MPS

MPS further reserves the right to terminate this Contract at any time for any reason by giving Contractor 20 days’ advance written notice by Registered or Certified Mail of such termination. Upon receipt of notice, Contractor shall discontinue the Work or M&V Services, as the case may be, except to the extent reasonably necessary to secure the site or sites upon which the Project is to be performed (“Premises”). Upon said termination, Contractor shall be paid for all Work or M&V Services rendered through the date of termination, including any retainage. This section also applies should the Milwaukee Board of School Directors fail to appropriate additional monies required for the completion of the Contract.

14. INDEPENDENT CONTRACTOR

Contractor agrees and stipulates that in performing this Contract, it is acting as an Independent Contractor, and that no relationship of employer and employee, partnership or joint venture is created by this Contract. Contractor has exclusive control over work hours, location, and other details of such services, and MPS’s sole interest is to ensure that said service shall be performed and rendered in a competent, safe, efficient, timely and satisfactory manner in accordance with the terms of this Contract.

Contractor has the sole obligation to provide for and pay any contribution or taxes required by federal, state or local authorities imposed on or measured by income. Contractor specifically covenant not to file any complaint, charge, or claim with any local, state or federal agency or court in which Contractor claims to be or to have been an employee of MPS during the period of time covered by this Contract and that if any such agency or court assumes jurisdiction of any complaint, charge or claim against MPS on Contractor’s behalf, Contractor will request such agency or court to dismiss

such matter. MPS shall not be charged any obligation or responsibility whatsoever of extending any fringe benefits which may be extended to MPS employees, including any insurance, or pension plans.

Contractor further agrees that MPS is not to be charged with the obligation or responsibility of extending any fringe benefits such as hospital, medical and life insurance, or pension plans which may be extended to employees of MPS from time-to-time and further agree to indemnify and hold harmless MPS and all its employees, officers and agents from any liability for personal injuries, including death, or for damage to or loss of personal property, which might occur as a result of the performance of the services provided for under this Contract.

15. ASSIGNMENT LIMITATION

This Contract shall be binding upon and inure to the benefit of the parties and their successors and assigns; provided, however, that, other than the Subcontractor selection process described in **Appendix E** attached hereto, neither party shall assign its obligations hereunder without the prior written consent of the other.

16. PROHIBITED PRACTICES

- A. Contractor during the period of this Contract shall not hire, retain or use for compensation any member, officer, or employee of MPS to perform services under this Contract, or any other person who, to the knowledge of Contractor, has a conflict of interest.
- B. Contractor hereby attests it is familiar with MPS's Code of Ethics, providing in pertinent part, "[a]n employee of Milwaukee Public Schools may not accept any gift or gratuity in excess of \$25.00 annually from any person, persons, group or any firm which does business with or is attempting to do business with MPS."
- C. No person may enter into this Contract for services that the MPS employee would otherwise perform as an employee.
- D. No current or former MPS employee may perform services on a professional services contract without the prior written consent of the MPS Chief Human Capital Officer or his/her designee.
- E. If the Contract is for apparel for \$5,000.00 or more, the Contractor agrees to provide only items manufactured by responsible manufacturers. Contractor is required to include a similar provision in all subcontracts to this Contract.

17. LIVING WAGE REQUIREMENT

Contractor shall comply with, and ensure its subcontractors performing work under this Contract comply with, Milwaukee Board of School Directors' Administrative Policy 3.09(17), which requires that employees be paid a "living wage."

18. NOTICES

Notices to either party provided for in this Contract shall be sufficient if sent by Certified or Registered mail, postage prepaid, addressed to the signatories on this Contract, or to their designees.

19. WAIVER

The waiver or failure of either Party to exercise in any respect any rights provided for in this Contract shall not be deemed a waiver of any further right under this Contract.

20. INTEGRATION / SEVERABILITY

This Contract and the following Appendices, as well as any other exhibits and addenda, if any, constitute the entire Contract among the Parties with respect to the subject matter hereof and supersede all prior proposals, negotiations, conversations, discussions and Contracts among the Parties concerning the subject matter hereof. No amendment or modification of any provision of this Contract shall be effective unless the same shall be in writing and signed by both Parties:

- Appendix A – Price and Payment Terms/FIM Summary Sheet
- Appendix B – Scope of Work
- Appendix C – Assured Performance Guarantee & M&V Option per FIM
- Appendix D – Project Construction Schedule
- Appendix E – General Conditions for Work and M&V Services
- Appendix F – MPS Responsibilities
- Appendix G – Supplemental General Conditions for Work

The District shall not be bound by any terms and conditions included in of Contractor's packaging, service catalog, brochure, technical data sheet or other document which attempts to impose any conditions at variance with or in addition to the terms and conditions contained herein.

If any term or provision of this Contract should be declared invalid by a court of competent jurisdiction or by operation of law, the remaining terms and provisions of this Contract shall be interpreted as if such invalid Contracts or covenants were not contained herein.

21. CHOICE OF LAW & FORUM

The state courts of Wisconsin shall be the sole forum for all disputes arising of this Contract. The validity, construction, enforcement and effect of this Contract shall be governed solely by the laws of the State of Wisconsin. CONTRACTOR AND MPS HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL AS TO ANY CLAIM OR CAUSE OF ACTION BASED UPON, ARISING OUT OF OR DIRECTLY OR INDIRECTLY RELATED TO THIS CONTRACT, INCLUDING CONTRACT, TORT AND STATUTORY CLAIMS, AND EACH OF THE PARTIES HERETO ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO ENTER INTO A BUSINESS RELATIONSHIP, THAT EACH HAS RELIED ON THIS WAIVER IN ENTERING INTO THIS AGREEMENT, AND THAT EACH WILL CONTINUE TO RELY ON THIS WAIVER IN THEIR RELATED FUTURE DEALINGS UNDER THIS CONTRACT.

22. TIMING

Time is of the essence in this Contract.

23. CERTIFICATION REGARDING DEBARMENT OR SUSPENSION

Contractor certifies that neither Contractor or its principals; its subcontractors or their principals; the sub-recipients (if applicable) or their principals are suspended, debarred, proposed for debarment, voluntarily excluded from covered transactions, or otherwise disqualified by any federal department or agency from doing business with the Federal Government pursuant to Executive Orders 12549 and 12689. Contractor specifically covenants that neither the Contractor or its principals, its sub-contractors or their principals, or the sub-recipients (if applicable) or their principals are included on the Excluded Parties List System ("EPLS") maintained by the General Services Administration ("GSA").

24. DELAYS; FORCE MAJEURE

If Contractor is delayed in the performance of the Work and/or M&V Services by causes beyond its control and without its fault, including but not limited to inability to access the Premises; concealed or unknown conditions encountered at the Premises that materially differ from the conditions otherwise reasonably expected or known to Contractor; a Force Majeure Event (as defined below); or a failure by MPS to perform its obligations under this Contract, Contractor shall provide written notice to MPS of the existence, extent of, and reason for such delays and impacts, and Contractor shall not be held responsible to MPS for damages, loss, injury, or delay caused by such conditions. Under such circumstances, the parties shall negotiate an equitable adjustment in the time for performance, price and payment terms, and the Assured Performance Guarantee. As used herein, the term "Force Majeure Event" shall mean or refer to conditions that are beyond the reasonable control, and without the intentional misconduct or negligence of Contractor, including without limitation acts of God, riot, war, civil unrest, flood, earthquake, outbreak of contagious disease, strikes, labor disputes, fires, explosions or other casualties, acts of terrorism, electrical power outages, interruptions or degradations in telecommunications, computer, or electronic communications systems, or changes in Laws (but excluding failure caused by Contractor's financial condition or negligence).

25. STUDENT DATA

Contractor acknowledges that student data is protected by both federal and state law. *See* Wis. Stat. § 118.125; 20 U.S.C. § 1232g(b); 34 C.F.R. § 99.1 *et seq.* If MPS determines that Contractor has disclosed any student record information in violation of either federal or state law, without prejudice to any other rights or remedies the MPS may have, MPS shall be entitled to immediately terminate this and every other existing Contract without further liability. Moreover, MPS may bar Contractor from future MPS contracts for varying periods up to and including permanent debarment.

26. NON-DISCLOSURE

Absent prior written consent of the person listed in Section 3 or his/her designee, Contractor shall not: (1) disclose, publish, or disseminate any information, not a matter of public record, that is received by reason of this Contract, regardless of whether the Contractor is or is not under contract at the time of the disclosure; or (2) disclose, publish, or disseminate any information developed for MPS under this Contract. Contractor agrees to take all reasonable precautions to prevent any unauthorized use, disclosure, publication, or dissemination of the same information.

All information and any derivatives thereof, whether created by MPS or Contractor under this Contract remains the property of MPS and no license or other rights to such information is granted or implied hereby. For purposes of this Contract, “derivatives” shall mean: (i) for copyrightable or copyrighted material, any translation, abridgment, revision, or other form in which an existing work may be recast, transformed, or adapted; and (ii) for patentable or patented material, any improvement thereon.

Within ten business days of the earlier of receipt of MPS’ written or oral request, or final payment, Contractor will return all documents, records, and copies thereof it obtained during the development of the work product covered by this Contract.

27. MPS LOGO/PUBLICITY

No Contractor shall use the MPS Logo in its literature or issue a press release about the subject of this Contract without prior written notice to and written approval of MPS’s Executive Director of Communications & Outreach.

28. ORDER OF PRIORITY

Should Contractor and MPS sign Contractor’s Contract in addition to this Contract, the terms set forth in this Contract shall govern in the event of a conflict.

29. PUBLIC RECORDS

Both parties understand that the Board is bound by the Wisconsin Public Records Law, and as such, all of the terms of this Contract are subject to and conditioned on the provisions of Wis. Stat. § 19.21, *et seq.* Contractor acknowledges that it is obligated to assist the Board in retaining and producing records that are subject to Wisconsin Public Records Law, and that the failure to do so shall constitute a material breach of this Contract, and that the Contractor must defend and hold the Board harmless from liability under the law. Except as otherwise authorized, those records shall be maintained for a period of seven years after receipt of final payment under this Contract.

30. CONTRACT COMPLIANCE REQUIREMENT

The HUB requirement, student engagement requirement, and Career Education requirement for this Contract is as stated in Appendix G. Failure to achieve these requirements may result in the application of some or all of the sanctions set forth in Administrative Policy 3.10, which is hereby incorporated by reference.

31. LIMITATIONS ON LIABILITY

WITHOUT LIMITING CONTRACTOR’S EXPRESS OBLIGATIONS UNDER THE ASSURED PERFORMANCE GUARANTEE, CONTRACTOR’S LIABILITY UNDER THIS CONTRACT, REGARDLESS OF THE FORM OF ACTION, SHALL IN NO EVENT EXCEED THE AMOUNT OF THE PAYMENTS ACTUALLY RECEIVED BY CONTRACTOR UNDER THIS CONTRACT. If this Contract covers fire safety or security equipment, MPS understands that Contractor is not an insurer regarding those services, and that Contractor shall not be responsible for any damage or loss that may result from fire safety or security equipment that fails to prevent a casualty loss, except to the extent such loss resulted from the Contractor’s willful misconduct, negligence, or fraud.

TO THE EXTENT PERMITTED UNDER WISCONSIN LAW, AND EXCEPT AS SET FORTH BELOW, NEITHER MPS NOR CONTRACTOR WILL BE RESPONSIBLE TO THE OTHER FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, REMOTE, PUNITIVE, EXEMPLARY DAMAGES FOR LOSS OF PROFITS OR REVENUE, LOSS OF USE, PRINCIPAL OFFICE EXPENSES, AND COMPENSATION OF PERSONNEL (“CONSEQUENTIAL DAMAGES”), REGARDLESS of a party having been advised of the possibility of such potential losses or relief, arising in any manner from this Contract, the Work, the Improvement Measures, the M&V Services, or otherwise.

NOTWITHSTANDING THE FOREGOING, THIS LIMITATION DOES NOT APPLY TO ANY CONSEQUENTIAL DAMAGES THAT (A) ARE COVERED BY INSURANCE CARRIED BY THE CONTRACTOR; (B) ARISE OUT OF THE WILLFUL MISCONDUCT, NEGLIGENCE, OR FRAUD OF THE CONTRACTOR; (C) ARISE OF OUT OF

RELATE TO ANY OBLIGATION OF CONTRACTOR TO INDEMNIFY THE OWNER FOR THIRD-PARTY CLAIMS UNDER THIS CONTRACT; (D) ARISE OF OUT OF RELATE TO ANY VIOLATIONS OF LAW BY THE CONTRACTOR; OR (E) THAT ARE NOT COVERED BY INSURANCE BUT HAVE AN AGGREGATE VALUE OF LESS THAN \$ 50,000. The foregoing waivers and limitations are fundamental elements of the basis for this Contract between Contractor and Owner, and each party acknowledges that Contractor would not be able to provide the Work and M&V Services contemplated by this Contract on an economic basis in the absence of such waivers and limitations, and would not have entered into this Contract without such waivers and limitations.

[SIGNATURES BEGIN ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties here to have executed this Professional Services Contract on the day, month and year first above written.

JOHNSON CONTROLS, INC. (Vendor #: V0201847)

MILWAUKEE BOARD OF SCHOOL DIRECTORS

By: _____
Authorized Representative

By: _____
Kari H. Race, J.D./Acting Director
Procurement and Risk Management

Date: _____

Date: _____

Johnson Controls, Inc.
507 East Michigan Street
Milwaukee, WI 53202

By: _____
Darienne B. Driver Ed.D.,
Superintendent of Schools

Date: _____

SSN / FEIN: Budget

Code:

By: _____
Mark A. Sain, President
Milwaukee Board of School Directors

Date: _____

Reviewed by Risk Management:

By: _____

Date: _____

APPENDIX A
Price and Payment Terms

MPS shall make payments to Contractor for M&V Services pursuant to this Appendix A.

M&V Services. The price for **Johnson Controls, Inc.** M&V Services, as detailed in **Appendix C** of this Contract, is \$8,131.00 for year 1 and is included in the \$5,642,410.00 Contract Price set forth in the Contract. These payments will be due and payable when MPS receives Contractor invoice and are due in advance, per the Section 3 Compensation terms, of the service Contractor is to provide, and shall be made throughout the Guarantee Term. It is acknowledged by MPS that, consistent with Appendix C below, upon the conclusion of MPS's receipt of M&V Services, the Assured Performance Guarantee shall automatically terminate and Contractor shall have no liability hereunder.

The FIM Summary Sheet will be the basis for the Schedule of Values and will be used for payment requests.

The Contract Price in Section 3 of the Contract is derived from the APPENDIX A table shown on the following pages:

APPENDIX A

Appendix A1 - Facility Improvement Measure Listings
Site 006 Lincoln Center for the Arts = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
	Lighting															
006-F-LCORR	Corridor Upgrade/Replacement	\$2,157	\$399	\$1,694	\$188	\$131,479	\$290,526	\$2,121	\$219	\$428,783	\$7,798	\$15,000	\$3,731	\$26,528		\$72,900
006-F-LAUDIT	Auditorium Upgrade/Replacement	\$208	\$39	\$0	\$0	\$12,753	\$28,180	\$206	\$21	\$41,407	\$369	\$5,000	\$297	\$5,666		
006-F-LGYM	Gym Upgrade/Replacement	\$187	\$35	\$0	\$0	\$11,471	\$25,347	\$185	\$19	\$37,244	\$1,221	\$5,000	\$612	\$6,833		
006-F-LGDF	Gym Destratification Fans	\$106	\$20	\$529	\$59	\$6,336	\$14,001	\$102	\$11	\$21,164	\$316	\$0	\$0	\$316		
006-F-LCAFE	Cafeteria Upgrade/Replacement	\$489	\$90	\$0	\$0	\$29,919	\$66,111	\$483	\$50	\$97,141	\$691	\$4,000	\$799	\$5,489		
	Total	\$3,148	\$582	\$2,224	\$247	\$191,958	\$424,165	\$3,096	\$319	\$625,740	\$10,394	\$29,000	\$5,439	\$44,833	\$0	\$72,900

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms

Appendix A1 - Facility Improvement Measure Listings
Site 008 Milwaukee Marshall High School = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
	Lighting															
008-F-LCORR	Corridor Upgrade/Replacement	\$5,343	\$988	\$1,674	\$186	\$326,456	\$721,362	\$5,265	\$542	\$1,061,817	\$7,316	\$45,000	\$6,099	\$58,415		\$83,100
008-F-LGYM	Gym Upgrade/Replacement	\$338	\$63	\$0	\$0	\$20,708	\$45,758	\$334	\$34	\$67,235	\$3,723	\$5,000	\$864	\$9,587		
008-F-LGDF	Gym Destratification Fans	\$94	\$17	\$523	\$58	\$5,588	\$12,348	\$90	\$10	\$18,729	\$560	\$0	\$0	\$560		
008-F-LCAFE	Cafeteria Upgrade/Replacement	\$401	\$74	\$0	\$0	\$24,537	\$54,219	\$396	\$41	\$79,667	\$2,206	\$5,000	\$804	\$8,010		
	Total	\$6,176	\$1,143	\$2,198	\$244	\$377,289	\$833,687	\$6,085	\$626	\$1,227,449	\$13,805	\$55,000	\$7,767	\$76,573	\$0	\$83,100

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms

APPENDIX A

Purchase Requisition Number:

Contract Number:

Vendor Number: V0201847

Appendix A1 - Facility Improvement Measure Listings

Site 024 North Divison Multi-Plex = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
Lighting																
024-F-LCORR	Corridor Upgrade/Replacement	\$4,683	\$866	\$1,674	\$186	\$286,075	\$632,133	\$4,614	\$475	\$930,706	\$28,419	\$40,000	\$7,841	\$76,260	\$9,307	\$76,500
024-F-LGYM	Gym Upgrade/Replacement	\$526	\$97	\$0	\$0	\$32,218	\$71,191	\$520	\$53	\$104,605	\$4,289	\$8,000	\$982	\$13,271	\$1,046	
024-F-LGDF	Gym Destratification Fans	\$224	\$41	\$523	\$58	\$13,501	\$29,833	\$218	\$23	\$44,421	\$1,542	\$0	\$0	\$1,542	\$444	
Total		\$5,433	\$1,005	\$2,198	\$244	\$331,793	\$733,156	\$5,352	\$551	\$1,079,732	\$34,251	\$48,000	\$8,822	\$91,073	\$10,797	\$76,500

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms

Appendix A1 - Facility Improvement Measure Listings

Site 071 Milwaukee School of Languages = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
Lighting																
071-F-LCORR	Corridor Upgrade/Replacement	\$1,939	\$359	\$1,694	\$188	\$118,134	\$261,039	\$1,905	\$197	\$385,456	\$3,313	\$17,500	\$1,889	\$22,702	\$3,855	
071-F-LAUDIT	Auditorium Upgrade/Replacement	\$121	\$22	\$0	\$0	\$7,408	\$16,368	\$119	\$12	\$24,051	\$824	\$12,500	\$693	\$14,018	\$241	
071-F-LCAFE	Cafeteria Upgrade/Replacement	\$816	\$151	\$0	\$0	\$49,929	\$110,328	\$805	\$83	\$162,112	\$1,598	\$6,000	\$1,333	\$8,931	\$1,621	
Total		\$2,876	\$532	\$1,694	\$188	\$175,471	\$387,735	\$2,830	\$292	\$571,618	\$5,735	\$36,000	\$3,916	\$45,651	\$5,716	\$0

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms

APPENDIX A

Appendix A1 - Facility Improvement Measure Listings
Site 131 Dover Street Elementary School = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
	Lighting															
131-F-LCORR	Corridor Upgrade/Replacement	\$680	\$126	\$1,694	\$188	\$41,061	\$90,733	\$662	\$69	\$135,214	\$1,739	\$3,500	\$1,178	\$6,417	\$1,352	\$16,800
	Total	\$680	\$126	\$1,694	\$188	\$41,061	\$90,733	\$662	\$69	\$135,214	\$1,739	\$3,500	\$1,178	\$6,417	\$1,352	\$16,800

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms

Appendix A1 - Facility Improvement Measure Listings
Site 143 Eighty-First Street Elementary School = ESCO Input Data = MPS Input Data

PART 1

MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
	Lighting															
143-F-LCORR	Corridor Upgrade/Replacement	\$554	\$102	\$1,674	\$186	\$33,315	\$73,616	\$537	\$56	\$110,041	\$466	\$4,500	\$856	\$5,822	\$1,100	\$35,500
143-F-LGYM	Gym Upgrade/Replacement	\$163	\$30	\$0	\$0	\$9,984	\$22,062	\$161	\$17	\$32,417	\$1,807	\$500	\$378	\$2,685	\$324	
143-F-LCAFE	Cafeteria Upgrade/Replacement	\$34	\$6	\$0	\$0	\$2,092	\$4,623	\$34	\$3	\$6,792	\$621	\$2,000	\$524	\$3,144	\$68	
	Building Envelope															
143-F-ROOF	Roof Upgrade/Replacement	\$3,208	\$593	\$0	\$0	\$196,368	\$433,909	\$3,167	\$325	\$637,571	\$3,660	\$30,000	\$3,474	\$37,134	\$6,376	
	Total	\$3,959	\$732	\$1,674	\$186	\$241,759	\$534,210	\$3,899	\$402	\$786,821	\$6,553	\$37,000	\$5,231	\$48,785	\$7,868	\$35,500

Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms
 Revision by J Berget: Corrected sum formula for Columns D:L, N:Q, & AA:AC

APPENDIX A

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Appendix A1 - Facility Improvement Measure Listings																
Site 199 Green Bay Avenue Elementary School																
= ESCO Input Data																
= MPS Input Data																
PART 1																
MPS Requested Facility Improvement Measures		Costs (and proposed payment application allocation)									Annual Savings				Sum of CCS Costs (sum from all cost lines) (\$)	Environmental Contingency
MPS FIM ID	MPS FIM Description	Design Development (\$)	Pre Measurement & Verification (\$)	95% Design CD's (\$)	99% Design CD's (\$)	Equipment & Material (\$)	Labor & Installation (\$)	Closeout & Training (\$)	Post Measurement & Verification (\$)	Total Cost	Utility & Energy (\$)	Major Maintenance Deferred Cost Avoidance (\$)	Maintenance Operations Cost Avoidance (\$)	Total Savings (\$)		
	Lighting															
199-F-LCORN	Corridor Upgrade/Replacement	\$1,245	\$230	\$1,694	\$188	\$75,627	\$167,111	\$1,220	\$126	\$247,441	\$2,406	\$10,000	\$1,810	\$14,216	\$2,474	\$42,000
	Building Envelope															
199-F-ROOF	Roof Upgrade/Replacement	\$4,873	\$901	\$0	\$0	\$298,259	\$659,057	\$4,811	\$494	\$968,395	\$4,146	\$45,000	\$3,919	\$53,065	\$9,684	
	Total	\$6,118	\$1,132	\$1,694	\$188	\$373,886	\$826,167	\$6,030	\$620	\$1,215,836	\$6,552	\$55,000	\$5,729	\$67,281	\$12,158	\$42,000
Revision by J Berget: Removed Worksheet Data Value Definitions and Algorithms																
Revision by J Berget: Corrected sum formula for Columns D:L, N:Q, & AA:AC																
Revision by J Berget: Corrected cell O11 to autopopulated value from the A3 199 Savings Summary worksheet																

APPENDIX B –SCOPE OF WORK

Note regarding ceiling replacement: The intent is not to install a second ceiling over/under any existing ceiling. Under special circumstances a second ceiling option may be considered by MPS on a case by case basis and will be negotiated with the contractor.

**Project No. 006-F-LCORR + 006-F-LGYM + 006-F-LAUDIT + 006-F-LCAFE
Lighting Upgrade/Remodeling Project
Site 006 Lincoln Center of the Arts**

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Original corridors have ceilings consisting of 12"x12" concealed spline tiles with a combination of stem mounted single row light fixtures with either T8 or T12 fluorescent lamps
2. Remodeled corridors has corridors ceilings consisting of 2x4 lay-in tiles with 2x4 lay-in light fixtures with T8 and/or T12 fluorescent lamps
3. Auditorium Lobby has stem mounted decorative incandescent fixtures
4. Auditorium has stem mounted decorative incandescent fixtures
5. Gym has stem mounted HPS fixtures. Gym has ceilings consisting of 12"x12" concealed spline tiles
6. Cafeteria has 4' long wrap around fixtures with fluorescent lamps. Cafeteria has ceilings consisting of 12"x12" concealed spline tiles.

Scope:

1. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
2. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
3. Original Corridors:
 - a. Temporarily support all speakers, fire alarm system devices, etc.
 - b. Remove obsolete 2'x4' grid, supports, lights, stems, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install new 2'x4' ceiling grid with 2'x4' tectum ceiling tiles to hide the majority of conduit.
 - e. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - f. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - g. Replace all exit light fixtures with Extreme LED fixtures
 - h. Replace all decorative fixtures in the lobby with stem mounted decorative LED fixtures equal to Winona 4920 LED.
4. Remodeled Corridors:
 - a. Temporarily support all speakers, fire alarm system devices, etc.
 - b. Replace all ceiling tiles with new tectum tiles
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - e. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - f. Replace all exit light fixtures with Extreme LED fixtures
5. Auditorium:
 - a. Replace all the fixtures with decorative stem mounted dimmable LED fixtures. Integrate new fixtures into house lighting control panel for dimming capability.
 - b. Fixtures to be equal to Winona 4920 LED.
 - c. Turnover removed fixtures to MPS
6. Gym and Aux Gyms:

APPENDIX B

Purchase Requisition Number:
Contract Number:
Vendor Number: V0201847

- a. Replace all fixtures in the Gym with cable mounted LED fixtures
 - b. Lighting arrangement such that there is 110 FC on court surfaces.
 - c. Install air destratification fans in Gym with sensors, wiring, etc. connect to centralized control panel that is connected to the DDC system
7. Cafeteria:
- a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install direct/indirect dimmable LED recessed troffer fixtures in new grid. Fixtures equal to Lithonia BLT Series.
 - g. Install dimming control wiring to a remote dimming control panel
 - h. Replace all exit light fixtures with Extreme LED fixtures

APPENDIX B

Project No. 008-F-LCORR + 008-F-LGYM + 008-F-LCAFE Lighting Project Site 008 Milwaukee Marshall

Budgeted Project Cost:

The budget for the entire project was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Original Corridors have ceilings consisting of 12"x12" concealed spline tiles with a 2'x4' light fixtures with T8 fluorescent lamps
2. Remodeled corridors have ceilings consisting of 2x4 lay-in tiles with 2x4 lay-in light fixtures with T8 fluorescent lamps
3. Cafeteria fixtures are HPS cans. Cafeteria ceiling is exposed concrete.
4. Lobby fixtures are incandescent cans.
5. Gym fixtures are combination of fluorescent and HPS

Scope:

1. For purposes of this project; lobbies and corridors shall be considered part of 008-LCORR and the kitchen and serving areas shall be part of 008-F-LCAFE
2. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
3. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
4. Original Corridors:
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" corridor ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - f. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - g. Replace all exit light fixtures with Extreme LED fixtures
5. Remodeled Corridors:
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Replace all ceiling tiles with new tectum tiles
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - e. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - f. Replace all exit light fixtures with Extreme LED fixtures
6. Gym:
 - a. Remove original remote ballasts and remove separate emergency fixtures and combine operation with new fixtures
 - b. Replace all fixtures in the Gym with cable hung LED fixtures
 - c. Lighting arrangement such that there is 110 FC on court surfaces.
 - d. Install air destratification fans in Gym with sensors, wiring, etc. connect to centralized control panel that is connected to the DDC system
7. Cafeteria:
 - a. Replace HPS fixtures with dimmable LED fixtures.
 - b. Connect fixtures to a remote dimming control panel.
8. Lobbies: (Lobby 1-1 and 1-2)
 - a. Replace incandescent can fixtures with a combination LED cans and decorative stem mounted dimmable LED fixtures.
 - b. Decorative fixtures equal to Winona 4920 LED.

APPENDIX B

Project No. 024-F-LCORR + 024-F-LGYM Lighting Upgrade/Replacement Project Site 024 North Division High School

Budgeted Project Cost:

The budget for the entire project was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Corridor has ceilings consisting of 24"x12" concealed spline metal pans with a cove lighting along the perimeter with either T8 or T12 fluorescent lamps
2. Field House has stem mounted custom 400W HPS can light fixtures and 4' long (2) lamp fluorescent emergency fixtures hung from exposed ceiling.

Scope:

1. For purposes of this project the lobby work shall be considered part of 024-F-LCORR
2. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
3. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
4. Corridors:
 - a. Remove 24"x12" corridor ceiling metal pan system, black-iron support grid, light fixtures, etc.
 - b. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Replace all exit light fixtures with Extreme LED fixtures
 - g. Install 2x4 lay-in LED fixtures for consistent light levels
 - h. Lobby: Replace HPS can style fixtures with LED fixtures
5. Fieldhouse:
 - a. Remove all HPS fixtures and install cable hung LED fixtures
 - b. Adjust the lighting layout as required to attain 110 FC on the court surfaces
 - c. Install air destratification fans in Gym with sensors, wiring, etc. connect to centralized control panel that is connected to the DDC system
 - d. Replace all exit light fixtures with Extreme LED fixtures
 - e. Turnover removed aluminum light fixture bodies to MPS

APPENDIX B

Purchase Requisition Number:
Contract Number:
Vendor Number: V0201847

**Project No. 071-F-LCORR + 071-F-LCAFE + 071-F-LAUDIT
Lighting Upgrade/Replacement Project
Site 071 Milwaukee School of Languages**

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

- 1. Corridor has ceilings consisting of 12"x12" concealed spline tiles with 1'x4' light fixtures with T8 fluorescent lamps
- 2. Lighting in the Gyms was remodeled in 2012
- 3. Cafeteria/Kitchen has ceilings consisting of 12"x12" concealed spline tiles with 1'x4' and 2'x4' light fixtures with T8 fluorescent lamps
- 4. Auditorium has recessed can style fixtures with incandescent lamps.
- 5. Library has ceilings consisting of 2'x4' lay-in tile below plaster with 2'x4' light fixtures with T8 fluorescent lamps

Scope:

- 1. For the purposes of this project library and surrounding areas shall be part of 071-F-LCAFE
- 2. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
- 3. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
- 4. Corridors:
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - g. Replace all exit light fixtures with Extreme LED fixtures
- 5. Auditorium;
 - a. Replace all the fixtures with new dimmable LED can style fixtures.
 - b. Integrate new fixtures into house lighting panel for dimming capability.
 - c. Replace stage lighting, lighting control and sound system as indicated on proposal from Main Stage (system to be similar to that at site 049 Parkside)
 - d. Locate new lighting control panel in center of the Auditorium.
- 6. Cafeteria/Kitchen
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install direct/indirect LED recessed troffer fixtures in new grid. Fixtures equal to Lithonia BLT Series.
 - g. Replace all exit light fixtures with Extreme LED fixtures
- 7. Library
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 2'x4' ceiling tile system, support system, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install direct/indirect LED recessed troffer fixtures in new grid. Fixtures equal to Lithonia BLT Series.
 - g. Replace all exit light fixtures with Extreme LED fixtures

APPENDIX B

Project No. 131-F-LCRR Lighting Upgrade/Replacement Project Site 131 Dover Street Elementary School

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Ground, 1st and 2nd Floor corridors have ceilings consisting of 24"x12" concealed spline metal pans with 1'x4' and 2'x4' light fixtures with T8 fluorescent lamps
2. 3rd Floor corridor has 2'x4' lay-in tile ceiling with 2'x4' light fixtures with T8 fluorescent lamps

Scope:

1. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
2. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
3. Ground, 1st and 2nd Floor Corridors:
 - a. Temporarily support all speakers, fire alarm system devices, etc.
 - b. Remove 24"x12" metal pan ceiling system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Replace all exit light fixtures with Extreme LED fixtures
 - g. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
4. 3rd Floor Corridors:
 - a. Temporarily support all speakers, fire alarm system devices, etc.
 - b. Remove 24"x48" lay-in tile ceiling system, support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Replace all exit light fixtures with Extreme LED fixtures
 - g. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer

APPENDIX B

Project No. 143-F-LCORR + 143-F-LCAFE + 143-F-LGYM Lighting Upgrade/Replacement Project Site 143 81st Street School

Budgeted Project Cost:

The budget for the entire project was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Corridor has ceilings consisting of 12"x12" concealed spline tiles with 1'x4' and 2'x4' light fixtures with fluorescent lamps
2. Gym/Multi-Purpose room has recessed fixtures with fluorescent lamps
3. Cafeteria has ceilings consisting of 12"x12" concealed spline tiles with 1'x4' stem mounted fixtures with fluorescent lamps

Scope:

1. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
2. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
3. Corridors:
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - g. Replace all exit light fixtures with Extreme LED fixtures
4. Gym/MP Room:
 - a. Replace all T8 lamps with 5000oK LED lamps
5. Cafeteria:
 - a. Temporarily support any speaker, fire alarm devices, cameras, etc.
 - b. Remove 12"x12" ceiling tile system, black-iron support grid, light fixtures, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install 2'x4' lay-in ceiling grid with tectum tiles and clips
 - e. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - f. Install direct/indirect LED recessed troffer fixtures in new grid. Fixtures equal to Lithonia BLT Series.
 - g. Replace all exit light fixtures with Extreme LED fixtures

APPENDIX B

Project No. 143-F-ROOF Roof Replacement Project Site 143 81st Street School

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. See digital deliverable engineering data spreadsheet for this building (circa 2012)
2. Roof Sections are as follows:

RF143A	4 PLY SMOOTH ASPH, 1' PERLITE	4,600
RF143B	4 PLY SMOOTH ASPH, 1' PERLITE	7,200
RF143C	4PLY SMTH ASP,TAP POLY&3/4'PER	11,400
RF143D	MOD BIT (GRAN),TAPERED POLYISO	2,000
RF143E	4PLY ASPH & GRAVEL, 2' PERLITE	1,400

Scope:

1. Tear off and replace all roof sections per MPS master specifications with taper insulation system to assure positive drainage.
2. Install fall protection railing system around the roof perimeters.
3. Do not replace Section 143F (South Overhang)

Plumbing:

1. Replace/modify roof drain locations and piping as required for new roof layout
2. Insulation work as required for roof drain modifications and abatement

Abatement (by MPS):

1. Storm piping abatement as required for drain modifications.

APPENDIX B

Project No. 199-F-LCORR Lighting Upgrade/Replacement Project Site 199 Green Bay Ave. School

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. Corridor have ceilings consisting of 2x4 lay-in tiles with stem mounted single row light fixtures with fluorescent lamps

Scope:

1. The intent is to replace all the lighting fixtures with LED fixtures type fixtures in identified areas
2. See digital deliverable spreadsheet for details of areas to be modified (high-lighted)
3. Corridors:
 - a. Temporarily support all speakers, fire alarm system devices, etc.
 - b. Remove obsolete 2'x4' grid, supports, lights, stems, etc.
 - c. Properly support any cable sitting on old ceiling grid as required
 - d. Install new 2'x4' ceiling grid with 2'x4' tectum ceiling tiles to hide the majority of conduit.
 - e. Install recessed troffer fixtures in new grid. Fixtures equal to Lithonia T Series Recessed LED Troffer
 - f. Re-install any speaker, fire alarm system devices, etc. into new ceiling tile system
 - g. Replace all exit light fixtures with Extreme LED fixtures
 - h. Replace all decorative fixtures in the lobby with stem mounted decorative LED fixtures equal to Winona 4920 LED.

APPENDIX B

Project No. 199-F-ROOF Roof Replacement Project Site 199 Green Bay Ave. School

Budgeted Project Cost:

The budget for the entire project cost was estimated as presented in the RFP and includes any equipment and all mechanical, electrical, structural, general, plumbing, etc. costs for all phases of work.

Proposed Scope of Work:

Notes:

1. See digital deliverable engineering data spreadsheet for this building (circa 2013)
2. Roof Sections are as follows:

RF199A	4 PLY ASPH&GRAVEL, 1' PERLITE	17,000
RF199B	4 PLY ASPH&GRVL, 1' PERLITE	8,300
RF199C	4 PLY ASPH&GRVL, 1' PERLITE	400
RF199D	4 PLY ASPH&GRVL, 1' PERLITE	800
RF199E	4 PLY ASPH&GRVL, 1' PERLITE	1,200
RF199F	4 PLY ASPH&GRAVEL, 1' PERLITE	800
RF199G	4 PLY ASPH&GRAVEL, 1' PERLITE	400
RF199H	METAL DECK, NONE	200
RF199I	METAL DECK W/RUBBER, NONE	300
RF199J	MOD. BITUMEN, NONE	600

Scope:

1. Tear off and replace all roof sections per MPS master specifications with taper insulation system to assure positive drainage.
2. Install fall protection railing system around the roof perimeters.

Plumbing:

1. Replace/modify roof drain locations and piping as required for new roof layout
2. Insulation work as required for roof drain modifications and abatement

Abatement (by MPS):

1. Storm piping abatement as required for drain modifications.

APPENDIX C
ASSURED PERFORMANCE GUARANTEE
Measurement & Verification Plan per FIM

FIM	Components	M&V Option				Non-Measured
		A	B	C	D	
006-F-LCORR	Corridor Upgrade/Replacement	X				
006-F-LAUDIT	Auditorium Upgrade/Replacement	X				
006-F-LGYM	Gym Upgrade/Replacement	X				
006-F-LGDF	Gym Destratification Fans	X				
006-F-LCAFE	Cafeteria Upgrade/Replacement	X				
008-F-LCORR	Corridor Upgrade/Replacement	X				
008-F-LGYM	Gym Upgrade/Replacement	X				
008-F-LGDF	Gym Destratification Fans	X				
008-F-LCAFE	Cafeteria Upgrade/Replacement	X				
024-F-LCORR	Corridor Upgrade/Replacement	X				
024-F-LGYM	Gym Upgrade/Replacement	X				
024-F-LGDF	Gym Destratification Fans	X				
071-F-LCORR	Corridor Upgrade/Replacement	X				
071-F-LAUDIT	Auditorium Upgrade/Replacement	X				
071-F-LCAFE	Cafeteria Upgrade/Replacement	X				
131-F-LCORR	Corridor Upgrade/Replacement	X				
143-F-LCORR	Corridor Upgrade/Replacement	X				
143-F-LGYM	Gym Upgrade/Replacement	X				
143-F-LCAFE	Cafeteria Upgrade/Replacement	X				
143-F-ROOF	Roof Upgrade/Replacement	X				
199-F-LCORR	Corridor Upgrade/Replacement	X				
199-F-ROOF	Roof Upgrade/Replacement	X				

I. PROJECT BENEFITS

A. Certain Definitions. For purposes of this Agreement, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

Annual Project Benefits Surplus is the amount by which the Annual Project Benefits Realized exceed the Annual Project Benefits in any one year of the Guarantee Term.

APPENDIX C

Purchase Requisition Number:
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Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Section IV below.

Guarantee Term will commence on the first day of the month next following the Substantial Completion date and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement.

Installation Period is the period beginning on **Contractor**'s receipt of Customer's Notice to Proceed and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the utility savings and cost avoidance calculated in accordance with the methodologies set forth in Section III below.

Non-Measured Project Benefits are identified in Section II below. The Non-Measured Project Benefits have been agreed to by Customer and will be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below. Customer and Contractor agree that: (i) the Non-Measured Project Benefits may include, but are not limited to, future capital and operational costs avoided as a result of the Work and implementation of the Improvement Measures, (ii) achievement of the Non-Measured Project Benefits is outside of Contractor's control, and (iii) Customer has evaluated sufficient information to conclude that the Non-Measured Project Benefits will occur and bears sole responsibility for ensuring that the Non-Measured Project Benefits will be realized. Accordingly, the Non-Measured Project Benefits shall not be measured or monitored by Contractor at any time during the Guarantee Term, but rather shall be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below.

Project Benefits are the Measured Project Benefits plus the Non-Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

Total Project Benefits are the projected Project Benefits to be achieved during the entire term of this Agreement.

B. Project Benefits Summary. Subject to the terms and conditions of this Agreement, Contractor and Customer agree that Customer will be deemed to achieve a total of \$790,893 in Non-Measured Project Benefits and Contractor guarantees that Customer will achieve a total of \$231,656 in Measured Project Benefits during the term of this Agreement, for Total Project Benefits of \$1,022,548 as set forth in the Total Project Benefits table below.

APPENDIX C

Purchase Requisition Number:
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 Vendor Number: V0201847

TOTAL PROJECT BENEFITS

Site 006 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non-Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
2	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
3	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
4	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
5	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
6	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
7	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
8	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
9	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
10	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
11	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
12	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
13	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
14	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
15	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
16	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
17	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
18	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
19	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
20	\$10,394	\$0	\$10,394	\$29,000	\$5,439	\$44,833
006 Total	\$207,880	\$0	\$207,880	\$580,000	\$108,780	\$896,660

APPENDIX C

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Site 008 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non- Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
2	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
3	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
4	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
5	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
6	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
7	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
8	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
9	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
10	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
11	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
12	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
13	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
14	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
15	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
16	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
17	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
18	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
19	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
20	\$13,805	\$0	\$13,805	\$55,000	\$7,767	\$76,572
008 Total	\$276,100	\$0	\$276,100	\$1,100,000	\$155,340	\$1,531,440

APPENDIX C

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Site 024 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non- Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
2	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
3	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
4	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
5	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
6	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
7	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
8	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
9	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
10	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
11	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
12	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
13	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
14	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
15	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
16	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
17	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
18	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
19	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
20	\$34,251	\$0	\$34,251	\$48,000	\$8,822	\$91,073
024 Total	\$685,020	\$0	\$685,020	\$960,000	\$175,440	\$1,821,460

APPENDIX C

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Site 071 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non-Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
2	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
3	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
4	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
5	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
6	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
7	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
8	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
9	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
10	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
11	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
12	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
13	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
14	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
15	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
16	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
17	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
18	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
19	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
20	\$5,735	\$0	\$5,735	\$36,000	\$3,916	\$45,651
071 Total	\$114,700	\$0	\$114,700	\$720,000	\$78,320	\$913,020

APPENDIX C

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Site 131 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non-Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
2	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
3	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
4	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
5	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
6	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
7	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
8	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
9	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
10	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
11	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
12	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
13	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
14	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
15	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
16	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
17	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
18	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
19	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
20	\$1,739	\$0	\$1,739	\$3,500	\$1,178	\$6,417
131 Total	\$34,780	\$0	\$34,780	\$70,000	\$23,560	\$128,340

APPENDIX C

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Site 143 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non-Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance**	Total Savings (Annual)
1	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
2	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
3	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
4	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
5	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
6	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
7	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
8	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
9	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
10	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
11	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
12	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
13	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
14	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
15	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
16	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
17	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
18	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
19	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
20	\$6,553	\$0	\$6,553	\$37,000	\$5,231	\$48,784
143 Total	\$131,060	\$0	\$131,060	\$740,000	\$104,620	\$975,680

APPENDIX C

Purchase Requisition Number:
 Contract Number:
 Vendor Number: V0201847

Site 199 Year	Utility Cost Avoidance Measured*	Utility Cost Avoidance Non-Measured*	Total Utility Cost Avoidance*	Major Maintenance Deferred Cost Avoidance **	Maintenance Operations Cost Avoidance***	Total Savings (Annual)
1	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
2	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
3	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
4	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
5	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
6	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
7	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
8	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
9	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
10	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
11	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
12	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
13	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
14	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
15	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
16	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
17	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
18	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
19	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
20	\$6,552	\$0	\$6,552	\$55,000	\$5,729	\$67,281
199 Total	\$131,040	\$0	\$131,040	\$1,100,000	\$114,580	\$1,345,620

Per MPS Request, Utility Cost Avoidance will be measured in Year 1 and stipulated for the remainder of the contract.

*Utility Cost Avoidance is a Measured Project Benefit. Utility Cost Avoidance figures in the table above are based on current unit energy costs with no escalation as set forth in the table in Section IV below.

** Major Maintenance Deferred Cost Avoidance and Maintenance Operations Savings are Non-Measured Project Benefits. Major Maintenance Deferred Cost Avoidance and Maintenance Operations Savings figures in the table above are based on current report values with no escalation.

Within sixty (60) days of the commencement of the Guarantee Term, Contractor will calculate the Measured Project Benefits achieved during the Installation Period plus any Non-Measured Project Benefits applicable to such period and advise Customer of same. Any Project Benefits achieved during the Installation Period may, at Contractor’s discretion, be allocated to the Annual Project Benefits for the first year of the Guarantee Term. Within sixty (60) days of each anniversary of the commencement of the Guarantee Term, Contractor will calculate the Measured Project Benefits achieved for the applicable year plus any Non-Measured Project Benefits applicable to such period and advise Customer of same.

Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Appendix A, (iii) fails to fulfill any of its responsibilities necessary to enable Contractor to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate and Contractor shall have no liability hereunder.

APPENDIX C

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C. Project Benefits Shortfalls or Surpluses.

- (i) Project Benefits Shortfalls. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, Contractor shall, at its discretion and in any combination, (a) set off the amount of such shortfall against any unpaid balance Customer then owes to Contractor, (b) where permitted by applicable law, increase the next year’s amount of Annual Project Benefits by the amount of such shortfall, (c) pay to Customer the amount of such shortfall, or (d) subject to Customer’s agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer.*
- (ii) Project Benefits Surpluses. . If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, Contractor may, at its discretion, apply the amount of such surplus to set off any subsequent Annual Project Benefit Shortfall during the Guarantee Term.
- (iii) Additional Improvements. Where an Annual Project Benefits Shortfall has occurred, Contractor may, subject to Customer’s approval (which approval shall not be unreasonably withheld, conditioned, or delayed), implement additional Improvement Measures, at no cost to Customer, which may generate additional Project Benefits in future years of the Guarantee Term.

*In the event Contractor is providing an Assured Performance Guarantee under Appendix C, Annual Project Benefits Shortfalls and Annual Project Benefits Surpluses under Appendix C shall be reconciled against one another.

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II. NON-MEASURED PROJECT BENEFITS

Source of Non-Measured Project Benefits	First Year Utility Avoidance	First Year Operations & Maintenance Cost Avoidance	Total Avoidance
006-F-LCORR		\$3,731	\$3,731
006-F-LAUDIT		\$297	\$297
006-F-LGYM		\$612	\$612
006-F-LGDF		\$0	\$0
006-F-LCAFE		\$799	\$799
008-F-LCORR		\$6,099	\$6,099
008-F-LGYM		\$864	\$864
008-F-LGDF		\$0	\$0
008-F-LCAFE		\$804	\$804
024-F-LCORR		\$7,841	\$7,841
024-F-LGYM		\$982	\$982
024-F-LGDF		\$0	\$0
071-F-LCORR		\$1,889	\$1,889
071-F-LAUDIT		\$693	\$693
071-F-LCAFE		\$1,333	\$1,333
131-F-LCORR		\$1,178	\$1,178
143-F-LCORR		\$856	\$856
143-F-LGYM		\$378	\$378
143-F-LCAFE		\$524	\$524
143-F-ROOF		\$3,474	\$3,474
199-F-LCORR		\$1,810	\$1,810
199-F-ROOF		\$3,919	\$3,919

Customer has furnished the foregoing information to Contractor, which information forms the basis of the Non-Measured Project Benefits. Customer agrees that the Non-Measured Project Benefits are reasonable and that the installation of the Improvement Measures will enable Customer to take actions that will result in the achievement of such Non-Measured Project Benefits.

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III. MEASUREMENT AND VERIFICATION METHODOLOGIES

The following is a brief overview of the measurement and verification methodologies applicable to the Improvement Measures set forth below. Contractor shall apply these methodologies, as more fully detailed in the guidelines and standards of the International Measurement and Verification Protocol (IPMVP), in connection with the provision of M&V Services hereunder.

M&V Options Summary

Improvement Measure	Electric M&V Option	Gas M&V Option	Water M&V Option
Corridor Upgrade/Replacement	A		
Auditorium Upgrade/Replacement	A		
Gym Upgrade/Replacement	A		
Gym Destratification Fans	A	A	
Cafeteria Upgrade/Replacement	A		
Roof Upgrade/Replacement	A	A	

**Option A
 Retrofit Isolation: Key Parameter Measurement**

Measured Project Benefits are determined by partial field measurement of the energy use of the system(s) to which an Improvement Measure was applied separate from the energy use of the rest of the facility.

Partial measurement means that some but not all parameters will be measured. Careful review of the design and installation of Improvement Measures is intended to demonstrate that the stipulated values fairly represent the probable actual values. Agreed-upon values will be shown in the measurement and verification plan. Engineering calculations using measurements and stipulations are used to calculate Measured Project Benefits for the duration of the Guarantee Term.

Measured Project Benefits from the following Improvement Measures will be calculated using Option A:

Source of Measured Benefit	Electric M&V Option	Gas M&V Option	First Year Utility Avoidance
006-F-LCORR	\$7,798		\$7,798
006-F-LAUDIT	\$369		\$ 369
006-F-LGYM	\$1,221		\$1,221
006-F-LGDF	-\$65	\$381	\$316
006-F-LCAFE	\$691		\$ 691
008-F-LCORR	\$7,316		\$7,316
008-F-LGYM	\$3,723		\$3,723
008-F-LGDF	-\$85	\$645	\$560
008-F-LCAFE	\$2,206		\$2,206
024-F-LCORR	\$28,419		\$28,419
024-F-LGYM	\$4,289		\$4,289
024-F-LGDF	-\$166	\$1,708	\$1,542
071-F-LCORR	\$3,313		\$3,313
071-F-LAUDIT	\$824		\$ 824
071-F-LCAFE	\$1,598		\$1,598
131-F-LCORR	\$ 1,739		\$1,739
143-F-LCORR	\$ 466		\$ 466
143-F-LGYM	\$ 1,807		\$1,807
143-F-LCAFE	\$ 621		\$ 621
143-F-ROOF		\$3,660	\$3,660
199-F-LCORR	\$2,406		\$2,406
199-F-ROOF		\$4,146	\$4,146

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006-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

006-F-LCORR													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD	40	25	3,744	1.0	3,744	NA	NA	NA
-	4TH FLOOR	0	0	3,744	0.000	0	LED - ADD	38	25	3,744	1.0	3,557	NA	NA	NA
-	GROUND FLOOR	0	0	3,744	0.000	0	LED - ADD	26	25	3,744	0.7	2,434	NA	NA	NA
-	2ND/3RD FLOOR	0	0	3,744	0.000	0	LED - ADD	32	25	3,744	0.8	2,995	NA	NA	NA
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-1	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$37
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	CORR 2-2	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$37
ECF - Exit Sign - 2X7CFLEXIT	CORR 2-1	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-4	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-3	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$55
ECF - Exit Sign - 2X7CFLEXIT	Corr 2-4	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$37
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-4	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-3	4	21	8,760	0.084	736	ECF - Exit Sign - IN	4	3	8,760	0.0	105	0.1	631	\$74
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-1	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	Corr 4-2	7	21	8,760	0.147	1,288	ECF - Exit Sign - IN	7	3	8,760	0.0	184	0.1	1,104	\$129
ECF - Exit Sign - 2X7CFLEXIT	Corr 4-1	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$37
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-5	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	CORR G2	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$55

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ECF - Exit Sign - 2X7CFLEXIT	CORR G3	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$55
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-3A	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-3B	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$18
ECF - Exit Sign - 2X7CFLEXIT	CORR 4-4	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$55
CF - Compact Fluorescent - 1X23CFLSI	Corr 2-3	8	23	3,744	0.184	689	- OUT	0	0	0	0.0	0	0.2	689	\$80
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-1	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-2	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-2	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-1	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-4	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-4	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-3	10	31	3,744	0.310	1,161	- OUT	0	0	0	0.0	0	0.3	1,161	\$135
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-4	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-3	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-2	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-1	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 4-2	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G3	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-3B	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$14
FT8 - T8 Linear Fluorescent -	CORR 4-4	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$27

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1X32T8EBN															
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	Corr 2-4	1	43	3,744	0.043	161	- OUT	0	0	0	0.0	0	0.0	161	\$19
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	Corr 2-5	1	43	3,744	0.043	161	- OUT	0	0	0	0.0	0	0.0	161	\$19
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	Corr 4-2	1	43	3,744	0.043	161	- OUT	0	0	0	0.0	0	0.0	161	\$19
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	Corr 3-5	1	43	3,744	0.043	161	- OUT	0	0	0	0.0	0	0.0	161	\$19
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	CORR G1	1	43	3,744	0.043	161	- OUT	0	0	0	0.0	0	0.0	161	\$19
FT12 - T12 and other Linear Fluorescent - 1X34T12MB	CORR G2	3	43	3,744	0.129	483	- OUT	0	0	0	0.0	0	0.1	483	\$56
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	19	58	3,744	1.102	4,126	- OUT	0	0	0	0.0	0	1.1	4,126	\$481
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-2	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$304
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-2	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$304
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-1	5	58	3,744	0.290	1,086	- OUT	0	0	0	0.0	0	0.3	1,086	\$127
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-4	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$304
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-3	8	58	3,744	0.464	1,737	- OUT	0	0	0	0.0	0	0.5	1,737	\$203
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-4	3	58	3,744	0.174	651	- OUT	0	0	0	0.0	0	0.2	651	\$76
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-3	30	58	3,744	1.740	6,515	- OUT	0	0	0	0.0	0	1.7	6,515	\$760
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-4	2	58	3,744	0.116	434	- OUT	0	0	0	0.0	0	0.1	434	\$51
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-3	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$101

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FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-2	3	58	3,744	0.174	651	- OUT	0	0	0	0.0	0	0.2	651	\$76
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-1	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$101
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 4-2	15	58	3,744	0.870	3,257	- OUT	0	0	0	0.0	0	0.9	3,257	\$380
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 4-1	21	58	3,744	1.218	4,560	- OUT	0	0	0	0.0	0	1.2	4,560	\$532
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G1	21	58	3,744	1.218	4,560	- OUT	0	0	0	0.0	0	1.2	4,560	\$532
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G2	7	58	3,744	0.406	1,520	- OUT	0	0	0	0.0	0	0.4	1,520	\$177
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G3	14	58	3,744	0.812	3,040	- OUT	0	0	0	0.0	0	0.8	3,040	\$355
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1- 3A	5	58	3,744	0.290	1,086	- OUT	0	0	0	0.0	0	0.3	1,086	\$127
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1- 3B	5	58	3,744	0.290	1,086	- OUT	0	0	0	0.0	0	0.3	1,086	\$127
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 4-4	3	58	3,744	0.174	651	- OUT	0	0	0	0.0	0	0.2	651	\$76
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 2-4	9	72	3,744	0.648	2,426	- OUT	0	0	0	0.0	0	0.6	2,426	\$283
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 3-4	10	72	3,744	0.720	2,696	- OUT	0	0	0	0.0	0	0.7	2,696	\$315
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 3-3	15	72	3,744	1.080	4,044	- OUT	0	0	0	0.0	0	1.1	4,044	\$472
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 3-2	9	72	3,744	0.648	2,426	- OUT	0	0	0	0.0	0	0.6	2,426	\$283
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 2-5	6	72	3,744	0.432	1,617	- OUT	0	0	0	0.0	0	0.4	1,617	\$189
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 4-2	17	72	3,744	1.224	4,583	- OUT	0	0	0	0.0	0	1.2	4,583	\$535
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	Corr 3-5	4	72	3,744	0.288	1,078	- OUT	0	0	0	0.0	0	0.3	1,078	\$126

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FT12 - T12 and other Linear Fluorescent - 2X34T12MB	CORR G2	6	72	3,744	0.432	1,617	- OUT	0	0	0	0.0	0	0.4	1,617	\$189
FT12 - T12 and other Linear Fluorescent - 2X34T12MB	CORR 4-4	8	72	3,744	0.576	2,157	- OUT	0	0	0	0.0	0	0.6	2,157	\$252
CF - Compact Fluorescent - 8X13CFLSI	Corr 1-3	1	104	3,744	0.104	389	- OUT	0	0	0	0.0	0	0.1	389	\$45
006-F-LCORR Total		378			20.402	80,599		176			3.520	13,781	16.882	66,818	\$7,798

006-F-LAUDIT

Auditorium Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

006-F-LAUDIT												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	227	0	0	1,584	0.000	0	- ADD	1	0	1,584	0.0	0	NA	NA	NA
ECF - Exit Sign - 2X7CFLEXIT	227	12	21	8,760	0.252	2,208	ECF - Exit Sign - IN	12	3	8,760	0.0	315	0.2	1,892	\$221
I Standard Incandescent - 1X25INCA	227	8	25	1,584	0.200	317	LED - IN	8	10	1,584	0.1	127	0.1	190	\$22
CF - Compact Fluorescent - 8X13CFLSI	227	12	104	1,584	1.248	1,977	LED - IN	12	64	1,584	0.8	1,217	0.5	760	\$89
I Standard Incandescent - 1X200INCA	227	1	200	1,584	0.200	317	- OUT	0	0	0	0.0	0	0.2	317	\$37
006-F-LAUDIT Total		33			1.900	4,818		33			0.9	1,659	1.0	3,159	\$369

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006-F-LGYM

Gym Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

006-F-LGYM													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/Yr	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/Yr	Savings kW	Savings kWh/Yr	Savings kWh \$/yr
ECF - Exit Sign - 2X7CFLEXIT	11/46/8	6	21	8,760	0.126	1,104	ECF - Exit Sign - IN	6	3	8,760	0.0	158	0.1	946	\$110
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	12	18	79	1,584	1.422	2,252	LED - IN	18	135	1,109	2.4	2,694	-1.0	-442	-\$52
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	50	12	79	1,584	0.948	1,502	LED - IN	12	135	1,109	1.6	1,796	-0.7	-295	-\$34
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	11/46/8	12	79	1,584	0.948	1,502	LED Tube - RET	12	42	1,584	0.5	791	0.4	711	\$83
MH Metal Halide Fixtures - 1X400MH	11/46/8	20	458	1,584	9.160	14,509	LED - IN	20	224	1,109	4.5	4,967	4.7	9,542	\$1,114
006-F-LGYM Total		68			12.604	20,869		68			9.0	10,406	3.6	10,462	\$1,221

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006-F-LGDF

Gym Destratification Fans - The following energy calculation was supplied by MPS. The energy savings is agreed to be reasonable and achievable by both parties. No further calculation or verification will be done to prove savings. A visual site inspection of the equipment and review of the final close out documentation will be done to confirm operation.

***ENERGY SAVINGS**

Length of space (ft.)	95	
Width of space (ft.)	105	
Ceiling height (ft., average)	25	
Height of Thermostat from Floor (ft.)	4.0	Estimate (typical height would be 4-5 ft.)
Roof Insulation R value	9.00	
Wall Insulation R value	3.000	
Annual Heating Hours	4,706	Per bin weather data for Milwaukee
Occupied Hours/wk.	35	
Unoccupied Hours/wk.	133	
Occupied Temp (deg. F)	70	Estimated Temp at thermostat height
Unoccupied Temp	70.0	Estimated Temp at thermostat height
Avg. Outdoor Air Temp (heating season)	30.5	From bin weather data
Existing Heating System Efficiency	88.0%	Est. heating efficiency.
Roof Area (sq. ft.)	9,975	
Est. Inside Ceiling Temp Occupied (deg. F)	80.50	
Est. Inside Ceiling Temp Unoccupied	80.50	
Baseline Annual Therm Use	2,964	
Proposed Heating System Efficiency	88.00%	
Destratification Savings Factor	100%	100% = perfect mixing or same temp at ceiling and tstat
Proposed Indoor Ceiling Temp Occupied	70.00	
Proposed Indoor Ceiling Temp Unoccupied	70.00	
Proposed Annual Therm Use:	2,341	
Total kW of Motors	0.210	# Motors X kW each
Estimate Motor Efficiency	85.0%	
Est. Fan run-time hours	2,824	60% of annual heating hours
Load Factor	80.0%	80% Typical
New kWh Use	558	Negative since fan energy increases
Savings kWh/yr.	-558	Negative due to increased fan energy use
Savings kWh \$/yr.	-\$65	
Savings th/yr.	622	
Savings th \$/yr.	\$381	

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006-F-LCAFE

Cafeteria Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

006-F-LCAFE													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/Yr	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/Yr	Savings kW	Savings kWh/Yr	Savings kWh \$/yr
-	411	0	0	2,160	0.000	0	LED - ADD	36	25	2,160	0.9	1,944	NA	NA	NA
-	412/412B/E	0	0	2,160	0.000	0	LED - ADD	16	25	2,160	0.4	864	NA	NA	NA
ECF - Exit Sign - 2X7CFLEXIT	411	6	21	8,760	0.126	1,104	ECF - Exit Sign - IN	6	3	8,760	0.0	158	0.1	946	\$110
FT8 - T8 Linear Fluorescent - 1X32T8EBN	411	30	31	2,160	0.930	2,009	- OUT	0	0	0	0.0	0	0.9	2,009	\$234
FT8 - T8 Linear Fluorescent - 1X32T8EBN	412	2	31	2,160	0.062	134	- OUT	0	0	0	0.0	0	0.1	134	\$16
FT8 - T8 Linear Fluorescent - 2X32T8EBN	411	24	58	2,160	1.392	3,007	- OUT	0	0	0	0.0	0	1.4	3,007	\$351
FT8 - T8 Linear Fluorescent - 2X32T8EBN	412	13	58	2,160	0.754	1,629	- OUT	0	0	0	0.0	0	0.8	1,629	\$190
FT8 - T8 Linear Fluorescent - 2X32T8EBN	412E	2	58	2,160	0.116	251	- OUT	0	0	0	0.0	0	0.1	251	\$29
FT8 - T8 Linear Fluorescent - 2X32T8EBN	412B	6	58	2,160	0.348	752	- OUT	0	0	0	0.0	0	0.3	752	\$88
006-F-LCAFE Total		83			3.728	8,884		58			1.3	2,966	2.4	5,918	\$691

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008-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

008-F-LCORR												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD	136	25	3,744	3.4	12,730	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD	109	25	3,744	2.7	10,202	NA	NA	NA
-	3RD FLOOR	0	0	3,744	0.000	0	LED - ADD	30	25	3,744	0.8	2,808	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-4	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-3	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-5	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr G-5	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr G-7	2	3	8,760	0.006	53	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-8	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-5A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 9A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 8A	3	3	8,760	0.009	79	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.0	0	\$0
LED - 1X6LEDSI	CORR 1-1	34	6	3,744	0.204	764	- OUT	0	0	0	0.0	0	0.2	764	\$78
LED - 1X6LEDSI	CORR 1-9C	4	6	3,744	0.024	90	- OUT	0	0	0	0.0	0	0.0	90	\$9
CF - Compact Fluorescent - 2X7CFL2P	CORR 2-2	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	CORR 2-1	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	CORR G-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$16
CF - Compact Fluorescent - 2X7CFL2P	CORR G-3	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	CORR G-4	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32

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CF - Compact Fluorescent - 2X7CFL2P	Corr 2-3	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	Corr 1-6	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$16
CF - Compact Fluorescent - 2X7CFL2P	Corr G-10	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$48
CF - Compact Fluorescent - 2X7CFL2P	Corr G-11	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	Corr 1-7	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	LOBBY 2-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$16
CF - Compact Fluorescent - 2X7CFL2P	CORR 1-9A	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$48
CF - Compact Fluorescent - 2X7CFL2P	CORR 1-9B	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$48
CF - Compact Fluorescent - 2X7CFL2P	CORR 1-8	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$16
CF - Compact Fluorescent - 2X7CFL2P	CORR G-15	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$48
CF - Compact Fluorescent - 2X7CFL2P	CORR G-13	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	CORR 9A	3	21	8,760	0.063	552	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	473	\$48
LED Tube - 2X15LEDT	CORR 1-1	23	23	3,744	0.529	1,981	- OUT	0	0	0	0.0	0	0.5	1,981	\$202
LED Tube - 2X15LEDT	Corr 1-4	21	23	3,744	0.483	1,808	- OUT	0	0	0	0.0	0	0.5	1,808	\$184
LED Tube - 2X15LEDT	Corr 1-3	12	23	3,744	0.276	1,033	- OUT	0	0	0	0.0	0	0.3	1,033	\$105
LED Tube - 2X15LEDT	Corr 1-5	12	23	3,744	0.276	1,033	- OUT	0	0	0	0.0	0	0.3	1,033	\$105
LED Tube - 2X15LEDT	Corr 1-7	4	23	3,744	0.092	344	- OUT	0	0	0	0.0	0	0.1	344	\$35
LED Tube - 2X15LEDT	CORR1-2	19	23	3,744	0.437	1,636	- OUT	0	0	0	0.0	0	0.4	1,636	\$167
LED Tube - 2X15LEDT	CORR 9A	16	23	3,744	0.368	1,378	- OUT	0	0	0	0.0	0	0.4	1,378	\$141
LED Tube - 2X15LEDT	CORR 8A	10	23	3,744	0.230	861	- OUT	0	0	0	0.0	0	0.2	861	\$88
LED Tube - 2X15LEDT	LOBBY 2-1	6	23	3,744	0.138	517	LED Tube - RET	6	23	3,744	0.1	517	0.0	0	\$0
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-2	14	31	3,744	0.434	1,625	- OUT	0	0	0	0.0	0	0.4	1,625	\$166
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-1	16	31	3,744	0.496	1,857	- OUT	0	0	0	0.0	0	0.5	1,857	\$189
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-2	16	31	3,744	0.496	1,857	- OUT	0	0	0	0.0	0	0.5	1,857	\$189

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FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-3	15	31	3,744	0.465	1,741	- OUT	0	0	0	0.0	0	0.5	1,741	\$178
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-4	21	31	3,744	0.651	2,437	- OUT	0	0	0	0.0	0	0.7	2,437	\$249
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-3	14	31	3,744	0.434	1,625	- OUT	0	0	0	0.0	0	0.4	1,625	\$166
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-6	12	31	3,744	0.372	1,393	- OUT	0	0	0	0.0	0	0.4	1,393	\$142
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr G-6	17	31	3,744	0.527	1,973	- OUT	0	0	0	0.0	0	0.5	1,973	\$201
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr G-5	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$59
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr G-7	12	31	3,744	0.372	1,393	- OUT	0	0	0	0.0	0	0.4	1,393	\$142
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr G-10	21	31	3,744	0.651	2,437	- OUT	0	0	0	0.0	0	0.7	2,437	\$249
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr G-11	13	31	3,744	0.403	1,509	- OUT	0	0	0	0.0	0	0.4	1,509	\$154
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-7	8	31	3,744	0.248	929	- OUT	0	0	0	0.0	0	0.2	929	\$95
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-9A	13	31	3,744	0.403	1,509	- OUT	0	0	0	0.0	0	0.4	1,509	\$154
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-9B	13	31	3,744	0.403	1,509	- OUT	0	0	0	0.0	0	0.4	1,509	\$154
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-8	16	31	3,744	0.496	1,857	- OUT	0	0	0	0.0	0	0.5	1,857	\$189
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-15	33	31	3,744	1.023	3,830	- OUT	0	0	0	0.0	0	1.0	3,830	\$391
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-5A	7	31	3,744	0.217	812	- OUT	0	0	0	0.0	0	0.2	812	\$83
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-13	12	31	3,744	0.372	1,393	- OUT	0	0	0	0.0	0	0.4	1,393	\$142
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 9A	21	31	3,744	0.651	2,437	- OUT	0	0	0	0.0	0	0.7	2,437	\$249
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	3	58	3,744	0.174	651	- OUT	0	0	0	0.0	0	0.2	651	\$66

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FT8 - T8 Linear Fluorescent - 2X32T8EBN	LOBBY 1-2	3	58	3,744	0.174	651	LED Tube - RET	3	23	3,744	0.1	258	0.1	393	\$40
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR G-2	3	112	3,744	0.336	1,258	- OUT	0	0	0	0.0	0	0.3	1,258	\$128
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR G-3	3	112	3,744	0.336	1,258	- OUT	0	0	0	0.0	0	0.3	1,258	\$128
FT8 - T8 Linear Fluorescent - 4X32T8EBN	Corr G-6	2	112	3,744	0.224	839	- OUT	0	0	0	0.0	0	0.2	839	\$86
FT8 - T8 Linear Fluorescent - 4X32T8EBN	Corr G-10	6	112	3,744	0.672	2,516	- OUT	0	0	0	0.0	0	0.7	2,516	\$257
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR 1-9A	1	112	3,744	0.112	419	- OUT	0	0	0	0.0	0	0.1	419	\$43
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR 1-9B	1	112	3,744	0.112	419	- OUT	0	0	0	0.0	0	0.1	419	\$43
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR 1-8	8	112	3,744	0.896	3,355	- OUT	0	0	0	0.0	0	0.9	3,355	\$342
FT8 - T8 Linear Fluorescent - 4X32T8EBN	CORR G-13	2	112	3,744	0.224	839	- OUT	0	0	0	0.0	0	0.2	839	\$86
I Standard Incandescent - 1X200INCA	LOBBY 2-2	18	200	3,744	3.600	13,478	LED - KIT	18	30	3,744	0.5	2,022	3.1	11,457	\$1,169
I Standard Incandescent - 1X200INCA	LOBBY 2-1	8	200	3,744	1.600	5,990	LED - KIT	8	30	3,744	0.2	899	1.4	5,092	\$519
I Standard Incandescent - 1X200INCA	LOBBY 1-2	28	200	3,744	5.600	20,966	LED - KIT	28	30	3,744	0.8	3,145	4.8	17,821	\$1,818
008-F-LCORR Total		593			27.157	105,543		385			8.8	33,815	18.3	71,728	\$7,316

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008-F-LGYM

Gym Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

008-F-LGYM													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
CF - Compact Fluorescent - 2X7CFL2P	GYM 130 A+B	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
CF - Compact Fluorescent - 2X7CFL2P	GYM 114 A+B	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	GYM 130 A+B	8	79	1,584	0.632	1,001	LED Tube - RET	8	42	1,584	0.3	527	0.3	474	\$48
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	GYM 114 A+B	12	79	1,584	0.948	1,502	LED Tube - RET	12	42	1,584	0.5	791	0.4	711	\$73
MH Metal Halide Fixtures - 1X400MH	GYM 114 A+B	42	458	1,584	19.236	30,470	LED - IN	42	224	1,109	9.4	10,432	9.8	20,038	\$2,044
HPS - High Pressure Sodium - 1X400HPS	GYM 130 A+B	30	465	1,584	13.950	22,097	LED - IN	30	224	1,109	6.7	7,451	7.2	14,646	\$1,494
008-F-LGYM Total		96			34.850	55,805		96			17.0	19,306	17.9	36,499	\$3,723

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008-F-LGDF (Sr. & Jr. Gym)

Gym Destratification Fans - The following energy calculation was supplied by MPS. The energy savings is agreed to be reasonable and achievable by both parties. No further calculation or verification will be done to prove savings. A visual site inspection of the equipment and review of the final close out documentation will be done to confirm operation.

Gym Destratification Fans

Sr Gym

***ENERGY SAVINGS**

Length of space (ft.)	100	
Width of space (ft.)	100	
Ceiling height (ft., average)	26	
Height of Thermostat from Floor (ft.)	4.0	Estimate (typical height would be 4-5 ft.)
Roof Insulation R value	9.00	
Wall Insulation R value	3.000	
Annual Heating Hours	4,706	Per bin weather data for Milwaukee
Occupied Hours/wk.	35	
Unoccupied Hours/wk.	133	
Occupied Temp (deg. F)	70	Estimated Temp at thermostat height
Unoccupied Temp	70.0	Estimated Temp at thermostat height
Avg. Outdoor Air Temp (heating season)	30.5	From bin weather data
Existing Heating System Efficiency	88.0%	Est. heating efficiency.
Roof Area (sq. ft.)	10,000	
Est. Inside Ceiling Temp Occupied (deg. F)	81.00	
Est. Inside Ceiling Temp Unoccupied	81.00	
Baseline Annual Therm Use	3,001	
Proposed Heating System Efficiency	88.00%	
Destratification Savings Factor	100%	100% = perfect mixing or same temp at ceiling and tstat
Proposed Indoor Ceiling Temp Occupied	70.00	
Proposed Indoor Ceiling Temp Unoccupied	70.00	
Proposed Annual Therm Use:	2,347	
Total kW of Motors	0.210	# Motors X kW each
Estimate Motor Efficiency	85.0%	
Est. Fan run-time hours	2,824	60% of annual heating hours
Load Factor	80.0%	80% Typical
New kWh Use	558	Negative since fan energy increases
Savings kWh/yr.	-558	Negative due to increased fan energy use
Savings kWh \$/yr.	-\$57	
Savings th/yr.	654	
Savings th \$/yr.	\$380	

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Gym Destratification Fans

Jr Gym

***ENERGY SAVINGS**

Length of space (ft.)	100	
Width of space (ft.)	70	
Ceiling height (ft., average)	26	
Height of Thermostat from Floor (ft.)	4.0	Estimate (typical height would be 4-5 ft.)
Roof Insulation R value	9.00	
Wall Insulation R value	3.000	
Annual Heating Hours	4,706	Per bin weather data for Milwaukee
Occupied Hours/wk.	35	
Unoccupied Hours/wk.	133	
Occupied Temp (deg. F)	70	Estimated Temp at thermostat height
Unoccupied Temp	70.0	Estimated Temp at thermostat height
Avg. Outdoor Air Temp (heating season)	30.5	From bin weather data
Existing Heating System Efficiency	88.0%	Est. heating efficiency.
Roof Area (sq. ft.)	7,000	
Est. Inside Ceiling Temp Occupied (deg. F)	81.00	
Est. Inside Ceiling Temp Unoccupied	81.00	
Baseline Annual Therm Use	2,100	
Proposed Heating System Efficiency	88.00%	
Destratification Savings Factor	100%	100% = perfect mixing or same temp at ceiling and tstat
Proposed Indoor Ceiling Temp Occupied	70.00	
Proposed Indoor Ceiling Temp Unoccupied	70.00	
Proposed Annual Therm Use:	1,643	
Total kW of Motors	0.105	# Motors X kW each
Estimate Motor Efficiency	85.0%	
Est. Fan run-time hours	2,824	60% of annual heating hours
Load Factor	80.0%	80% Typical
New kWh Use	279	Negative since fan energy increases
Savings kWh/yr.	-279	Negative due to increased fan energy use
Savings kWh \$/yr.	-\$28	
Savings th/yr.	458	
Savings th \$/yr.	\$266	

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008-F-LCAFE

Cafeteria Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

008-F-LCAFE												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
CF - Compact Fluorescent - 2X7CFL2P	Café	2	21	8,760	0.042	368	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	315	\$32
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Café	6	58	2,160	0.348	752	LED Tube - RET	6	23	2,160	0.1	298	0.2	454	\$46
FT8 - T8 Linear Fluorescent - 2X32T8EBN	SERVING LINE	8	58	2,160	0.464	1,002	LED Tube - RET	8	23	2,160	0.2	397	0.3	605	\$62
HPS - High Pressure Sodium - 1X100HPS	Café	34	138	2,160	4.692	10,135	LED - KIT	34	30	2,160	1.0	2,203	3.7	7,932	\$809
MH Metal Halide Fixtures - 1X175MH	Café	35	215	2,160	7.525	16,254	LED - KIT	35	52	2,160	1.8	3,931	5.7	12,323	\$1,257
008-F-LCAFE Total		85			13.071	28,511		85			3.2	6,882	9.9	21,628	\$2,206

024-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

024-F-LCORR												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	125	25	3,744	3.1	11,700	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	75	25	3,744	1.9	7,020	NA	NA	NA
-	3RD FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	75	25	3,744	1.9	7,020	NA	NA	NA
-	GROUND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	80	25	3,744	2.0	7,488	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1	2	3	8,760	0.006	53	ECF - Exit Sign - IN/1X3LEDEXIT	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 3-3	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	0	\$0

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ECF - Exit Sign - 1X3LEDEXIT	Corr 3-1	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-5	2	3	8,760	0.006	53	ECF - Exit Sign - IN/1X3LEDEXIT	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 2-5	2	3	8,760	0.006	53	ECF - Exit Sign - IN/1X3LEDEXIT	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 2-7	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 3-7	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 3-5	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-2	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LEDEXIT	2	3	8,760	0.0	53	0.0	315	\$31
ECF - Exit Sign - 2X7CFLEXIT	CORR 2-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	CORR 2-1	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-4	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-3	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-3	6	21	8,760	0.126	1,104	ECF - Exit Sign - IN/1X3LEDEXIT	6	3	8,760	0.0	158	0.1	946	\$92
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-1	3	21	8,760	0.063	552	ECF - Exit Sign - IN/1X3LEDEXIT	3	3	8,760	0.0	79	0.1	473	\$46
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-5	5	21	8,760	0.105	920	ECF - Exit Sign - IN/1X3LEDEXIT	5	3	8,760	0.0	131	0.1	788	\$76
ECF - Exit Sign - 2X7CFLEXIT	Corr B-1	4	21	8,760	0.084	736	ECF - Exit Sign - IN/1X3LEDEXIT	4	3	8,760	0.0	105	0.1	631	\$61
ECF - Exit Sign - 2X7CFLEXIT	Corr B-2	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-7	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDEXIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 2-6	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LEDEXIT	2	3	8,760	0.0	53	0.0	315	\$31

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ECF - Exit Sign - 2X7CFLEXIT	Corr 2-5	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDE XIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 2-7	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDE XIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 3-6	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LEDE XIT	2	3	8,760	0.0	53	0.0	315	\$31
ECF - Exit Sign - 2X7CFLEXIT	CORR 1-8	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LEDE XIT	2	3	8,760	0.0	53	0.0	315	\$31
ECF - Exit Sign - 2X7CFLEXIT	Corr 1-9	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDE XIT	1	3	8,760	0.0	26	0.0	158	\$15
ECF - Exit Sign - 2X7CFLEXIT	Corr 2-9	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LEDE XIT	2	3	8,760	0.0	53	0.0	315	\$31
ECF - Exit Sign - 2X7CFLEXIT	Corr 2-8	1	21	8,760	0.021	184	ECF - Exit Sign - IN/1X3LEDE XIT	1	3	8,760	0.0	26	0.0	158	\$15
CF - Compact Fluorescent - 1X23CFLSI	CORR 1-2	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
CF - Compact Fluorescent - 1X23CFLSI	CORR 2-2	5	23	3,744	0.115	431	- OUT	0	0	0	0.0	0	0.1	431	\$42
CF - Compact Fluorescent - 1X23CFLSI	CORR 2-1	6	23	3,744	0.138	517	- OUT	0	0	0	0.0	0	0.1	517	\$50
CF - Compact Fluorescent - 1X23CFLSI	Corr 3-3	11	23	3,744	0.253	947	- OUT	0	0	0	0.0	0	0.3	947	\$92
CF - Compact Fluorescent - 1X23CFLSI	Corr 3-1	6	23	3,744	0.138	517	- OUT	0	0	0	0.0	0	0.1	517	\$50
CF - Compact Fluorescent - 1X23CFLSI	Corr 1-7	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
CF - Compact Fluorescent - 1X23CFLSI	Corr 2-6	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
CF - Compact Fluorescent - 1X23CFLSI	Corr 2-5	4	23	3,744	0.092	344	- OUT	0	0	0	0.0	0	0.1	344	\$33
CF - Compact Fluorescent - 1X23CFLSI	Corr 2-7	1	23	3,744	0.023	86	- OUT	0	0	0	0.0	0	0.0	86	\$8
CF - Compact Fluorescent - 1X23CFLSI	Corr 3-6	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
CF - Compact Fluorescent - 1X23CFLSI	Corr 1-9	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
CF - Compact Fluorescent - 1X23CFLSI	Corr 2-8	4	23	3,744	0.092	344	- OUT	0	0	0	0.0	0	0.1	344	\$33
CF - Compact Fluorescent - 1X23CFLSI	Corr 3-5	3	23	3,744	0.069	258	- OUT	0	0	0	0.0	0	0.1	258	\$25
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-2	3	31	3,744	0.093	348	- OUT	0	0	0	0.0	0	0.1	348	\$34

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FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-1	3	31	3,744	0.093	348	- OUT	0	0	0	0.0	0	0.1	348	\$34
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-4	1	31	3,744	0.031	116	- OUT	0	0	0	0.0	0	0.0	116	\$11
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-3	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$56
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-2	3	31	3,744	0.093	348	- OUT	0	0	0	0.0	0	0.1	348	\$34
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-1	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$56
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-5	4	31	3,744	0.124	464	- OUT	0	0	0	0.0	0	0.1	464	\$45
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr B-1	3	31	3,744	0.093	348	- OUT	0	0	0	0.0	0	0.1	348	\$34
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-6	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$56
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-7	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$23
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-7	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$23
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-6	3	31	3,744	0.093	348	- OUT	0	0	0	0.0	0	0.1	348	\$34
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-8	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$56
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-5,6	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$23
FT8 - T8 Linear Fluorescent - 1X32T8EBN	BY ELEVATOR	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$56
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	14	58	3,744	0.812	3,040	- OUT	0	0	0	0.0	0	0.8	3,040	\$295
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-2	15	58	3,744	0.870	3,257	- OUT	0	0	0	0.0	0	0.9	3,257	\$316
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-2	5	58	3,744	0.290	1,086	- OUT	0	0	0	0.0	0	0.3	1,086	\$105
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-1	11	58	3,744	0.638	2,389	- OUT	0	0	0	0.0	0	0.6	2,389	\$232
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-4	6	58	3,744	0.348	1,303	- OUT	0	0	0	0.0	0	0.3	1,303	\$126
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-3	11	58	3,744	0.638	2,389	- OUT	0	0	0	0.0	0	0.6	2,389	\$232
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-4	19	58	3,744	1.102	4,126	- OUT	0	0	0	0.0	0	1.1	4,126	\$400
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-3	18	58	3,744	1.044	3,909	- OUT	0	0	0	0.0	0	1.0	3,909	\$379
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-4	17	58	3,744	0.986	3,692	- OUT	0	0	0	0.0	0	1.0	3,692	\$358

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FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-3	24	58	3,744	1.392	5,212	- OUT	0	0	0	0.0	0	1.4	5,212	\$506
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-2	14	58	3,744	0.812	3,040	- OUT	0	0	0	0.0	0	0.8	3,040	\$295
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-1	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$253
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-5	15	58	3,744	0.870	3,257	- OUT	0	0	0	0.0	0	0.9	3,257	\$316
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr B-1	21	58	3,744	1.218	4,560	- OUT	0	0	0	0.0	0	1.2	4,560	\$442
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr B-2	19	58	3,744	1.102	4,126	- OUT	0	0	0	0.0	0	1.1	4,126	\$400
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr B-3	17	58	3,744	0.986	3,692	- OUT	0	0	0	0.0	0	1.0	3,692	\$358
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr B-4	7	58	3,744	0.406	1,520	- OUT	0	0	0	0.000	0	0.406	1,520	\$147
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-6	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$253
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-5	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$84
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-7	8	58	3,744	0.464	1,737	- OUT	0	0	0	0.0	0	0.5	1,737	\$169
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-7	3	58	3,744	0.174	651	- OUT	0	0	0	0.0	0	0.2	651	\$63
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-6	14	58	3,744	0.812	3,040	- OUT	0	0	0	0.0	0	0.8	3,040	\$295
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-8	7	58	3,744	0.406	1,520	- OUT	0	0	0	0.0	0	0.4	1,520	\$147
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 2-8	16	58	3,744	0.928	3,474	- OUT	0	0	0	0.0	0	0.9	3,474	\$337
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-5,6	25	58	3,744	1.450	5,429	- OUT	0	0	0	0.0	0	1.5	5,429	\$527
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 3-5	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$84
I Standard Incandescent - 1X60INCA	Corr 2-8	1	60	3,744	0.060	225	- OUT	0	0	0	0.0	0	0.1	225	\$22
I Standard Incandescent - 1X60INCA	Corr 1-5,6	12	60	3,744	0.720	2,696	- OUT	0	0	0	0.0	0	0.7	2,696	\$261
HPS - High Pressure Sodium - 1X50HPS	Corr 2-9	9	66	3,744	0.594	2,224	- OUT	0	0	0	0.0	0	0.6	2,224	\$216
MH Metal Halide Fixtures - 1X175MH	CORR 2-1	8	215	3,744	1.720	6,440	- OUT	0	0	0	0.0	0	1.7	6,440	\$625
MH Metal Halide Fixtures - 1X175MH	Corr 3-3	12	215	3,744	2.580	9,660	- OUT	0	0	0	0.0	0	2.6	9,660	\$937
MH Metal Halide Fixtures - 1X175MH	Corr 3-1	12	215	3,744	2.580	9,660	- OUT	0	0	0	0.0	0	2.6	9,660	\$937

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MH Metal Halide Fixtures - 1X175MH	Corr 1-5	154	215	3,744	33.110	123,964	- OUT	0	0	0	0.0	0	33.1	123,964	\$12,024
MH Metal Halide Fixtures - 1X175MH	Corr B-1	32	215	3,744	6.880	25,759	- OUT	0	0	0	0.0	0	6.9	25,759	\$2,499
MH Metal Halide Fixtures - 1X175MH	Corr B-3	1	215	3,744	0.215	805	- OUT	0	0	0	0.0	0	0.2	805	\$78
MH Metal Halide Fixtures - 1X175MH	Corr 1-7	19	215	3,744	4.085	15,294	- OUT	0	0	0	0.0	0	4.1	15,294	\$1,484
MH Metal Halide Fixtures - 1X175MH	Corr 2-6	8	215	3,744	1.720	6,440	- OUT	0	0	0	0.0	0	1.7	6,440	\$625
MH Metal Halide Fixtures - 1X175MH	Corr 2-5	4	215	3,744	0.860	3,220	- OUT	0	0	0	0.0	0	0.9	3,220	\$312
MH Metal Halide Fixtures - 1X175MH	Corr 2-7	4	215	3,744	0.860	3,220	- OUT	0	0	0	0.0	0	0.9	3,220	\$312
MH Metal Halide Fixtures - 1X175MH	Corr 3-6	4	215	3,744	0.860	3,220	- OUT	0	0	0	0.0	0	0.9	3,220	\$312
MH Metal Halide Fixtures - 1X175MH	CORR 1-8	12	215	3,744	2.580	9,660	- OUT	0	0	0	0.0	0	2.6	9,660	\$937
MH Metal Halide Fixtures - 1X175MH	Corr 1-9	15	215	3,744	3.225	12,074	- OUT	0	0	0	0.0	0	3.2	12,074	\$1,171
MH Metal Halide Fixtures - 1X175MH	Corr 2-9	2	215	3,744	0.430	1,610	- OUT	0	0	0	0.0	0	0.4	1,610	\$156
024-F-LCORR Total		802			86.360	327,500		404			9.0	34,516	77.3	292,984	\$28,419

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024-F-LGYM

Gym Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

024-F-LGYM												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
ECF - Exit Sign - 2X7CFLEXIT	Gym	4	21	8,760	0.084	736	ECF - Exit Sign - IN/1X3LED EXIT	4	3	8,760	0.0	105	0.1	631	\$61
FT8 - T8 Linear Fluorescent - 4X32T8EBN	Gym	8	112	1,584	0.896	1,419	- OUT	0	0	0	0.0	0	0.9	1,419	\$138
MH Metal Halide Fixtures - 1X400MH	Gym	42	458	1,584	19.236	30,470	LED - IN/1X224L EDF	42	224	1,109	9.4	10,432	9.8	20,038	\$1,944
HPS - High Pressure Sodium - 1X400HPS	Gym	55	465	1,584	25.575	40,511	LED - IN/1X224L EDF	74	224	1,109	16.6	18,379	9.0	22,131	\$2,147
024-F-LGYM Total		109			45.791	73,136		120			26.0	28,916	19.8	44,220	\$4,289

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024-F-LGDF

Gym Destratification Fans - The following energy calculation was supplied by MPS. The energy savings is agreed to be reasonable and achievable by both parties. No further calculation or verification will be done to prove savings. A visual site inspection of the equipment and review of the final close out documentation will be done to confirm operation.

***ENERGY SAVINGS**

Length of space (ft.)	230	
Width of space (ft.)	125	
Ceiling height (ft., average)	37	
Height of Thermostat from Floor (ft.)	4.0	Estimate (typical height would be 4-5 ft.)
Roof Insulation R value	9.00	
Wall Insulation R value	3.000	
Annual Heating Hours	4,706	Per bin weather data for Milwaukee
Occupied Hours/wk.	35	
Unoccupied Hours/wk.	133	
Occupied Temp (deg. F)	70	Estimated Temp at thermostat height
Unoccupied Temp	70.0	Estimated Temp at thermostat height
Avg. Outdoor Air Temp (heating season)	30.5	From bin weather data
Existing Heating System Efficiency	88.0%	Est. heating efficiency.
Roof Area (sq. ft.)	28,750	
Est. Inside Ceiling Temp Occupied (deg. F)	86.50	
Est. Inside Ceiling Temp Unoccupied	86.50	
Baseline Annual Therm Use	9,566	
Proposed Heating System Efficiency	88.00%	
Destratification Savings Factor	100%	100% = perfect mixing or same temp at ceiling and tstat
Proposed Indoor Ceiling Temp Occupied	70.00	
Proposed Indoor Ceiling Temp Unoccupied	70.00	
Proposed Annual Therm Use:	6,748	
Total kW of Motors	0.540	# Motors X kW each
Estimate Motor Efficiency	85.0%	
Est. Fan run-time hours	2,824	60% of annual heating hours
Load Factor	80.0%	80% Typical
New kWh Use	1,435	Negative since fan energy increases
Savings kWh/yr.	-1,435	Negative due to increased fan energy use
Savings kWh \$/yr.	-\$166	
Savings th/yr.	2,819	
Savings th \$/yr.	\$1,708	

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071-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

071-F-LCORR												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	99	25	3,744	2.5	9,266	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25L EDF	23	25	3,744	0.6	2,153	NA	NA	NA
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	31	58	3,744	1.798	6,732	- OUT	0	0	0	0.0	0	1.8	6,732	\$800
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-2	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$310
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-1	35	58	3,744	2.030	7,600	- OUT	0	0	0	0.0	0	2.0	7,600	\$903
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-4	24	58	3,744	1.392	5,212	- OUT	0	0	0	0.0	0	1.4	5,212	\$619
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-3	36	58	3,744	2.088	7,817	- OUT	0	0	0	0.0	0	2.1	7,817	\$929
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-6	10	58	3,744	0.580	2,172	- OUT	0	0	0	0.0	0	0.6	2,172	\$258
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-7	10	58	3,744	0.580	2,172	- OUT	0	0	0	0.0	0	0.6	2,172	\$258
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-8	10	58	3,744	0.580	2,172	- OUT	0	0	0	0.0	0	0.6	2,172	\$258
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Corr 1-9	13	58	3,744	0.754	2,823	- OUT	0	0	0	0.0	0	0.8	2,823	\$335
071-F-LCORR Total		181			10.498	39,305		122			3.1	11,419	7.4	27,885	\$3,313

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071-F-LAUDIT

Auditorium Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

071-F-LAUDIT													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
ECF - Exit Sign - 1X3LEDEXIT	Aud	4	3	8,760	0.012	105	ECF - Exit Sign - IN/1X3LEDEXIT	4	3	8,760	0.0	105	0.0	0	\$0
H - Halogen Incandescent - 1X90HAL	Aud	73	90	1,584	6.570	10,407	LED - KIT/1X30LED	73	30	1,584	2.2	3,469	4.4	6,938	\$824
071-F-LAUDIT Total		77			6.582	10,512		77			2.2	3,574	4.4	6,938	\$824

071-F-LCAFE

Cafeteria Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

071-F-LCAFE													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	Kitchen	0	0	2,160	0.000	0	LED - ADD/1X25 LEDF	9	25	2,160	0.2	486	NA	NA	NA
-	cafeteria	0	0	2,160	0.000	0	LED - ADD/1X25 LEDF	24	25	2,160	0.6	1,296	NA	NA	NA
-	Library	0	0	2,160	0.000	0	LED - ADD/1X25 LEDF	28	25	2,160	0.7	1,512	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-1	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LED EXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LED EXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-4	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LED EXIT	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-3	3	3	8,760	0.009	79	ECF - Exit Sign - IN/1X3LED EXIT	3	3	8,760	0.0	79	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-6	1	3	8,760	0.003	26	ECF - Exit Sign -	1	3	8,760	0.0	26	0.0	0	\$0

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							IN/1X3LED EXIT								
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-8	1	3	8,760	0.003	26	ECF - Exit Sign - IN/1X3LED EXIT	1	3	8,760	0.0	26	0.0	0	\$0
CF - Compact Fluorescent - 2X7CFL2P	CORR 2-1	2	21	8,760	0.042	368	ECF - Exit Sign - IN/1X3LED EXIT	2	3	8,760	0.0	53	0.0	315	\$37
CF - Compact Fluorescent - 1X23CFLSI	Kitchen	2	23	8,760	0.046	403	ECF - Exit Sign - IN/1X3LED EXIT	2	3	8,760	0.0	53	0.0	350	\$42
CF - Compact Fluorescent - 1X23CFLSI	Corr 1-7	1	23	8,760	0.023	201	ECF - Exit Sign - IN/1X3LED EXIT	1	3	8,760	0.0	26	0.0	175	\$21
CF - Compact Fluorescent - 1X23CFLSI	SERVING LINE	10	23	8,760	0.230	2,015	ECF - Exit Sign - IN/1X3LED EXIT	10	3	8,760	0.0	263	0.2	1,752	\$208
CF - Compact Fluorescent - 1X23CFLSI	cafeteria	3	23	8,760	0.069	604	ECF - Exit Sign - IN/1X3LED EXIT	3	3	8,760	0.0	79	0.1	526	\$62
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Kitchen	22	31	2,160	0.682	1,473	- OUT	0	0	0	0.0	0	0.7	1,473	\$175
FT8 - T8 Linear Fluorescent - 2X32T8EBN	cafeteria	28	58	2,160	1.624	3,508	- OUT	0	0	0	0.0	0	1.6	3,508	\$417
FT8 - T8 Linear Fluorescent - 2X32T8EBN	Library	44	58	2,160	2.552	5,512	- OUT	0	0	0	0.0	0	2.6	5,512	\$655
HPS - High Pressure Sodium - 1X50HPS	cafeteria	22	66	2,160	1.452	3,136	- OUT	0	0	0	0.0	0	1.5	3,136	\$373
071-F-LCAFE Total		142			6.744	17,431		87			1.6	3,977	5.1	13,454	\$1,598

131-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	ENERGY SAVINGS		
													Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25 LEDF	16	25	3,744	0.4	1,498	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25 LEDF	20	25	3,744	0.5	1,872	NA	NA	NA
-	GROUND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25 LEDF	26	25	3,744	0.7	2,434	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-2	10	3	8,760	0.030	263	ECF - Exit Sign - IN/1X3LED EXIT	10	3	8,760	0.0	263	0.0	0	\$0

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ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1	6	3	8,760	0.018	158	ECF - Exit Sign - IN/1X3LED EXIT	6	3	8,760	0.0	158	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-1	8	3	8,760	0.024	210	ECF - Exit Sign - IN/1X3LED EXIT	8	3	8,760	0.0	210	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-2	2	3	8,760	0.006	53	ECF - Exit Sign - IN/1X3LED EXIT	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-3	2	3	8,760	0.006	53	ECF - Exit Sign - IN/1X3LED EXIT	2	3	8,760	0.0	53	0.0	0	\$0
CF - Compact Fluorescent - 1X18CFL4P	CORR G-4	8	20	3,744	0.160	599	- OUT	0	0	0	0.0	0	0.2	599	\$83
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-1	6	31	3,744	0.186	696	- OUT	0	0	0	0.0	0	0.2	696	\$97
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-2	6	31	3,744	0.186	696	- OUT	0	0	0	0.0	0	0.2	696	\$97
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	22	58	3,744	1.276	4,777	- OUT	0	0	0	0.0	0	1.3	4,777	\$665
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-2	10	58	3,744	0.580	2,172	- OUT	0	0	0	0.0	0	0.6	2,172	\$302
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-2	8	58	3,744	0.464	1,737	- OUT	0	0	0	0.0	0	0.5	1,737	\$242
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-1	16	58	3,744	0.928	3,474	- OUT	0	0	0	0.0	0	0.9	3,474	\$484
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-1	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$121
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-3	8	58	3,744	0.464	1,737	- OUT	0	0	0	0.0	0	0.5	1,737	\$242
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-4	4	58	3,744	0.232	869	- OUT	0	0	0	0.0	0	0.2	869	\$121
FT8 - T8 Linear Fluorescent - 3X32T8EBN	CORR 1-1	2	89	3,744	0.178	666	- OUT	0	0	0	0.0	0	0.2	666	\$93
Total		122			4.970	19,029		90			1.6	6,539	3.3	12,490	\$1,739

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143-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

143-F-LCORR												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	BASEMENT	0	0	3,744	0.000	0	LED - ADD	10	25	3,744	0.3	936	NA	NA	NA
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD	10	25	3,744	0.3	936	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD	10	25	3,744	0.3	936	NA	NA	NA
-	3RD FLOOR	0	0	3,744	0.000	0	LED - ADD	10	25	3,744	0.3	936	NA	NA	NA
-	4TH FLOOR	0	0	3,744	0.000	0	LED - ADD	8	25	3,744	0.2	749	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-1	2	3	8,760	0.006	53	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-2	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 1-4	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 2-4	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 3-1	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr B-3	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr B-4	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr B-5	2	3	8,760	0.006	53	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	Corr 4-2	3	3	8,760	0.009	79	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 4-3	3	3	8,760	0.009	79	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-3A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-2A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 3-2A	1	3	8,760	0.003	26	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	0	\$0
ECF - Exit Sign - 2X10INCEXIT	CORR 1-1	1	20	8,760	0.020	175	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	149	\$20
ECF - Exit Sign - 2X10INCEXIT	CORR 2-2	2	20	8,760	0.040	350	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	298	\$39

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ECF - Exit Sign - 2X10INCEXIT	Corr 3-1	2	20	8,760	0.040	350	ECF - Exit Sign - IN	2	3	8,760	0.0	53	0.0	298	\$39
ECF - Exit Sign - 2X10INCEXIT	CORR 4-3	3	20	8,760	0.060	526	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	447	\$59
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 1-1	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$76
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-2	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$76
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR 2-1	5	31	3,744	0.155	580	- OUT	0	0	0	0.0	0	0.2	580	\$76
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-4	10	31	3,744	0.310	1,161	- OUT	0	0	0	0.0	0	0.3	1,161	\$153
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 1-3	10	31	3,744	0.310	1,161	- OUT	0	0	0	0.0	0	0.3	1,161	\$153
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 2-4	10	31	3,744	0.310	1,161	- OUT	0	0	0	0.0	0	0.3	1,161	\$153
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-3	10	31	3,744	0.310	1,161	- OUT	0	0	0	0.0	0	0.3	1,161	\$153
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-2	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$31
FT8 - T8 Linear Fluorescent - 1X32T8EBN	Corr 3-1	2	31	3,744	0.062	232	- OUT	0	0	0	0.0	0	0.1	232	\$31
143-F-LCORR Total		89			2.055	8,828		78			1.3	5,281	0.8	3,546	\$466

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143-F-LGYM

Gym Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

143-F-LGYM													ENERGY SAVINGS		
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
ECF - Exit Sign - 1X3LEDEXIT	29	3	3	8,760	0.009	79	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.0	0	\$0
ECF - Exit Sign - 2X10INCEXIT	25	3	20	8,760	0.060	526	ECF - Exit Sign - IN	3	3	8,760	0.0	79	0.1	447	\$59
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	25	6	79	1,584	0.474	751	LED Tube - RET	6	42	1,584	0.2	395	0.2	355	\$47
FT8 - T8 Linear Fluorescent - 2X32T8EBVH	29	6	79	1,584	0.474	751	LED Tube - RET	6	42	1,584	0.2	395	0.2	355	\$47
FT5 - T5 Linear Fluorescent - 8X54T5HOEBH PS2	25	12	460	1,584	5.520	8,744	LED - IN	12	184	1,109	2.2	2,448	3.3	6,295	\$827
FT5 - T5 Linear Fluorescent - 8X54T5HOEBH PS2	29	12	460	1,584	5.520	8,744	LED - IN	12	184	1,109	2.2	2,448	3.3	6,295	\$827
143-F-LGYM Total		42			12.057	19,593		42			4.9	5,845	7.1	13,749	\$1,807

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143-F-LCAFE

Cafeteria Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

143-F-LCAFE												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	23	0	0	2,160	0.000	0	LED - ADD	20	25	2,160	0.5	1,080	NA	NA	NA
-	24	0	0	2,160	0.000	0	LED - ADD	9	25	2,160	0.2	486	NA	NA	NA
-	24D	0	0	2,160	0.000	0	LED - ADD	6	25	2,160	0.2	324	NA	NA	NA
-	24B/C	0	0	2,160	0.000	0	LED - ADD	4	25	2,160	0.1	216	NA	NA	NA
ECF - Exit Sign - 2X10INCEXIT	23	1	20	8,760	0.020	175	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	149	\$20
ECF - Exit Sign - 2X7CFLEXIT	23	1	21	8,760	0.021	184	ECF - Exit Sign - IN	1	3	8,760	0.0	26	0.0	158	\$21
FT8 - T8 Linear Fluorescent - 1X32T8EBN	23	1	31	2,160	0.031	67	- OUT	0	0	0	0.0	0	0.0	67	\$9
FT8 - T8 Linear Fluorescent - 1X32T8EBN	24D	1	31	2,160	0.031	67	- OUT	0	0	0	0.0	0	0.0	67	\$9
FT8 - T8 Linear Fluorescent - 2X32T8EBN	23	48	58	2,160	2.784	6,013	- OUT	0	0	0	0.0	0	2.8	6,013	\$790
FT8 - T8 Linear Fluorescent - 2X32T8EBN	24	3	58	2,160	0.174	376	- OUT	0	0	0	0.0	0	0.2	376	\$49
143-F-LCAFE Total		55			3.061	6,882		41			1.0	2,159	2.1	4,724	\$621

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143-F-ROOF

Roof Upgrade/Replacement - The following energy calculation was supplied by MPS. The energy savings is agreed to be reasonable and achievable by both parties. No further calculation or verification will be done to prove savings. A visual site inspection of the equipment and review of the final close out documentation will be done to confirm operation.

143-F-ROOF Roof Upgrade/Replacement (increase insulation R-value)

ENERGY SAVINGS

Notes

Area of Roof to be Replaced	26,600	
Number of Roof Drains	4	
Existing R-value of insulation:	4	built up roofing is .33 and 1" perlite is R 2.7 = 3.5
Total air film R-value	2.0	
Heating Balance Point (F):	55	
Heating Degree Days:	4,908	
Efficiency of heating system:	80%	
Is the facility cooled?	No	Click on cell to choose from drop down
Hrs./wk. Facility is Cooled	0	
Cooling Balance Point (F):	0	
Cooling Degree Days:	0	
Efficiency of cooling system (EEE)	9.0	
Average Existing th/yr. Use	7,121	
Average Existing kWh/yr.	0	
R-value of additional insulation	20	
Average Proposed th/yr. Use	1,536	
Average Proposed kWh/yr.	0	
Savings kWh/yr.	0	
Savings kWh/yr. \$	\$0	
Savings th/yr.	5,585	
Savings th/yr. \$	\$3,660	

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199-F-LCORR

Corridor Upgrade/Replacement - The following parameters (Annual pre and post retrofit operating hours) are agreed upon and listed in the table below:

199-F-LCORR												ENERGY SAVINGS			
Existing Lighting Type	Location	Number of Fixtures	Fixture Wattage	Annual Operating Hours	Existing kW	Existing kWh/yr.	Proposed Lighting Type	Number of Fixtures	Proposed Fixture Wattage	Annual Operating Hours	Proposed kW	Proposed kWh/yr.	Savings kW	Savings kWh/yr.	Savings kWh \$/yr.
-	1ST FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25LEDF	24	25	3,744	0.6	2,246	NA	NA	NA
-	2ND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25LEDF	30	25	3,744	0.8	2,808	NA	NA	NA
-	GROUND FLOOR	0	0	3,744	0.000	0	LED - ADD/1X25LEDF	39	25	3,744	1.0	3,650	NA	NA	NA
ECF - Exit Sign - 1X3LEDEXIT	CORR 1-2	15	3	8,760	0.045	394	ECF - Exit Sign - IN/1X3LEDEXIT	15	3	8,760	0.0	394	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR 2-1	9	3	8,760	0.027	237	ECF - Exit Sign - IN/1X3LEDEXIT	9	3	8,760	0.0	237	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-1	12	3	8,760	0.036	315	ECF - Exit Sign - IN/1X3LEDEXIT	12	3	8,760	0.0	315	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-2	3	3	8,760	0.009	79	ECF - Exit Sign - IN/1X3LEDEXIT	3	3	8,760	0.0	79	0.0	0	\$0
ECF - Exit Sign - 1X3LEDEXIT	CORR G-3	3	3	8,760	0.009	79	ECF - Exit Sign - IN/1X3LEDEXIT	3	3	8,760	0.0	79	0.0	0	\$0
CF - Compact Fluorescent - 1X18CFL4P	CORR G-4	12	20	3,744	0.240	899	- OUT	0	0	0	0.0	0	0.2	899	\$112
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-1	9	31	3,744	0.279	1,045	- OUT	0	0	0	0.0	0	0.3	1,045	\$130
FT8 - T8 Linear Fluorescent - 1X32T8EBN	CORR G-2	9	31	3,744	0.279	1,045	- OUT	0	0	0	0.0	0	0.3	1,045	\$130
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-1	33	58	3,744	1.914	7,166	- OUT	0	0	0	0.0	0	1.9	7,166	\$889
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 1-2	15	58	3,744	0.870	3,257	- OUT	0	0	0	0.0	0	0.9	3,257	\$404
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-2	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$323
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR 2-1	24	58	3,744	1.392	5,212	- OUT	0	0	0	0.0	0	1.4	5,212	\$647
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-1	6	58	3,744	0.348	1,303	- OUT	0	0	0	0.0	0	0.3	1,303	\$162
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-3	12	58	3,744	0.696	2,606	- OUT	0	0	0	0.0	0	0.7	2,606	\$323
FT8 - T8 Linear Fluorescent - 2X32T8EBN	CORR G-4	9	58	3,744	0.522	1,954	- OUT	0	0	0	0.0	0	0.5	1,954	\$243
FT8 - T8 Linear Fluorescent - 3X32T8EBN	CORR 1-1	3	89	3,744	0.267	1,000	- OUT	0	0	0	0.0	0	0.3	1,000	\$124

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199-F-LCORR Total	186		7,629	29,195		135		2.5	9,809	5.2	19,386	\$2,406
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199-F-ROOF

Roof Upgrade/Replacement - The following energy calculation was supplied by MPS. The energy savings is agreed to be reasonable and achievable by both parties. No further calculation or verification will be done to prove savings. A visual site inspection of the equipment and review of the final close out documentation will be done to confirm operation.

199-F-ROOF Roof Upgrade/Replacement (increase insulation R-value)

ENERGY SAVINGS

Notes

Area of Roof to be Replaced	30,000	
Number of Roof Drains	5	
Existing R-value of insulation:	3.5	built up roofing is .33 and 1" perlite is R 2.7 = 3.5
Total air film R-value	2.0	
Heating Balance Point (F):	55	
Heating Degree Days:	4,908	
Efficiency of heating system:	80%	
Is the facility cooled?	No	Click on cell to choose from drop down
Hrs./wk. Facility is Cooled	0	
Cooling Balance Point (F):	0	
Cooling Degree Days:	0	
Efficiency of cooling system (EEE)	9.0	
Average Existing th/yr. Use	8,031	
Average Existing kWh/yr.	0	
R-value of additional insulation	20	
Average Proposed th/yr. Use	1,732	
Average Proposed kWh/yr.	0	
Savings kWh/yr.	0	
Savings kWh/yr. \$	\$0	
Savings th/yr.	6,299	
Savings th/yr. \$	\$4,146	

Parameter variables to be measured for all lighting measures

Existing and Proposed fixture kW per the sampling plan.

Sampling Plan

80/20 sampling plan will be used to verify fixture savings. Measured pre and post wattages will then replace original estimates and the savings will be recalculated once.

Analysis Method

Based on pre-lighting retrofit lighting survey report data, engineering calculations, and post-retrofit sample measurements (Option A protocol). Pre-retrofit value minus post-retrofit value will indicate projected financial savings through calculations analysis. The savings for this measure will be determined once during post-retrofit performance. Subsequent lighting hours and fixture watt performance will be agreed upon.

Savings Summary

See tables above for saving summaries.

Savings Calculations The tables above utilizes the MPS supplied calculation method and applies the following equations:

Demand (kW)

$$kW Savings = \dot{a}_u [(kW/Fixture_{baseline} \times Quantity_{baseline} - kW/Fixture_{post} \times Quantity_{post})]_{t,u}$$

where:

- $kW/fixture_{baseline}$ = lighting baseline demand per fixture for usage group u
- $kW/fixture_{post}$ = lighting demand per fixture during post-installation period for usage group
- $Quantity_{baseline}$ = quantity of affected fixtures before the lighting retrofit for usage group u
- $Quantity_{post}$ = quantity of affected fixtures after the lighting retrofit for usage group u

Energy (kWh)

$$kWh Savings_{Lighting} = \dot{a}_u [kW Savings_u \times Hours of Operation]_{t,u}$$

where:

- $kW Savings_u$ = total connected fixture demand reduction for usage group u
- $Hours of Operation$ = number of operating hours during the time period t for the usage group u

**CHANGES IN USE OR CONDITION; ADJUSTMENT TO BASELINE
AND/OR ANNUAL PROJECT BENEFITS**

MPS agrees to notify Contractor, within fourteen (14) days, of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Improvement Measure to which this Appendix applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Benefits realized under this Contract.

Such a change, expansion, addition, or condition would include, but is not limited to: (a) changes in the primary use of any facility, Improvement Measure, or portion of the premises; (b) changes to the hours of operation of any facility, Improvement Measure, or portion of the premises; (c) changes or modifications to the Improvement Measures or any related equipment; (d) changes to the M&V Services provided under this Contract; (e) failure of any portion of the premises to meet building codes; (f) changes in utility suppliers, utility rates, method of utility billing, or method of utility purchasing; (g) insufficient or improper maintenance or unsound usage of the Improvement Measures or any related equipment at any facility or portion of the premises (other than by Contractor); (h) changes to the Improvement Measures or any related equipment or to any facility or portion of the premises required by building codes or any governmental or quasi-governmental entity; or (i) additions or deletions of Improvement Measures or any related equipment at any facility or portion of the premises.

Such a change or condition need not be identified in the Baseline in order to permit Contractor to make an adjustment to the Baseline and/or the Annual Project Benefits. If Contractor does not receive the notice within the time period specified above or travels to either MPS's location or the project site to determine the nature and scope of such changes, MPS agrees to pay Contractor, in addition to any other amounts due under this Contract, any applicable third party consulting charges incurred by Contractor that are attributable to the time it took to determine the changes and to make any adjustments and/or corrections to the project as a result of the changes, plus all reasonable and documented third party out-of-pocket expenses, including travel costs. Upon receipt of such notice, or if Contractor independently learns of any such change or condition, Contractor shall calculate and send to MPS a notice of adjustment to the Baseline and/or Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose. Should MPS fail to promptly provide Contractor with notice of any such change or condition, Contractor may make reasonable estimates as to the impact of such change or condition and as to the date on which such change or condition first arose in calculating the impact of such change or condition, and such estimates shall be conclusive.

IV. BASELINE CALCULATIONS AND UTILITY RATES

The unit utility costs for the Baseline period are set forth below as “Base Utility Cost” and shall be used for all calculations made under this Appendix. The Base Utility Cost shall be escalated annually by the actual utility cost escalation but such escalation shall be no less than the mutually agreed “floor” escalation rate of Three Percent (3%).

Contractor was furnished with documentation prepared by MPS that provided electricity costs for the Baseline utilizing a blended rate (demand and energy cost integrated into one value). MPS acknowledges that the use of a blended \$/kWh electricity charge may not represent the actual savings achieved as compared to utilizing separate demand (\$/kW) and energy (\$/kWh) charges for a given improvement measure. The information below is directly from the Facilities Improvement Measure (FIM) workbooks “Site Info” tabs for each site.

Utility Baseline

Utility	Building	Dollars	Units	Base Blended Rate
Electric	006	\$206,680	1,771,038 kWh	\$0.1167/ kWh
Natural Gas	006	\$65,180	106,372 Therms	\$0.6128/therm
Electric	008	\$340,706	3,340,259 kWh	\$0.1020/kWh
Natural Gas	008	\$100,128	172,388 Therms	\$0.5808/therm
Electric	024	\$832,627	8,583,787 kWh	\$0.0970/kWh
Natural Gas	024	\$122,972	212,167 Therms	\$0.5796/therm
Electric	071	\$144,463	1,216,015 kWh	\$0.1188/kWh
Electric	131	\$23,004	165,258 kWh	\$0.1392/kWh
Electric	143	\$35,309	268,716 kWh	\$0.1314/kWh
Natural Gas	143	\$ 24,771	37,799 Therms	\$0.6553/therm
Electric	199	\$37,616	303,122 kWh	\$0.1241/kWh
Natural Gas	199	\$26,861	40,807 Therms	\$0.6582/therm

V. PRIMARY OPERATIONS SCHEDULE PRE & POST RETROFIT

Pre and Post lighting hours can be found in the Option A guarantee section by retrofit type and line item. The hours were supplied and agreed upon by MPS.

VI. MEASUREMENT & VERIFICATION SERVICES

Contractor will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a Contractor Performance Assurance Specialist will track Measured Project Benefits. Contractor will report the Measured Project Benefits achieved during the Installation Period, as well as any Non-Measured Project Benefits applicable to the Installation Period, to Customer within 60 days of the commencement of the Guarantee Term.
2. Within 60 days of each anniversary of the commencement of the Guarantee Term, Contractor will provide Customer with an annual report containing:
 - A. an executive overview of the project’s performance and Project Benefits achieved to date;
 - B. a summary analysis of the Measured Project Benefits accounting; and
 - C. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.
3. During the Guarantee Term, a Contractor Performance Assurance Specialist will monitor the on-going performance of the Improvement Measures, as specified in this Agreement, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Specialist will periodically assist Customer, on-site or remotely, with respect to the following activities:
 - A. review of information furnished by Customer from the facility management system to confirm that control strategies are in place and functioning;
 - B. advise Customer’s designated personnel of any performance deficiencies based on such information;
 - C. coordinate with Customer’s designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and
 - D. inform Customer of opportunities to further enhance project performance and of opportunities for the implementation of additional Improvement Measures.
4. For specified Improvement Measures utilizing an “Option A” M&V protocol, Contractor will:
 - A. conduct pre and post installation measurements required under this Agreement;
 - B. confirm the building management system employs the control strategies and set points specified in this Agreement; and
 - C. analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).
5. For specified Improvement Measures utilizing an “Option B” M&V protocol, Contractor will:
 - A. confirm that the appropriate metering and data points required to track the variables associated with the applicable Improvement Measures’ benefits calculation formulas are established; and
 - B. set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.
6. For specified Improvement Measures utilizing an “Option C” M&V protocol, Contractor will:

APPENDIX C

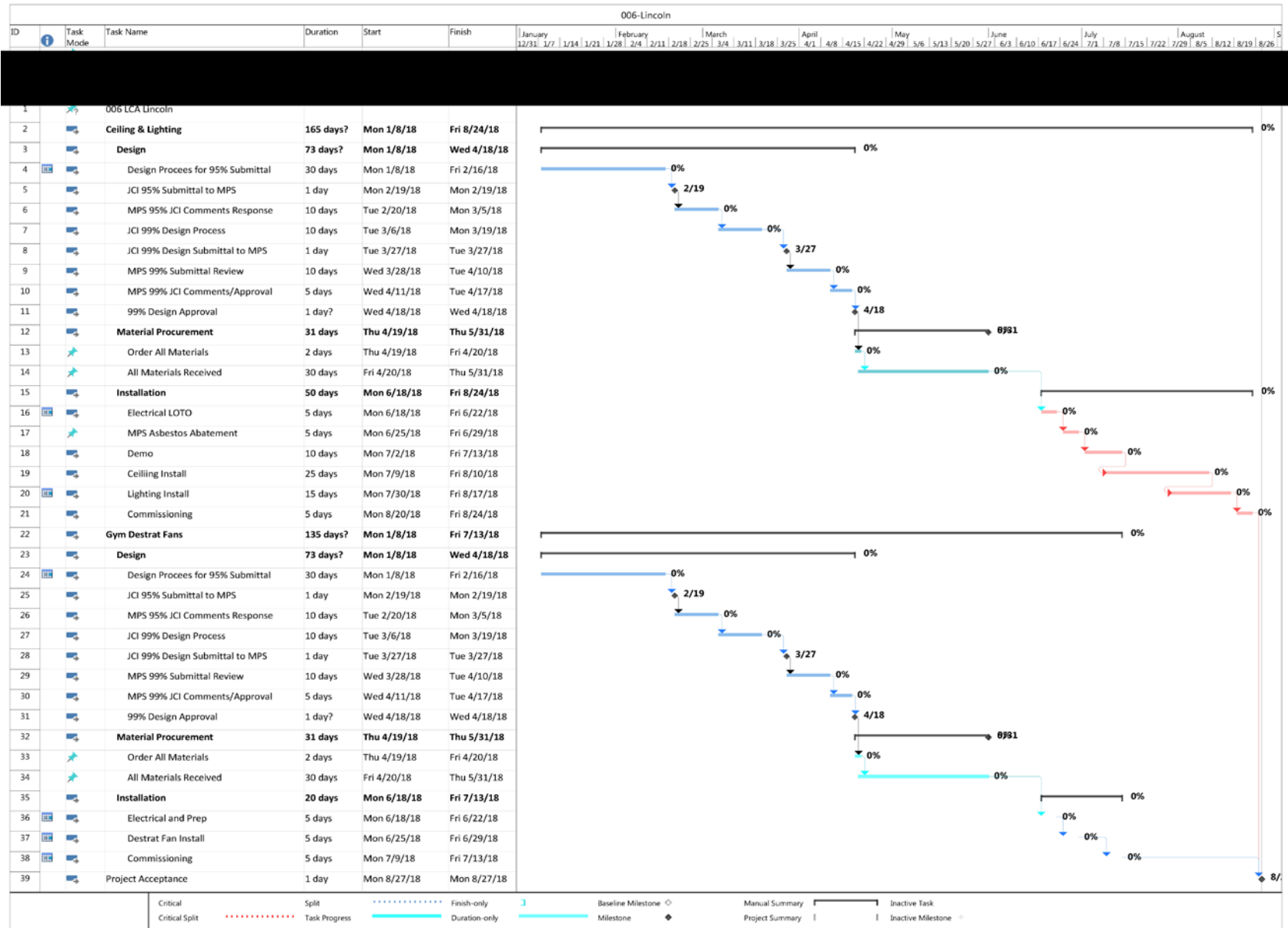
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- A. Within sixty (60) days of the implementation phase, establish a tuned baseline for the utility meters by utilizing statistical regression analysis to identify the relationships (if any) between historic utility performance and weather or other variables.
 - B. Enter monthly utility utilization and compare to baseline for cost avoidance results
 - C. Remote connect periodically via internet access to building systems management to verify and validate control strategies and set points specified in this agreement.
 - D. Analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).
 - E. Set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.
7. For specified Improvement Measures utilizing an “Option D” M&V protocol, Contractor will:
- A. Develop calibrated computer simulation models of the individual component or whole building energy consumption to determine measure energy cost avoidance.
 - B. Within twelve (12) months of the implementation phase, establish a tuned baseline for the utility meters by utilizing calibrated computer simulation models. Long-term whole building energy use data may be used to calibrate the simulation(s).
 - C. Perform spot, short-, or long-term measurements of system components; and whole building utility meter data.
 - D. Remote connect periodically via internet access to building systems management to verify and validate control strategies and set points specified in this agreement.
 - E. Analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).

Set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.

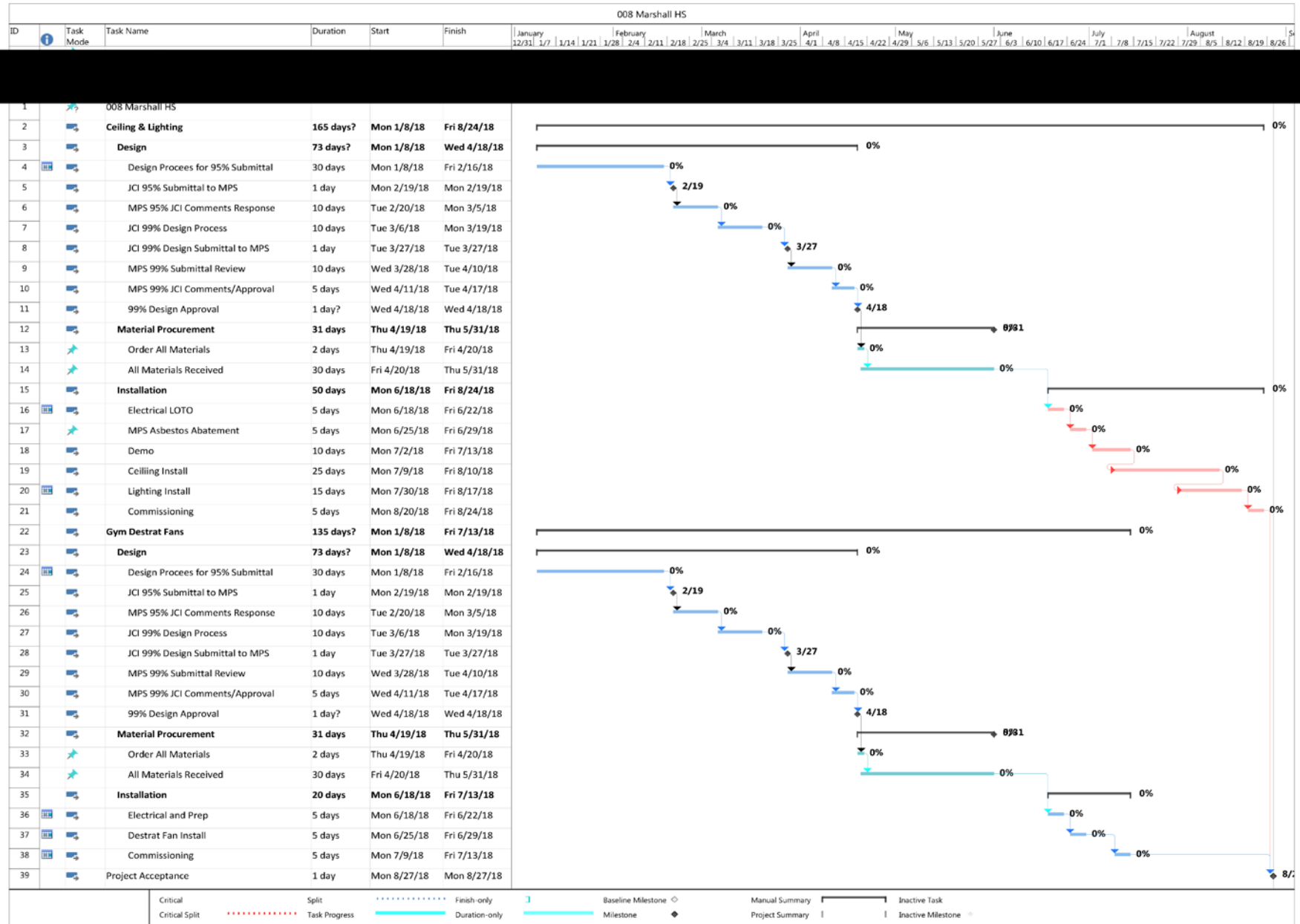
APPENDIX D - PROJECT CONSTRUCTION SCHEDULE

Per Section 2 of the primary contract all schedules are tentative as it states: “Attached hereto as **Appendix D** is the initial Construction Progress Schedule for the project (the “**Progress Schedule**”), which shall be updated by Contractor from time to time as the need arises during the Term for MPS’ approval.”



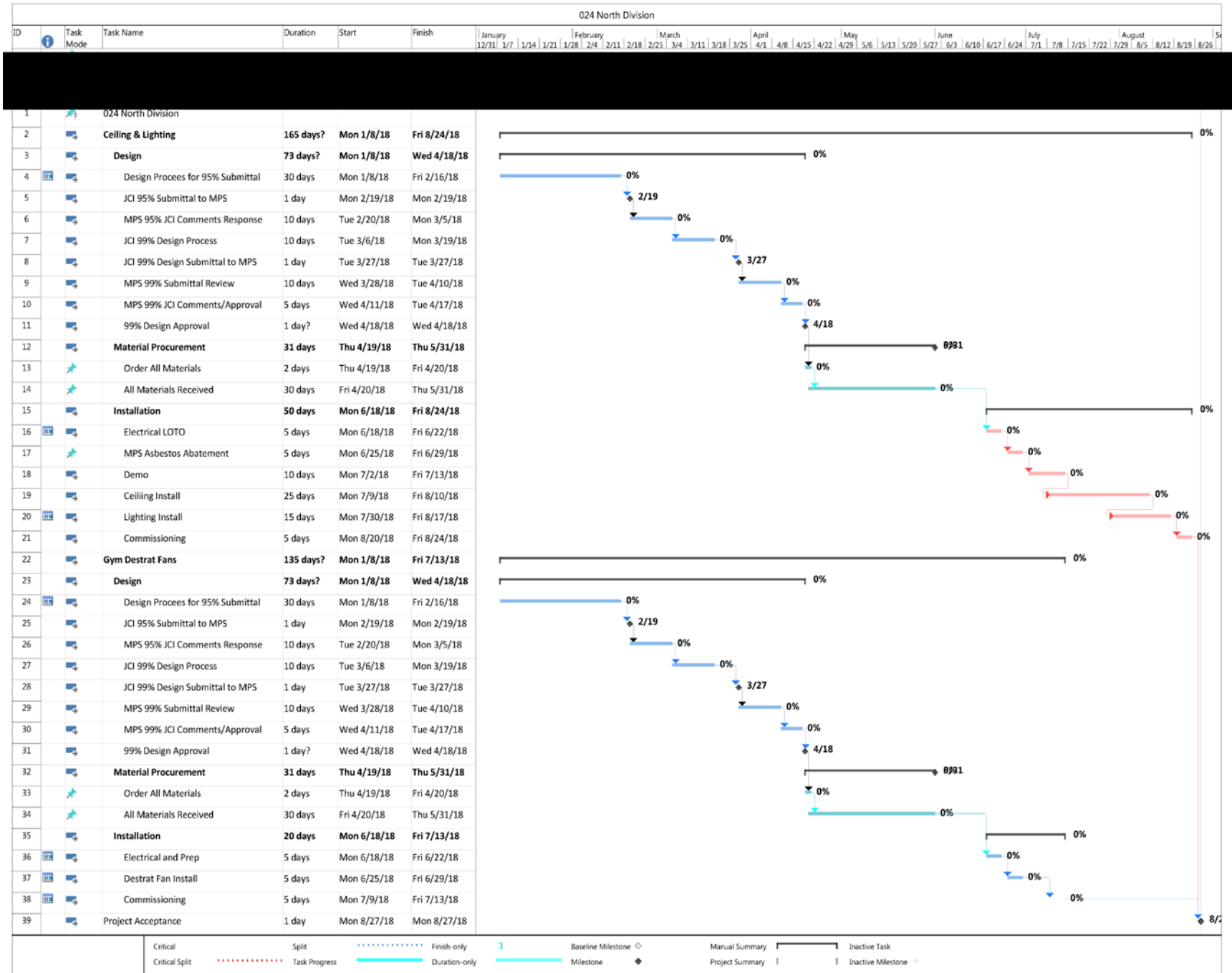
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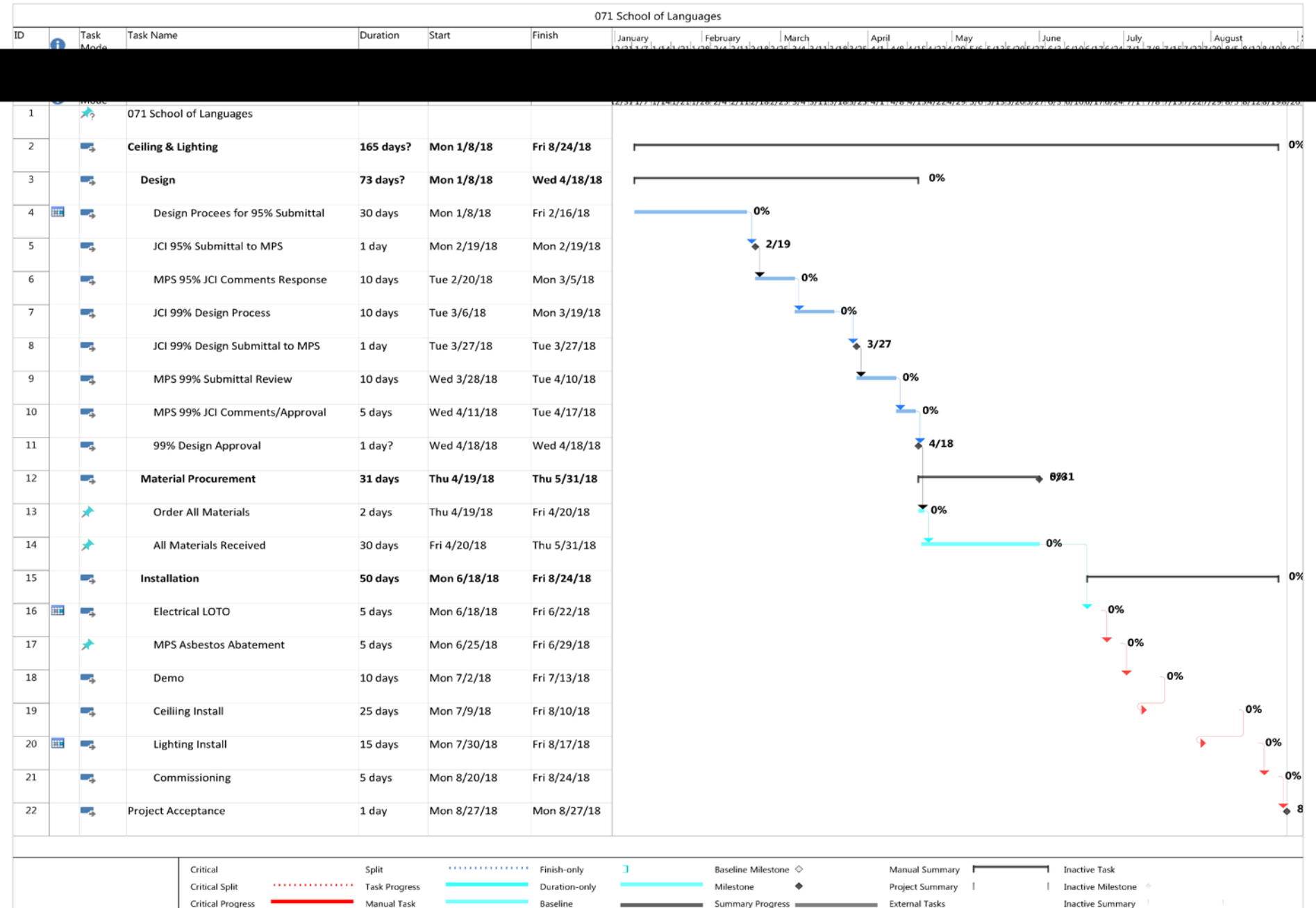
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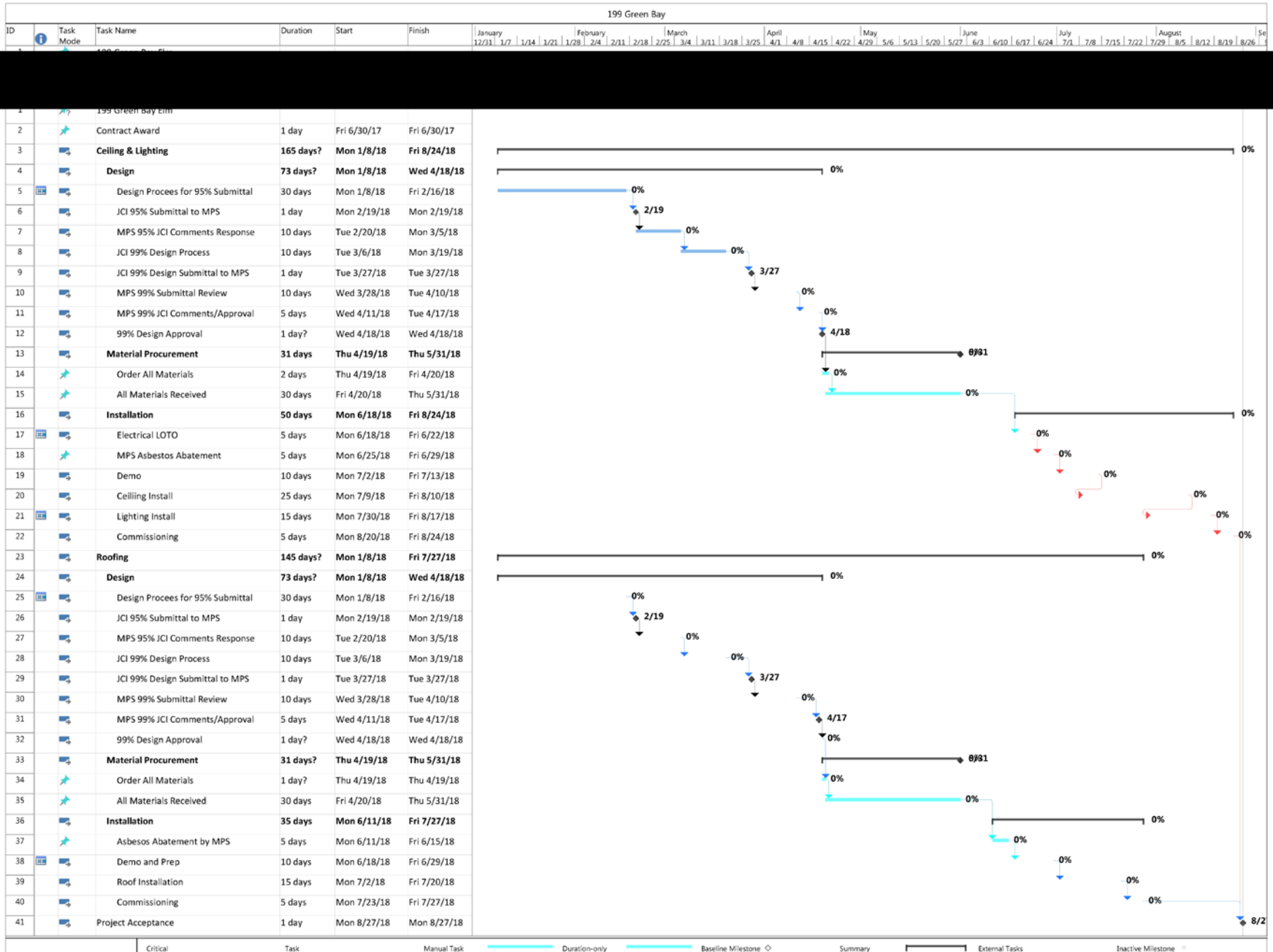
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ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		143 81st Elm					
2		Ceiling & Lighting	165 days?	Mon 1/8/18	Fri 8/24/18		
3		Design	73 days?	Mon 1/8/18	Wed 4/18/18		
4		Design Procees for 95% Submittal	30 days	Mon 1/8/18	Fri 2/16/18		
5		JCI 95% Submittal to MPS	1 day	Mon 2/19/18	Mon 2/19/18	4	
6		MPS 95% JCI Comments Response	10 days	Tue 2/20/18	Mon 3/5/18	5	
7		JCI 99% Design Process	10 days	Tue 3/6/18	Mon 3/19/18	6	
8		JCI 99% Design Submittal to MPS	1 day	Tue 3/27/18	Tue 3/27/18	7FS+5 days	
9		MPS 99% Submittal Review	10 days	Wed 3/28/18	Tue 4/10/18	8	
10		MPS 99% JCI Comments/Approval	5 days	Wed 4/11/18	Tue 4/17/18	9	
11		99% Design Approval	1 day?	Wed 4/18/18	Wed 4/18/18	10	
12		Material Procurement	31 days	Thu 4/19/18	Thu 5/31/18		
13		Order All Materials	2 days	Thu 4/19/18	Fri 4/20/18	11	
14		All Materials Received	30 days	Fri 4/20/18	Thu 5/31/18	13	
15		Installation	50 days	Mon 6/18/18	Fri 8/24/18		
16		Electrical LOTO	5 days	Mon 6/18/18	Fri 6/22/18	14	
17		MPS Asbestos Abatement	5 days	Mon 6/25/18	Fri 6/29/18	16	
18		Demo	10 days	Mon 7/2/18	Fri 7/13/18	17	
19		Ceiling Install	25 days	Mon 7/9/18	Fri 8/10/18	18FS-5 days	
20		Lighting Install	15 days	Mon 7/30/18	Fri 8/17/18	19FS-10 days	
21		Commissioning	5 days	Mon 8/20/18	Fri 8/24/18	20	
22		Roofing	145 days?	Mon 1/8/18	Fri 7/27/18		
23		Design	73 days?	Mon 1/8/18	Wed 4/18/18		
24		Design Procees for 95% Submittal	30 days	Mon 1/8/18	Fri 2/16/18		
25		JCI 95% Submittal to MPS	1 day	Mon 2/19/18	Mon 2/19/18	24	
26		MPS 95% JCI Comments Response	10 days	Tue 2/20/18	Mon 3/5/18	25	
27		JCI 99% Design Process	10 days	Tue 3/6/18	Mon 3/19/18	26	
28		JCI 99% Design Submittal to MPS	1 day	Tue 3/27/18	Tue 3/27/18	27FS+5 days	
29		MPS 99% Submittal Review	10 days	Wed 3/28/18	Tue 4/10/18	28	
30		MPS 99% JCI Comments/Approval	5 days	Wed 4/11/18	Tue 4/17/18	29	
31		99% Design Approval	1 day?	Wed 4/18/18	Wed 4/18/18	30	
32		Material Procurement	31 days?	Thu 4/19/18	Thu 5/31/18		
33		Order All Materials	1 day?	Thu 4/19/18	Thu 4/19/18	31	
34		All Materials Received	30 days	Fri 4/20/18	Thu 5/31/18	33	
35		Installation	35 days	Mon 6/11/18	Fri 7/27/18		
36		Asbesos Abatement by MPS	5 days	Mon 6/11/18	Fri 6/15/18	34	
37		Demo and Prep	10 days	Mon 6/18/18	Fri 6/29/18	36	
38		Roof Installation	15 days	Mon 7/2/18	Fri 7/20/18	37	
39		Commissioning	5 days	Mon 7/23/18	Fri 7/27/18	38	
40		Project Acceptance	1 day	Mon 8/27/18	Mon 8/27/18	21 39	

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APPENDIX E

GENERAL CONDITIONS FOR WORK AND M&V SERVICES

Contractor shall complete the Work and M&V Services in accordance with the following terms and conditions:

1. **Construction Standards.** Contractor shall perform, administer and supervise the Work and M&V Services in a diligent and good and workmanlike manner, and in accordance with generally accepted standards of construction and construction management practices for projects in the Milwaukee metropolitan area similar to the Project, as in existence during the term of this Contract. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures for coordinating all portions of the Work and M&V Services.
2. **Scope of Work and Services.** Except to the extent that any such items are the obligations of others, as expressly provided in the Contract, Contractor shall provide all labor, materials, equipment, tools, construction equipment and machinery, coordination of Subcontractors (as such term is defined in Section 5 below), as reasonably necessary for the execution and completion of the Work and M&V Services. Should any governmental entity require the completion of code compliance measures in areas or locations outside of the Project scope of work, the Work shall not include any such work, unless such work is otherwise added to the Project through a Change Order.
3. **Site Control.** Contractor shall maintain good order among Contractor's agents, employees and Subcontractors on the Premises. Contractor shall not permit the presence of unfit persons for whom Contractor is responsible on the Premises nor utilize personnel or entities to perform tasks in which such persons or entities are not reasonably skilled. Contractor shall be responsible for the acts and omissions of Contractor's employees, agents and Subcontractors. Contractor shall at all times properly dispose of waste materials and rubbish on the Premises, and shall periodically remove from the Project waste materials and/or rubbish.
4. **Safety.** Contractor shall be responsible for maintaining and supervising safety programs in connection with the performance of the Work and M&V Services. Contractor shall take reasonable precautions to protect and prevent damage, injury, or loss to: (i) employees engaged in the Work and M&V Services; (ii) the Project and materials and equipment to be incorporated therein; (iii) students, employees and agents of MPS present or working in or about the Premises, and (iv) other property adjacent to or surrounding the Premises. Contractor shall comply with applicable Laws related to the safety of persons and property and their protection from damage, injury, or loss. Contractor's responsibility for safety under this Section is not intended in any way to relieve any of Contractor's subcontractors, suppliers or second or third tier subcontractors and suppliers of their own legal obligations and responsibility for complying with any applicable laws, ordinances, rules, regulations, and lawful orders of public authorities related to safety of persons or property, and for taking all necessary measures to implement and monitor reasonable safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.
5. **Subcontractors.** Contractor shall furnish in writing to MPS the names of the proposed Subcontractors, if any, for each of the portions of the Work not otherwise being self-performed by Contractor. Contractor shall not contract with any Subcontractor with whom MPS has made a reasonable and timely objection. Contractor shall not be required to contract with anyone with whom Contractor reasonably objects. As used in the Contract, the term "Subcontractor" shall mean (i) any person or entity who has a direct contractual arrangement with Contractor to either perform a portion of the Work or to provide materials and equipment to be incorporated into the Project, and (ii) other persons or entities working on behalf of Contractor or for whom Contractor is responsible pursuant to the Contract.
6. **Materials and Equipment; Warranty.** All materials and equipment incorporated into the Project under the Contract (but excluding the tools and construction equipment owned or rented by Contractor or its Subcontractors for the purposes of completing the installation of the Improvement Measures) shall be of good quality, new and free from defects unless otherwise expressly required or permitted by the Contract. Materials and equipment not conforming to these requirements shall be deemed to be "Non-

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Conforming Work.” Contractor will promptly re-perform any Non-Conforming Work for no charge, as long as MPS provides written notice to Contractor within one (1) year following Substantial Completion or such other period identified in **Appendix B** (such time period shall be the “Workmanship Warranty Period”). During the Workmanship Warranty Period only, MPS shall also have the benefit of any implied warranties relating to the Work, including without limitation warranties of merchantability and fitness for particular purpose. Contractor shall also assign and transfer to MPS the benefits of any end-user warranties relating to goods or equipment incorporated into the Work. The foregoing remedies with respect to the Work, together with any remedy provided by goods or equipment manufacturers, shall be MPS’ sole and exclusive remedies for warranty claims. These exclusive remedies shall not have failed of their essential purpose so long as Contractor transfers the benefits of any goods or equipment end-user warranty to MPS and remains willing to re-perform any Non-Conforming Work for no charge within the Workmanship Warranty Period. **EXCEPT AS EXPRESSLY PROVIDED ABOVE IN THIS SECTION 6, NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE PROVIDED BY CONTRACTOR.** This warranty does not extend to any Work that has been abused, altered, or misused, or repaired by MPS or third parties without the supervision or prior written approval of Contractor. Except (i) with respect to goods or equipment manufactured by Contractor and furnished to MPS hereunder, for which Contractor shall provide its express written manufacturer’s warranty, and (ii) during the Workmanship Warranty Period, Contractor shall not be considered a merchant or vendor of goods or equipment. Contractor shall store materials and equipment only in areas designated by MPS and shall reasonably remove, as construction of the Project progresses, any tools and construction equipment that are no longer reasonably required to complete the remaining Work.

7. **MPS Scope Modifications.** Contractor agrees not to seek any change orders for additional costs incurred in performing the Work pursuant to the Scope of Work set forth above. However, in the event that MPS modifies the Scope of Work and directs Contractor to perform any additional or extra work outside the Scope of Work as set forth above, the Contract Price

and Contract Time shall be adjusted accordingly. Contractor shall not be obligated to perform scope modifications, including additional or extra work, unless Contractor and an authorized representative of MPS execute a written change order so providing (a “Change Order”); provided, that work performed without the written directive of MPS, but made necessary by an emergency involving an immediate threat to the safety of persons or property, or the non-performance of which would impair the efficiency, scheduling or coordination of the work of MPS, Contractor or Contractor’s subcontractors, shall nevertheless serve as a basis for revising the Contract Price or Contract Time in accordance with this paragraph. The amount to be paid by MPS to Contractor for any scope modifications, including additional or extra work, or the amount to be allowed by Contractor, shall be determined as provided under the terms of the Change Order, except, notwithstanding any provisions to the contrary in the Change Order or elsewhere in the Contract Documents, Contractor shall be entitled to an allowance of ten percent (10%) for overhead and an allowance of five percent (5%) for profit, in addition to its actual costs for materials and labor on all scope modifications, including additional or extra work.

8. **Access.** MPS shall provide Contractor, its Subcontractors, and their respective agents reasonable and safe access to all facilities and properties where the Work and M&V Services are to be performed. An equitable adjustment in the time for performance, price and payment terms, and Assured Performance Guarantee shall be made as a result of any failure to grant such access. Contractor shall provide and maintain reasonable access to the Premises for MPS and its students, agents and employees throughout the completion of the Work and M&V Services. Contractor shall also take all necessary measures to minimize disruption to the operations of MPS.
9. **Environmental Conditions.** The following provisions shall apply to environmental conditions arising at the Premises during the completion of the Project:

Asbestos-Containing Materials: Neither party desires to or is licensed to undertake direct obligations relating to the identification, abatement, cleanup, control, removal or disposal of asbestos-containing materials (“ACM”). Consistent with applicable Laws, MPS shall supply Contractor with any information in its possession relating to the presence of ACM in the Premises that may result in the disturbance of ACM. It is Contractor’s policy to seek

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certification for facilities constructed prior to 1982 that no ACM is present, and MPS shall provide such certification for the Premises, if Contractor will undertake Work or M&V Services in such locations that could disturb ACM. If either MPS or Contractor becomes aware of or suspects the presence of ACM that may be disturbed by the Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other. As between MPS and Contractor, MPS shall be responsible at its sole expense for addressing the potential for or the presence of ACM in conformance with all applicable Laws and addressing the impact of its disturbance before Contractor continues with its Work or M&V Services, unless Contractor had actual knowledge that ACM was present and acted with intentional disregard of that knowledge, in which case (i) Contractor shall be responsible at its sole expense for remediating areas impacted by Contractor's disturbance of the ACM, and (ii) MPS shall resume its responsibilities for the ACM after Contractor's remediation has been completed.

Other Hazardous Materials: Contractor shall be responsible for removing or disposing of any Hazardous Materials (as defined below) that it uses in providing Work or M&V Services ("Contractor Hazardous Materials") and for the remediation of any areas impacted by the release of Contractor Hazardous Materials. For other Hazardous Materials that may be present at the Premises ("Non-Contractor Hazardous Materials"), MPS shall supply Contractor with any information in its possession relating to the presence of such materials if their presence may affect Contractor's performance of the Work or M&V Services. If either MPS or Contractor becomes aware of or suspects the presence of Non-Contractor Hazardous Materials that may interfere with Contractor's Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other. As between MPS and Contractor, MPS shall be responsible at its sole expense for removing and disposing of Non-Contractor Hazardous Materials from its facilities and the remediation of any areas impacted by the release of Non-Contractor Hazardous Materials, unless Contractor had actual knowledge that Non-Contractor Hazardous Materials were present and acted with intentional disregard of that knowledge, in which case (i) Contractor shall be responsible at its sole expense for the remediation of any areas impacted by Contractor's release of such Non-Contractor Hazardous Materials, and (ii) MPS shall remain responsible at its sole expense for the removal of Non-Contractor Hazardous Materials that have not been released and for releases not resulting from Contractor's performance of the Work or M&V Services. For purposes of this Contract, "Hazardous Materials" means any material or substance that, whether by its nature or use, is

now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant or contaminant under applicable Law relating to or addressing public or employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, mutagenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product, or polychlorinated biphenyls. "Hazardous Materials" specifically includes mold and lead-based paint and specifically excludes ACM. Contractor shall have no obligations relating to the identification, abatement, cleanup, control, removal, or disposal of mold, regardless of the cause of the mold.

10. **Permits and Fees.** Unless otherwise specified in **Appendix F**, Contractor shall be responsible for obtaining all building permits required for it to perform the Work. Unless otherwise specified in **Appendix B**, MPS shall be responsible for obtaining all other permits, licenses, approvals, permissions and certifications, including without limitation all zoning and land use changes or exceptions required for the provision of the Work or the ownership and use of the Improvement Measures.

APPENDIX F CUSTOMER RESPONSIBILITIES

In order for Contractor to perform its obligations under this Contract with respect to the Work, the Assured Performance Guarantee, and the M&V Services, MPS shall be responsible for:

1. Providing Contractor, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;
2. Providing for shut down and scheduling of affected locations during installation, including timely shutdowns of chilled water and hot water systems as needed, including notice to any staff or system users to accomplish the Work and/or M&V Services;
3. Providing timely reviews and approvals of design submissions, proposed change orders, and other project documents;
4. Providing the following information with respect to the project and project site as soon as practicable following Contractor's request:
 - a. surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;
 - b. geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the project site;
 - c. temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the project and enable Contractor to perform the Work;
 - d. a legal description of the project site;
 - e. as-built and record drawings of any existing structures at the project site; and
 - f. environmental studies, reports and impact statement describing the environmental conditions, including hazardous conditions or materials, in existence at the project site.
5. Securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable Contractor to perform the Work;
6. Providing assistance to Contractor in obtaining any permits, approvals, and licenses that are Contractor's responsibility to obtain as set forth in Appendix B;
7. Obtaining any permits, approvals, and licenses that are necessary for the performance of the Work and are not MPS's responsibility to obtain as set forth in Appendix B;
8. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;
9. MPS shall provide Customer with utility information via access to WE Energies and THG online systems.
10. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by Contractor;

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11. Providing and installing utility sub-meters on all new construction and/or additions built during the Guarantee Term as recommended by Contractor or, alternatively, paying Contractor's applicable fees for calculating necessary adjustments to the Assured Performance Guarantee as a result of the new construction;
12. Providing and maintaining a dedicated telephone line and/or TCP/IP remote connection to facilitate remote monitoring of relevant equipment, such access to be provided via MPS current LAN infrastructure;
13. Promptly notifying Contractor of any change in use or condition described in Section III of Appendix C or any other matter that may impact the Assured Performance Guarantee;
14. Taking all actions reasonably necessary to achieve the Non-Measured Project Benefits;
15. Reviewing and providing approval for all submittals within ten (10) days;
16. Reviewing and providing approval for all engineering reviews within ten (10) business days;
17. Providing a number of LAN connections, as reasonably agreed to by MPS and Contractor, for all Contractor control connections in locations specified by Contractor;
18. Coordinating MPS facility users such that all areas scheduled for construction can be turned over to Contractor for construction in accordance with the construction schedule;
19. Remove and relocate any storage items that are in the area of mechanical upgrades were work is to be done, or in a route for equipment delivery and/or removal;
20. MPS shall be responsible at its sole expense for removing asbestos or lead containing material (ACM) in areas where work is proposed.
21. The portion of **Appendix G** attached hereto, noted as "MPS Responsibilities."

**APPENDIX G
SUPPLEMENTAL GENERAL CONDITIONS FOR WORK**

DESIGN AND SPECIFICATIONS REQUIREMENTS:

1. Prior to commencing any design work, Contractor shall verify all existing conditions that will be affected by the project scope.
2. Contractor shall provide all drawings in AUTOCAD 2013 or approved equal for necessary sketches or representations to clearly define scope of work.
3. MPS has made available to Contractor single-line schematic floor plan CAD drawings for all MPS sites for use as a base plan; however, each school must be surveyed in order to verify existing conditions. In addition, MPS maintains an archive of original drawings, prints, submittals, and specifications for the original construction, remodeling, and maintenance projects for all MPS sites, which may be loaned for use. Please schedule an appointment in advance to review the archives.
4. MPS has prepared Guide Specification sections for the general requirements, general construction, mechanical, and electrical divisions of work, for use on all MPS projects. These specification sections identify the approved materials and product performance standards required for use on all MPS projects.
5. The Guide Specifications have been prepared in the three-part Construction Specifications Institute (CSI) format, and are intended to be utilized as a guide, requiring editing to reflect the specifics for each individual project, including work by consultants and sub-consultants. The Guide Specifications are not inclusive of all required conditions, materials or equipment, but shall be supplemented as required.
6. Any revisions to the materials specified, or to the specifications in general are to be highlighted on the construction document review sets provided to MPS, along with the rationale for the required changes.
7. Failure to use the MPS Guide Specifications for all aspects of the project will be cause for rejection of the review sets, and will not be a basis for additional compensation.
8. All drawings and specifications, renderings, models, scale details, approved copies of shop drawings, calculations, and other such documents, whether hard copy or electronic, prepared by the PC Firm or any consultant pursuant to each contract shall be provided to MPS on completion and acceptance of any of the PC Firm's work, or upon termination of the contract, and shall be delivered to MPS upon request.

DESIGN PHASE REQUIREMENTS:

1. Contractor shall work with the City of Milwaukee and/or other regulatory agencies so that project designs comply with any code related issues, including ADA. Contractor is responsible for all redraw/redesign efforts due to changes required to bring the project in line with MPS standards.
2. Contractor shall provide MPS with paper and electronic copies of the following design documents for MPS review:
 - a. 75% and 95% Construction Documents and Specifications:
 - i. Contractor shall submit one (1) review set, hard copy, at the 75% and 95% completion phases of the Construction Documents.
 - ii. Such design review sets should clearly define the general scope of work for the project, including all items that have a major impact on the project's budget, mechanical and electrical systems, etc. All consultant work must be complete at the time of the review submittal.

- iii. Design review sets shall include coordination, to protect the integrity of the design and facilitate construction with all required manufacturers, consultants, utility companies, governmental authorities and MPS.
 - iv. Contractor shall determine time requirements for obtaining any equipment and services for coordination issues.
- b. 95% Construction Documents and Specifications:**
- i. Contractor shall submit to MPS one (1) review set, hard copy, at the 99% completion of Construction Documents Phase along with the 95% review set mark-ups.
 - ii. Documents shall provide for a final review to confirm that all details are complete and all required information is provided. Minor corrections may remain, such as spelling, incomplete references, etc., but major items such as finishes, equipment schedules, details, sections, and elevations, shall be complete. The specifications should be in the correct final format with a complete Table of Contents.
 - iii. Preliminary Plan Review by regulating authorities.
- c. Final 100% Complete Construction Documents and Specifications:**
- i. Contractor shall submit electronic files of all 100% complete construction documents via email, jump drive, CD, or consultant FTP site to MPS.

CONSTRUCTION PHASE REQUIREMENTS:

1. Contractor shall conduct two (2) punch list walkthroughs and distribute to MPS. One (1) punch list with site visit to verify construction documents have been followed and one (1) follow up inspection to assure punch list items have been completed.
2. Contractor shall provide all site visits and documentation as reasonably required to resolve field problems as result of ambiguous scope of work (RFI's) within five (5) working days of identification of same.
3. Contractor shall provide all required shop drawing review and maintenance of the Submittal Log Spreadsheet within five (5) working days of receipt.
4. Contractor shall provide any required conflict mediation, primarily request for extras, with Subcontractors as required for the project.

PROJECT CLOSEOUT AND FOLLOW-UP PHASE:

1. Upon notification to MPS that Contractor believes Substantial Completion has taken place, Contractor and MPS shall determine in a written report whether Substantial Completion has, in fact, been achieved, along with a written punch list of items found not to be complete, in need of correction, replacement or otherwise not in accordance with the construction Contract Documents. MPS will prepare and distribute the Certificate of Substantial Completion when appropriate.
2. The PC Firm shall maintain marked-up record prints during construction and, upon completion of the Work, modify the original drawings to reflect the changes in the Work made during the construction process to produce a set of as-built documents. All addenda, change orders, and other circumstances known to have caused change shall be included in the production of the as-built documents.
3. At the conclusion of the project, in addition to providing the final Record Drawings, Contractor shall update the existing MPS schematic floor plan CAD drawings as poly-lines in accordance with the MPS guidelines to indicate all

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new building modifications and/or additions and provide the drawings to MPS where the floor plan has been modified as part of the Work.

4. Contractor shall also provide the following to MPS as part of the As-Built/Record Drawings:
 - a. One (1) complete set of reproducible drawings.
 - b. One (1) complete set of CAD record drawings on CD, properly labeled with index. Each drawing must be a separate CAD drawing file.
 - c. One (1) complete set of updated schematic CAD poly-line drawings of all new spaces.
 - d. One (1) electronic copy of Project Specifications.
 - e. Record of all addenda information.
5. Contractor shall provide follow-up assistance within one year of project completion as noted in **Appendix E**.
6. Once project is completed, Contractor shall provide MPS a closeout package which includes two of the following: contractor contact information, as-built drawings, addendum, construction bulletins, submittals, shop drawings, cut sheets, O&M manuals, warranties, attic stock form sign-off's, training form sign-offs, etc.

MPS RESPONSIBILITIES:

1. MPS will provide Contractor available information regarding the requirements for the project, including the desired objectives for the program, and the following:
 - a. Division 1 Specification Sections
 - b. Existing Documents: MPS will provide access to all existing drawings, electronic files, etc., for Contractor's use for informational purposes only. All existing conditions must be field verified as the information provided on existing documents may or may not reflect existing conditions correctly.
 - c. Hazardous Materials Identification
 - d. Existing Materials: MPS will provide information for each specific project and will include the abatement services for the removal of identified hazardous materials.

ENVIRONMENTAL COMPLIANCE:

Asbestos materials in any form are not allowed to be specified in any portion of the Work. At the completion of the project, Contractor shall submit a notarized, signed affidavit attesting that no asbestos containing materials were specified or approved to be used through the project, including the approval of shop drawings or change orders on this project.

EMERGENCY EVACUATION OF BUILDING:

When the fire alarm signal sounds in the school, all employees of contractors involved with this project are to follow the evacuation instructions. This means that all employees shall leave the building upon the sounding of the fire alarm signal and shall not return to the building until the ALL CLEAR signal is sounded.

NOTIFICATIONS:

1. Contractor shall notify the MPS’ Division of Facilities and Maintenance Services:
 - a. At least (72) hours before starting work on the project.
 - b. In writing in case of defects in such surfaces that are to receive Work.
 - c. Whenever work is suspended or resumed because of weather or other conditions and at least 24 hours prior to resuming any work.

LIVABLE WAGE POLICY:

Contractor shall comply with, and ensure its subcontractors performing work under this Contract comply with, Milwaukee Board of School Directors’ Administrative Policy 3.09(17), which requires that employees be paid a “living wage.” The current livable wage rate can be found at the City of Milwaukee website

<http://city.milwaukee.gov/ImageLibrary/Groups/doaPurchasing/forms/LivingWageTable.docx>

PARTICIPATION PLAN:

1. In educating the children and youth of Milwaukee, MPS is also a primary purchaser of goods and services in the Milwaukee marketplace. MPS believes it is obligated to display in its own operations the values of excellence, diversity, and economic responsibility that it strives to teach its students.
2. To that end, many MPS contracts require the use of Historically Underutilized Business (HUB) firms, Communities in Need (COIN) employees and the engagement of the MPS contract awardee in Student Employment and/or Student Career Education activities.
3. All information relating to the HUB participation, COIN requirement and the Student Engagement Requirement, including all forms that must be filled out, can be found at <http://mps.milwaukee.k12.wi.us/en/District/About-MPS/School-Board/Contract-Compliance-Services.htm> (then click on Forms and Schedules, then click on Vendors).
4. Each individual School/Project has specific requirements for the MPS Participation Plan for HUB, COIN and Student Participation that are based on the cost provided by the Contractor for each School/Project. The MPS Participation Plan requirements per each School/Project under this Contract are as follows:

	<u>HUB</u>	<u>COIN</u>	<u>Paid Student Employment</u>	<u>Student Education Activities</u>
Project Total Cost of \$1,000,000 or less:	20%	10%	400 Hours	20 Hours
Project Total Cost between \$1,000,000 - \$2,000,000:	25%	15%	600 Hours	30 Hours
Project Total Cost in excess of \$2,000,000	30%	20%	800 Hours	40 Hours