AGREEMENT BETWEEN OWNER AND DESIGN/BUILDER FOR THE GUARANTEED ENERGY SAVINGS PROJECT

PART 2 AGREEMENT

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AGREEMENT made

BETWEEN the Owner
Ramsey County Parks & Recreation
2015 Van Dyke Street
Maplewood, MN 55109

and the Design/Builder ("Contractor"):
Honeywell International Inc, acting through its Honeywell Building Solutions business
715 Peachtree Street N.E.
Atlanta, GA 30308

For the following Project: Installation of Energy Conservation Measures (ECMs), including lighting upgrades, building envelope improvements, building management system upgrades, mechanical upgrades, and rooftop solar photovoltaic arrays at various County facilities.

This Project is made up of two (2) phases. See the Part 1 Agreement for the description of the Part 1 services provided by the Design/Builder.

This Part 2 Agreement includes the balance of design, construction documents, bidding, and construction services for the Project. See **Exhibit A** - Scope of Work, attached hereto and made a part of this Part 2 Agreement, for a description of Part 2 services. Part 2 services will be provided using the Design/Build delivery method.

The mechanical and electrical engineering services for the services described in Article 3 of this Part 2 Agreement will be provided by the following persons or entities, lawfully licensed to practice architecture or engineering in the State of Minnesota, both of which shall be referred to as the "Architect" in this Part 2 Agreement with respect to their respective scopes.

Name and address	Registration Number	Relationship to Design/Builder
Nicolas Nitti, P.E. WestShore Design Engineers 100 Great Oaks Blvd. Suite 117A Albany, NY 12203	54597	Consultant
Perry Nistler, P.E. Nistler Engineering 412 5th Ave NE St. Stephen, MN 56375	22468	Consultant

The Owner and the Design/Builder agree as set forth below.

TERMS AND CONDITIONS -- PART 2 AGREEMENT

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 BASIC DEFINITIONS

§ 1.1.1 The Contract Documents consist of the Part 1 Agreement, including the Exhibits, to the extent not modified by this Part 2 Agreement; the Design/Builder's Design Documents approved by the Owner under the Part 1 Agreement; this Part 2 Agreement; the Construction Documents approved by the Owner in accordance with Section 3.2.3 of this Part 2 Agreement; and Modifications issued after execution of this Part 2 Agreement. A Modification is a Change Order to this Part 2 Agreement signed by both parties. If there are inconsistencies among the Contract Documents or among the attachments to this Part 2 Agreement, the more detailed shall prevail over the general and the inconsistencies shall be interpreted in favor of the owner..

§ 1.1.2 The term "Work" means all design, bidding, and construction services provided by the Design/Builder to fulfill the Design/Builder's obligations.

§ 1.2 EXECUTION, CORRELATION AND INTENT

§ 1.2.1 It is the intent of the Owner and the Design/Builder that the Contract Documents include all items necessary for proper execution and completion of the Work. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Design/Builder shall be required only to the extent consistent with and reasonably inferable from the Contract Documents as being necessary to produce the intended results. Words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.2 If the Design/Builder believes or is advised by the Architect or by another design professional retained to provide services on the Project that implementation of any instruction received from the Owner would cause a violation of any applicable law, the Design/Builder shall notify the Owner in writing. Neither the Design/Builder nor the Architect shall be obligated to perform any act which either believes will violate any applicable law.

§ 1.2.3 Nothing contained in this Part 2 Agreement shall create a contractual relationship between the Owner and any person or entity other than the Design/Builder.

§ 1.3 OWNERSHIP AND USE OF ELECTRONIC DATA AND DOCUMENTS

§ 1.3.1 The Owner owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works created under this Part 2 Agreement solely for Owner and for which the Design/Builder has received Final Payment (collectively “Work Product”). To the extent possible, the Work Product eligible for copyright protection under the United States Copyright Act will be deemed to be "works made for hire". Work Product shall not include Design/Builder’s trademarks, service marks, trade dress, trade names, logos, corporate names, or domain names, or Design Builder’s pre-existing proprietary information and methodologies for delivery of the services for the project, including but not limited to, inventions (whether or not patentable), discoveries, improvements, trade secrets, know how, designs, formulas, processes, techniques, algorithms, information, ideas, software, object code, source, code, computer programs, interfaces and/or other copyrightable subject matter (whether or not patentable), processes, document templates or project tools used by Design/Builder to deliver the services for the project, and Design/Builder owned materials in the Work Product (collectively, “Design Builder Intellectual Property”).

§ 1.3.2 "Electronic Data" means any and all items resulting from the use of any software program stored in digital format on hard disks, floppy disks, zip drives, CD-ROM discs, magnetic tapes of all types and kinds, microfiche, punched cards, punched tape, computer chips (including but not limited to EPROM, PROM, ROM and RAM of any kind) or in any other vehicle for digital data storage or transmittal, including labels appended to or associated with any physical storage device associated with each original and each copy.

§ 1.3.3 "Work Product" means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings,

specifications, materials, tapes, and disks conceived, created or originated by the Design/Builder, its employees, agents, and subcontractors, either individually or jointly with others in the performance of this contract that are created solely for Owner and are actually provided to the Owner as deliverables, that are deliverables in draft form or still "in-progress", or that are expected to become part of the deliverables. "Work Product" includes "Documents". "Documents" are comprised of written and electronic forms of deliverables created under the terms of this Part 2 Agreement, and of Electronic Data including the originals of any data or databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Design/Builder, its employees, agents or subcontractors, solely for the performance of services under the terms of this Part 2 Agreement.

§ 1.3.4 The Documents actually provided to the Owner as Deliverables, that are Deliverables in draft form or still “in-progress”, or that are expected to become part of the Deliverables will be the exclusive property of the Owner upon payment in accordance with the provisions of this Part 2 Agreement, and all such Documents must be immediately provided to the Owner by the Design/Builder upon termination of this Part 2 Agreement or upon request. For Deliverables in draft form or still “in-progress”, or that are expected to become part of the Deliverables, “Final Payment” means payment of the cost for the services provided to create the Documents to the then-current stage of completion. The Design/Builder assigns all right, title, and interest it may have in the Work Product to the Owner for which it has received Final Payment.

§ 1.3.5 The Design/Builder must, at the request of the Owner, execute all reasonable papers and perform all other reasonable acts necessary to transfer or record the Owner’s ownership interest in the Documents. The Documents shall be submitted to the Owner, upon request, prior to the Owner making Final Payment to the Design/Builder.

§ 1.3.6 Documents in electronic form shall be provided to the Owner in both native format and PDF. The Design/Builder may retain copies of the Documents only for purposes of performance under the terms of this Part 2 Agreement and for its records as part of the Project file and may not use any such Documents for any other purposes without the prior written consent of the Owner except that the Architect may reuse details and specifications contained in the Work Product and Documents which have been developed by the Architect as the Architect’s standards for similar public projects.

§ 1.3.7 The Owner shall have the right to use the drawings, specifications, and other documents and electronic data furnished by the Design/Builder without the written permission of the Design/Builder. Such use shall be at the Owner’s risk.

ARTICLE 2 OWNER

§ 2.1 The Owner designates Mark McCabe as its representative authorized to act on the Owner's behalf with respect to the Project. The Owner or such authorized representative shall examine documents submitted by the Design/Builder and shall render decisions in a timely manner and in accordance with the schedule accepted by the Owner. The Owner may obtain independent review of the Contract Documents by a separate architect, engineer, contractor or cost estimator under contract to or employed by the Owner. Such independent review shall be undertaken at the Owner's expense in a timely manner and shall not delay the orderly progress of the Work.

§ 2.2 The Owner may appoint an on-site project representative to observe the Work and to have such other responsibilities as the Owner and the Design/Builder agree to in writing.

§ 2.3 The Owner shall furnish all legal, accounting and insurance counseling services as may be necessary at any time for the Project, including such auditing services as the Owner may require to verify the Design/Builder's Applications for Payment, except in relation to any dispute between the parties.

§ 2.4 If the Owner observes or otherwise becomes aware of a fault or defect in the Work or nonconformity with the Construction Documents, the Owner shall give prompt written notice thereof to

the Design/Builder.

§ 2.5 The Owner shall communicate with persons or entities employed or retained by the Design/Builder through the Design/Builder, unless otherwise directed by the Design/Builder.

ARTICLE 3 DESIGN/BUILDER
§ 3.1 SERVICES AND RESPONSIBILITIES

§ 3.1.1 Design services required by this Part 2 Agreement shall be performed by qualified architects and other design professionals. The contractual obligations of such professional persons or entities are undertaken and performed in the interest of the Design/Builder. Prior to the termination of the services of the Architect or any other design professional designated in this Part 2 Agreement, the Design/Builder shall identify to the Owner in writing another architect or design professional with respect to whom the Owner has no reasonable objection, who will provide the services originally to have been provided by the Architect or other design professional whose services are being terminated. The Design/Builder shall be responsible for any additional costs associated with the other architectural or design professionals.

§ 3.1.2 The agreements between the Design/Builder and the persons or entities identified in this Part 2 Agreement, and any subsequent modifications, shall be in writing.

§ 3.1.3 The Design/Builder shall be responsible to the Owner for acts and omissions of the Design/Builder's employees, subcontractors and their agents and employees, and other persons, including the Architect and other design professionals, performing any portion of the Design/Builder's obligations under this Part 2 Agreement.

§ 3.2 BASIC SERVICES
§ 3.2.1 The Design/Builder's Basic Services are described below and in Article 14.

§ 3.2.2 The Design/Builder designates Cindy Auld as its representative authorized to act on the Design/Builder's behalf with respect to the Project.

§ 3.2.3 The Design/Builder has provided Owner with a report as required by Minnesota Statutes Section 471.345 Subdivision 13, which summarizes estimates of all costs of installations, modifications, or remodeling, including costs of design, engineering, installation, maintenance, repairs, or debt service, and estimates of the amounts by which energy or operating costs will be reduced. This report is attached and made a part of this Part 2 Agreement as **EXHIBIT K.** The Design/Builder shall submit Construction Documents for review and approval by the Owner in accordance with the Project Schedule, attached hereto and made a part of this Part 2 Agreement as **Exhibit B**. Construction Documents may include drawings, specifications, and other documents and electronic data setting forth in detail the requirements for construction of the Work, and shall:

3.2.3.1 Develop in greater detail the intent of the Design Documents approved by the Owner under the Part 1 Agreement and Exhibit C – Installation Price, attached hereto and made a part of this Part 2 Agreement;
3.2.3.2 Provide information for use by those in the building trades; and
3.2.3.3 Include documents customarily required for regulatory agency approvals.

§ 3.2.4 The Design/Builder shall provide or cause to be provided and shall pay for design services, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.2.5 The Design/Builder shall be responsible for all construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under this Part 2 Agreement.

§ 3.2.6 The Design/Builder shall keep the Owner informed of the progress and quality of the Work by submission of monthly progress reports including narratives of Inclusiveness In Contracting results/Small Business Enterprise utilization and workforce results, change log narratives, schedule,

budget updates, and major issues resolution.

§ 3.2.7 The Design/Builder shall be responsible for correcting Work which does not conform to the Contract Documents.

§ 3.2.8 The Design/Builder warrants to the Owner that materials and equipment furnished under this Part 2 Agreement will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the construction will be free from faults and defects, and that the construction will conform with the requirements of the Contract Documents. Construction not conforming to these requirements, including substitutions not properly approved by the Owner, shall be corrected in accordance with Article 9 of this Part 2 Agreement.

§ 3.2.9 Except as otherwise provided herein, the Design/Builder shall pay all sales, consumer, use and similar taxes which had been legally enacted as of the date of execution of this Part 2 Agreement, and shall secure and pay for the building, mechanical, electrical, pollution control and watershed permits as applicable; and other permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of a contract for construction and/or are legally required as of the date of execution of this Part 2 Agreement.

§ 3.2.10 The Design/Builder shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities relating to the Project.

§ 3.2.11 The Design/Builder shall pay royalties and license fees for patented designs, processes or products. The Design/Builder shall defend suits or claims for infringement of patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer is required by the Owner. However, if the Design/Builder has reason to believe the use of a required design, process or product is an infringement of a patent, the Design/Builder shall be responsible for furnishing such information promptly to the Owner.

§ 3.2.12 The Design/Builder shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under this Part 2 Agreement. At the completion of the Work, the Design/Builder shall remove from the site waste materials, rubbish, the Design/Builder's tools, construction equipment, machinery, and surplus materials.

§ 3.2.13 The Design/Builder shall notify the Owner when the Design/Builder believes that the Work or an agreed upon portion thereof is substantially completed. If the Owner concurs, the Design/Builder shall issue a Certificate of Substantial Completion in the form set forth in Exhibit I which shall establish the Date of Substantial Completion, shall state the responsibility of each party for security, maintenance, heat, utilities, damage to the Work and insurance, shall include a list of items to be completed or corrected and shall fix the time within which the Design/Builder shall complete items listed therein. Disputes between the Owner and the Design/Builder regarding the Certificate of Substantial Completion shall be resolved in accordance with the provisions of Article 10.

§ 3.2.14 The Design/Builder shall maintain at the site for the Owner one record copy of the drawings, specifications, product data, samples, shop drawings, Change Orders and other modifications, in good order and regularly updated to record the completed construction. These shall be delivered to the Owner upon completion of construction and prior to final payment.

§ 3.2.15 The Design/Builder shall provide the following commissioning services on Project equipment and systems including: preparation of operation and maintenance manuals; training of personnel for operation and maintenance; confirmation of conformance to contract documents; and consultation during initial occupancy and operation.

§ 3.2.16 The Design/Builder will assist the Owner with utility interconnection and federal and state tax credit, grant, incentive and rebate applications. To the extent permissible, the Design/Builder will take the lead in completing and submitting documentation to support the utility interconnection, incentive,

and rebate application processes but not the submission and documentation for the federal and state tax credit. The Design/Builder does not guarantee the amount of interconnection costs nor any tax credits, grants, incentives or rebates.

§ 3.3 ADDITIONAL SERVICES

§ 3.3.1 The services described in this Section 3.3 are not included in Basic Services unless so identified in Article 14, and they shall be paid for by the Owner as provided in this Part 2 Agreement in addition to the compensation for Basic Services. The services described in this Section 3.3 shall be provided only if authorized or confirmed in writing by the Owner in accordance with the provisions of this Part 2 Agreement.

§ 3.3.2 Making revisions in the drawings, specifications, and other documents or electronic data when such revisions are required by Building Code officials after approval by the Building Code officials.

§ 3.3.3 Providing consultation concerning replacement of Work damaged by fire or other cause during construction, and furnishing services required in connection with the replacement of such Work, unless such damage is due to the acts or omissions of the Design/Builder and/or its consultants and subcontractors, employees, or agents of any of them.

§ 3.3.4 Providing services in connection with an arbitration proceeding or legal proceeding, except where the Design/Builder is a party thereto.

§ 3.3.5 Providing coordination of construction performed by the Owner's own forces or separate contractors employed by the Owner, and coordination of services required in connection with construction performed and equipment supplied by the Owner.

ARTICLE 4 TIME

§ 4.1 Unless otherwise indicated, the Owner and the Design/Builder shall perform their respective obligations as expeditiously as is consistent with reasonable skill and care and the orderly progress of the Project.

§ 4.2 Time limits stated in the Contract Documents are of the essence. The Work to be performed under this Part 2 Agreement shall commence upon execution of this Part 2 Agreement unless otherwise agreed and, subject to authorized Modifications, Substantial Completion shall be achieved on or before the date established in Article 14 and **Exhibit B**.

§ 4.3 Substantial Completion is the stage in the progress of the Work when the Work or a designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use as evidenced by a final Certificate of Occupancy obtained by the Design / Builder.

§ 4.4 The Project Schedule is set forth in **Exhibit B**.

§ 4.5 If the Design/Builder is materially delayed at any time in the progress of the Work by a negligent or willful act or omission of the Owner, the Owner's employees, or separate contractors employed by the Owner; or by labor disputes, fire, unusual delay in deliveries, adverse weather conditions not reasonably anticipatable, unavoidable casualties or changes in laws, codes or other regulations or other causes beyond the Design/Builder's control, or by delay authorized by the Owner pending arbitration, or by other causes which the Owner and the Design/Builder agree may justify delay, then the Project Schedule shall be reasonably extended by Change Order. If the Design/Builder identifies a negligent or willful act or omission of the Owner that may cause a material delay in the progress of the Work such that the Design/Builder will request a change in the Project Schedule or request additional compensation for costs incurred resulting from the delay, the Design/Builder shall notify the Owner in writing as soon as possible following identification. The Owner and the Design/Builder shall work together in good faith to bring the Project back within the Project Schedule. The Design/Builder shall not be entitled to an increase in the Project Schedule or additional compensation for any negligent or willful act or omission which the Design/Builder identifies but does not notify the Owner of upon identification.

ARTICLE 5 PAYMENTS
§ 5.1 PROGRESS PAYMENTS
§ 5.1.1 The Owner shall pay the Design/Builder as stated in **Exhibit D.**

§ 5.1.2. Based on the Applications for Payment submitted by the Design/Builder, the Owner shall make progress payments to the Design/Builder as described in this Article 5, and elsewhere in this Part 2 Agreement.

§ 5.1.3 The Owner will make payment to the Design/Builder no later than thirty-five (35) calendar days after receipt of a properly submitted and correct Application for Payment. The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows: The Design/Builder may request bi-weekly payment for work performed by a subcontractor or supplier, provided the subcontractor or supplier is a certified Small Business Enterprise for Ramsey County and has established a significant business need to receive payments on a bi-weekly basis. The Owner retains the right to grant or deny the request for bi-weekly payments.

§ 5.1.4 The Application for Payment shall show the percentage of the Work for each portion of the Work and the percentage that each portion of the Work bears to the entire Price of the Work for which payment is requested.

§ 5.1.5 [Reserved].

§ 5.1.6 Except with the Owner's prior approval, payments for the Work for the Design/Builder's subcontractors shall be subject to retainage of 5%. There shall be no retainage on Work performed by the Design/Builder's own labor forces or the Design/Builder's Fee.

§ 5.1.7 Neither progress payment nor partial or entire use or occupancy of the Project by the Owner shall constitute an acceptance of Work not in accordance with the Contract Documents.

§ 5.1.8 The Design/Builder warrants that title to all construction covered by an Application for Payment will pass to the Owner no later than the time of payment. The Design/Builder further warrants that upon submittal of an Application for Payment all construction for which payments have been received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Design/Builder or any other person or entity performing construction at the site or furnishing materials or equipment relating to the construction.

§ 5.1.9 At the time of substantial completion, the Owner shall pay the Design/Builder the retainage, if any, less the reasonable cost to correct or complete incorrect or incomplete Work. Final payment of such withheld sum shall be made upon correction or completion of such Work.

§ 5.1.10 The Price of the Work includes a Construction Contingency in the amount of $155,741, which shall be paid by Owner to Design/Builder to compensate Design/Builder for changes to the scope of work and miscellaneous work items which are required to complete the project. Funds from the Construction Contingency may be used only if mutually agreed to by Design/Builder and the Owner in writing. Once the scope of work is 100% complete, the Construction Contingency shall be calculated, and any amount not used may be used by the Owner to add additional work to the project or may be deducted from the Price of the Work by Change Order signed by both Parties. In the event the Construction Contingency is exceeded, the Owner shall bear the additional cost. In the event the Construction Contingency is not used within 18 months of the execution of the Agreement, Design/Builder reserves the right to not accept any additional work and may credit any unused Construction Contingency funds via deduct Change Order.

§ 5.2 FINAL PAYMENTS
§ 5.2.1 Final Payment constituting the Price of the Work shall be payable by the Owner to the Design/Builder when:

5.2.1.1 the Design/Builder has fully performed as provided in this Part 2 Agreement except

for the Design/Builder's responsibility to correct Work under this Part 2 Agreement and to satisfy other requirements, if any, which extend beyond final payment; and

5.2.1.2 a final Certificate for Payment has been received from the Design/Builder in the form of Exhibit I; and

5.2.1.3 the Design/Builder has received consent of surety, if any, to final payment; and

5.2.1.4 a final Certificate of Completion has been received from the Design/Builder in the form of Exhibit I. In addition, the Design/Builder shall maintain and, upon request open for inspection by the Owner, its representatives, and the State and other auditors, all books, records, documents, and accounting records of Design-Builder relevant to the Agreement required by Minnesota Statutes Sections 16C.05, subd. 5.

5.2.1.5 the Design/Builder has submitted a copy of the completed State of Minnesota Form IC-134, signed by the State Commissioner of Taxation; and

5.2.1.6 a complete report describing efforts and outcomes of those efforts towards achievement of Project SBE and labor utilization goals; and sustainability goals.

ARTICLE 6 PROTECTION OF PERSONS AND PROPERTY

§ 6.1 The Design/Builder shall be responsible for initiating, maintaining and providing supervision of all safety precautions and programs in connection with the performance of this Part 2 Agreement.

§ 6.2 The Design/Builder shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury or loss to: (1) employees on the Work and other persons who may be affected thereby; (2) the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Design/Builder or the Design/Builder's contractors; and (3) other property at or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ 6.3 The Design/Builder shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury or loss.

§ 6.4 The Design/Builder shall promptly remedy damage and loss (other than damage or loss insured under property insurance provided or required by the Contract Documents) to property at the site caused in whole or in part by the Design/Builder, a contractor of the Design/Builder or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.

ARTICLE 7 INSURANCE AND BONDS

See **Exhibit F**, attached hereto and made a part of this Part 2 Agreement.

ARTICLE 8 CHANGES IN THE WORK

§ 8.1 CHANGES

§ 8.1.1 Changes in the Work may be accomplished after execution of this Part 2 Agreement, without invalidating this Part 2 Agreement, by Change Order, or order for a minor change in the Work, subject to the limitations stated in the Contract Documents. A change in the Work that affects the Price or the Project Schedule may be made only by Change Order.

§ 8.1.2 A Change Order shall be based upon agreement between the Owner and the Design/Builder; an order for a minor change in the Work may be issued by the Design/Builder alone.

§ 8.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Design/Builder shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 8.1.4 [Reserved].

§ 8.2 CHANGE ORDERS

§ 8.2.1 A Change Order is a written instrument prepared by the Design/Builder and signed by the Owner and the Design/Builder, stating their agreement upon all of the following:

8.2.1.1 a change in the Work

8.2.1.2 the amount of the adjustment, if any, in the Price; and

8.2.1.3 the extent of the adjustment, if any, in the Project Schedule.

§ 8.2.2 No work consistent with the changes in the Change Order shall commence until the Change Order has been reduced to writing and signed by both parties.

§ 8.3 [Reserved].

§ 8.4 MINOR CHANGES IN THE WORK

§ 8.4.1 The Design/Builder shall have authority to make minor changes in the Construction Documents and construction consistent with the intent of the Contract Documents when such minor changes do not involve adjustment in the Price or extension of the Project Schedule. The Design/Builder shall promptly inform the Owner, in writing, of minor changes in the Construction Documents and construction.

§ 8.5 CONCEALED CONDITIONS

§ 8.5.1 If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or (2) unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then written notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than seven (7) business days after first observance of the conditions. Upon timely notice in writing by the observing party to the other party, the Owner and the Design/Builder will value engineer the Project to stay within the Price and to address the concealed conditions; the actions to be taken; and the responsibility for costs of such actions shall be mutually agreed to by the parties. Alternatively, the parties may agree to modify the Price, in which case the parties shall execute a Change Order. If the Design/Builder is the observing party and fails to give notice within the 21 day time period, the Owner reserves the right to demand and receive services from the Design/Builder to address and correct such concealed conditions without additional cost to the Owner.

§ 8.6 REGULATORY CHANGES

§ 8.6.1 The Design/Builder shall be compensated for changes in the Work necessitated by the enactment or revisions of codes, laws or regulations that are made applicable to the Project subsequent to execution of this Agreement, and its time for performance shall be extended if the change(s) result in delay to the Project Schedule. Such changes shall be made by Change Order pursuant to this Article 8.

ARTICLE 9 CORRECTION OF WORK

§ 9.1 The Design/Builder shall promptly correct Work rejected by the Owner or known by the Design/Builder to be defective or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. All defective and/or non-complying Work observed after Substantial Completion shall be completed in a timely manner agreed to by both parties. The Design/Builder shall bear the costs of correcting such rejected, defective, or non-conforming Work, including additional testing and inspections, within the one year warranty period.

§ 9.2 If the Design/Builder defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven (7) business days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may give a second written notice to the Design/Builder and, seven (7) business days following receipt by the Design/Builder of that second written notice and without prejudice to other remedies the Owner may have, correct such deficiencies. The Owner shall deduct from payments then or thereafter due the Design/Builder, the costs of correcting such deficiencies. If the payments then or thereafter due the Design/Builder are not sufficient to cover the amount of the deduction, the Design/Builder shall pay the

difference to the Owner. Such action by the Owner shall be subject to dispute resolution procedures as provided in Article 10.

§ 9.3 If, within one (1) year after the date of Substantial Completion of the Work for the individual energy conservation measure of this Part 2 Agreement, any of the Work for the individual energy conservation measure is found to be not in accordance with the requirements of the Contract Documents, the Design/Builder shall replace or correct it promptly at its own cost after receipt of a written notice from the Owner to do so unless the Owner has previously given the Design/Builder a written acceptance of such condition; except to the extent the defect results from fire, lightning, or water damage and, provided that no repairs, substitutions, modifications, or additions have been made, except by Design/Builder or with Design/Builder's written permission, and provided that after delivery such equipment or materials have not been subjected to accident, neglect, misuse, or use in violation of any instructions supplied by Design/Builder, including the failure to properly operate or maintain such equipment and materials. Manufacturers' and/or extended warranties shall be assigned to the Owner, and the Owner will be responsible for administration of same beyond this one (1) year period.

§ 9.4 Nothing contained in this Article 9 shall be construed to establish a period of limitation with respect to other obligations which the Design/Builder might have under the Contract Documents. Establishment of the time period of one (1) year as described in Section 9.3 relates only to the specific obligation of the Design/Builder to correct or replace the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Design/Builder's liability with respect to the Design/Builder's obligations other than specifically to correct or replace the Work.

§ 9.5 If the Design/Builder fails to correct or replace nonconforming Work as required or fails to carry out Work in accordance with the Contract Documents, the Owner may order the Design/Builder to stop the Work, or any portion thereof, until the cause for such stop order has been eliminated; however, the Owner's right to stop the Work shall not give rise to a duty on the part of the Owner to exercise the right for benefit of the Design/Builder or other persons or entities.

The Design/Builder warrants and guarantees that the energy conservation measures under this Agreement will result in savings to the County that will meet or exceed the cost of this Agreement in accordance with the terms and conditions of Attachment J.

THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND DESIGN/BUILDER EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE EQUIPMENT AND MATERIALS PROVIDED HEREUNDER.

ARTICLE 10 DISPUTE RESOLUTION -- MEDIATION AND ARBITRATION

§ 10.1 Claims, disputes or other matters in question between the parties to this Part 2 Agreement arising out of or relating to this Part 2 Agreement may be subject to mediation or arbitration only if agreed to in writing by both parties. Notwithstanding the foregoing, either party shall have the right to have a dispute resolved in a state or federal court in the State of Minnesota.

ARTICLE 11 MISCELLANEOUS PROVISIONS

§ 11.1 SUBCONTRACTS

§ 11.1.1 The Design/Builder shall bid out the Work in multiple bid packages, as agreed to by the parties. The Design/Builder shall use a competitive solicitation process following Ramsey County Procurement requirements. The Design/Builder may self-perform without bidding: administration, clean-up, safety, and general conditions work. If the Design/Builder desires to self-perform other work, the Design/Builder may do so only if determined to be the lowest responsible bidder for the work through the Design/Builder's participation in a bid package solicitation process. The Design/Builder will not self-perform any other Work with its own forces.

§ 11.1.2 As bids are received for the Project, the Design/Builder will review the bids with the Owner.

§ 11.1.3 The Design/Builder shall make good faith efforts to meet the Project goals set forth in **Exhibit G** -- SBE Utilization and Labor Goals, attached hereto and make a part of this Part 2 Agreement

§ 11.1.4 The Design/Builder shall not enter into a subcontract agreement or utilize as a subcontractor a vendor to which the Owner has reasonable objection. In the event that the cost of the replacement subcontractor or vendor is higher than the vendor objected to by the Owner, the Owner shall be obligated to pay the Design/Builder by Change Order, in accordance with Article 8, for any additional cost incurred as a result of the change, provided the original subcontractor selected by the Design/Builder was the lowest, qualified, responsible bidder.

§ 11.1.5 Prior to execution of this Agreement, the Design/Builder will secure a Project Labor Agreement directly with the St. Paul Building & Construction Trades Council.

§ 11.2 WORK BY OWNER OR OWNER'S CONTRACTORS

§ 11.2.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site. If the Design/Builder claims that delay or additional cost is involved because of such action by the Owner, the Design/Builder shall assert such claims as provided in Section 11.4.

§ 11.2.2 The Design/Builder shall afford the Owner's separate contractors, reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Design/Builder's construction and operation with the Owner's contractors as required by the Contract Documents.

§ 11.2.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefore.

§ 11.3 CLAIMS FOR DAMAGES

§ 11.3.1 If either party to this Part 2 Agreement suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a claim of additional cost or time related to this claim is to be asserted, it shall be made in writing in the form of a Request for Change Order.

§ 11.4 HAZARDOUS MATERIALS

§ 11.4.1. "Hazardous Material" means any materials, waste, substance, or chemicals which are deemed to be hazardous under applicable Legal Requirements, or for which handling, storage, remediation, or disposal are regulated by applicable Legal Requirements. "Legal Requirements" mean all applicable federal, state, and local laws, codes, ordinances, rules, regulations, orders and decrees of any governmental or quasi-governmental entity having jurisdiction over the Project or site, the practices involved in the Project, or any Work.

§ 11.4.2. If any Hazardous Material, whether disclosed or not by Owner, is discovered by Design/Builder or others and provides an unsafe condition for the performance of the Work or Measurement and Verification Services, the discovery of the Hazardous Material shall constitute a cause beyond Design/Builder’s reasonable control and Design/Builder shall have the right to cease the Work or Measurement and Verification Services until the area has been made safe by Owner or Owner’s representative, at Owner’s expense. To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Design/Builder, its Subcontractors, consultants and agents and employees of any of them from and against claims, damages, losses and expenses including, but not limited to judgments, fines, penalties, civil sanctions, and attorney's fees, arising out of or resulting from the Hazardous Material or performance of the Work in the affected area if in fact the material or substance is a Hazardous Material, except to the extent that such damage, loss, or expense is due to the negligence of a party

seeking indemnity and such party was advised of the presence of the Hazardous Material by Owner prior to performing the Work. Hazardous Materials are identified in **Exhibit L**.

§ 11.4.3 The Owner shall not be responsible under paragraph 11.4.4.3 for materials and substances brought to the site by the Design/Builder unless such materials were required by the Contract Documents.

§ 11.4.4 If, without negligence on the part of the Design/Builder, its subcontractors, consultants, and agents and the employees of any of them, the Design/Builder is held liable for the cost of remediation of a Hazardous Material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Design/Builder for all cost and expense thereby incurred including, but not limited to judgments, fines, penalties, civil sanctions and attorney's fees. The Design/Builder shall be obligated to notify the Owner of claims filed within a reasonable time after the Design/Builder's first knowledge of such claims.

§ 11.5 CLAIMS FOR CONSEQUENTIAL DAMAGES

§ 11.5.1 The Design/Builder and the Owner waive claims against each other for consequential damages arising out of or relating to this Part 2 Agreement. This mutual waiver includes:

11.5.1.1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons;

11.5.1.2 damages incurred by the Design/Builder for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from Work performed; and

11.5.1.3 damages incurred by the Design/Builder as a result of the Owner's loss of Project funding.

The mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with **Exhibit F**.

§ 11.6 LIMITATION OF LIABILITY

§ 11.6.1 THE AGGREGATE LIABILITY OF EITHER PARTY FOR ANY CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT WILL IN NO CASE EXCEED TWO TIMES THE "PRICE."

§ 11.7 RISK OF LOSS

§ 11.7.1 Risk of loss for all equipment and materials provided by Design/Builder hereunder shall transfer to Owner upon substantial completion of the project.

§ 11.8 INDEMNIFICATION

§ 11.8.1 Indemnity. Design/Builder agrees to indemnify, hold harmless and defend Owner, and Owner's officials, agents and employees harmless against any and all third-party liability, losses, costs, damages, expenses, claims or actions, including reasonable attorney's fees, which the Owner, its officials, agents, or employees may hereafter sustain, incur or be required to pay, arising out of or by reason of any act or omission of the Contractor, or its subcontractors, and their officers, agents or employees, in the execution, performance, or failure to adequately perform the Contractor's obligations pursuant to this Agreement..

§ 11.9 COMPLIANCE

§ 11.9.1 Owner and its affiliates will comply with all laws and regulations applicable to this Agreement. Owner will comply with all applicable laws and regulations.

§ 11.10 OWNER RESPONSIBILITIES

Owner shall provide Design/Builder full information regarding the requirements for the Work, and access to the Site as needed to perform the Work.

§ 11.10.1 Owner shall furnish to Design/Builder all information regarding legal limitations, utility locations, site conditions, environmental conditions, and other information reasonably pertinent to this Agreement, the Work, the Site, and the Project.

§ 11.10.2 Owner shall secure and pay for all necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities, including charges for legal and auditing services.

§ 11.10.3 If Owner becomes aware of any fault or defect in the Work, it shall give prompt written notice thereof to Design/Builder.

§ 11.10.4 The services and information required by the above paragraphs shall be furnished with reasonable promptness at Owner's expense and Design/Builder shall be entitled to rely upon the accuracy and the completeness thereof.

§ 11.11 ASSIGNMENT

Neither party to the Agreement shall assign this Agreement or sublet it as a whole without the written consent of the other party. Such consent shall not be unreasonably withheld.

ARTICLE 12 BASIS OF COMPENSATION
§ 12.1 COMPENSATION
§ 12.1.1 The "Price" for the Work is set forth in **Exhibit C.**

§ 12.1.2 The Design/Builder's Fee is to be paid in accordance with Article 5.

§ 12.2 PRICE OF THE WORK
§ 12.2.1 The term Price of the Work is set forth in Article 5 of this Agreement. As used in this Agreement, the term "Work" means the construction and services required by the Contract Documents (as defined in Section 1.1.1), whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by Design/Builder to fulfill Design/Builder's obligations, as defined in Exhibit A and otherwise set forth in the Contract Documents.

ARTICLE 13 OTHER CONDITIONS AND SERVICES
§ 13.1 [Reserved].

§13.2 The Design/Builder shall commence providing services upon final execution of this Part 2 Agreement. The date of Substantial Completion for the Project is as shown in **Exhibit B**.

§13.3 This Part 2 Agreement includes the following:

Exhibit A -- Scope of Work

Exhibit B -- Project Schedule

Exhibit C -- Installation Price

Exhibit D -- Payment Schedule

Exhibit E –[Reserved]

Exhibit F -- General Terms and Conditions

Exhibit G - SBE Utilization and Labor Goals

Exhibit H – [Reserved]

Exhibit I – Certificate of Substantial Completion and Final Project Acceptance Certificate

Exhibit J – Guarantee and Measurement and Verification Services Agreement and Honeywell Forge for Buildings Performance Order Quote, which includes:

Exhibit J1 & J2 - Baseline Operating Parameters & Guarantee Period Operating Parameters

Exhibit J3 - Baseline Conditions, Utility Use, Utility Unit Costs

Exhibit J4 - Engineered Cost Avoidance Calculations

Exhibit J5- M&V Options by Building & ECM

Exhibit J6 - M&V Plan Summary

Exhibit J7 - Operations Cost Avoidance Methodology

Exhibit K: Project Summary Report.

Exhibit L: Hazardous Materials Disclosure

§ 13.4 All notices and other communications under this Part 2 Agreement, and any amendments to this Part 2 Agreement, shall be in writing and shall be deemed given when delivered by certified mail, return receipt requested, postage prepaid; by personal delivery; or when received if sent by overnight courier. All notices shall be directed to the Parties at the respective addresses set forth below. If the name and/or address of the representatives changes, notice of such change shall be given to the other Party in accordance with the provisions of this section.

Owner's Representative: Mark McCabe, Project Manager
Ramsey County Parks & Recreation

Design/Builder's Representative: Cindy Auld
Honeywell

With a copy to:
Honeywell Building Solutions
General Counsel
715 Peachtree Street, N.E.
Atlanta, GA 30308

If the name and/or address of the above-identified representatives changes, notice of such change shall be given to the other party in accordance with the provisions of this section.

Article 14. Confidential Information.

To the extent applicable, all data collected, created, received, maintained or disseminated for any purpose in the course of the Contractor's performance under this Agreement is subject to the provisions of the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, any other applicable state statutes, any state rules adopted to implement the Act and statutes, as well as federal statutes and regulations on data privacy.

As used herein, the term “Confidential Information” shall be limited to data that meets the definition of “security information” or “trade secret information” as set forth in Minn. Stat. Section 13.37, and that is in readable form or in machine-readable form, including software supplied to Owner by Design/Builder that has been identified or labeled as “Confidential” and/or “Proprietary” or with words of similar import. Confidential Information shall also mean any information that meets the definition of “security information” or “trade secret information” as set forth in Minn. Stat. Section 13.37 and that is disclosed orally and is designated as “Confidential” and/or “Proprietary” or with words of similar import at the time of disclosure and is reduced to writing, marked as “Confidential” and/or “Proprietary” or with words of similar import, and supplied to the receiving party within ten (10) days of disclosure. The electronic platform, code and arrangement upon which the legible Energy Savings Calculations are published is “Proprietary.”

All rights in and to Confidential Information and to any proprietary and/or novel features contained in Confidential Information disclosed are reserved by the disclosing party; and the party receiving such disclosure will not use the Confidential Information for any purpose except in the performance of this Agreement and will not disclose any of the Confidential Information to benefit itself or to damage the disclosing party. This prohibition includes any business information (strategic plans, etc.) that may become known to either party. Each party shall, upon request of the other party or upon completion or earlier termination of this Agreement, return the other party's Confidential Information and all copies thereof.

Notwithstanding the foregoing provisions, neither party shall be liable for any disclosure or use of information disclosed or communicated by the other party if the information is public data under the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, and:

(a) is publicly available at the time of disclosure or later becomes publicly available other than through breach of this Agreement; or
(b) is known to the receiving party at the time of disclosure; or
(c) is subsequently rightfully obtained from a third party on an unrestricted basis; or
(d) is approved for release in writing by an authorized representative of the disclosing party.

The obligation of this Article shall survive any expiration, cancellation or termination of this Agreement.

Exhibit A to the Part 2 Agreement

Scope of Work

Exhibit B to the Part 2 Agreement

Project Schedule

Exhibit C to the Part 2 Agreement

Installation Price

Exhibit D to the Part 2 Agreement

Payment Schedule

Exhibit E to the Part 2 Agreement

Reserved

Exhibit F to the Part 2 Agreement

General Terms and Conditions

Note: For Purposes of this Exhibit F, the term "Contractor" shall mean "Design/Builder" and the term "County" shall mean "Owner" as those terms are defined in the Part 2 Agreement.

1. The provisions of **Exhibit D** -General Terms and Conditions to the Part 1 Agreement are incorporated herein and made a part of this Exhibit F as if specifically set forth herein. To the extent the provisions of this **Exhibit F** to the Part 2 Agreement are inconsistent with the provisions of **Exhibit D** to the Part 1 Agreement, the provisions of this **Exhibit F** to the Part 2 Agreement shall prevail.

2. Prevailing Wage

2.1.

Contractors and all subcontractors of the Contractor shall conform to the labor laws of the State of Minnesota, Ramsey County Prevailing Wage Ordinance No. 2013-329, and all other laws, ordinances, and legal requirements affecting the work in Ramsey County and Minnesota. The minimum wage rate per hour to be paid for each classification of work shall be the union wage rate in the locality of the project for those classifications over which the unions have jurisdiction and the local prevailing rate for those classifications of work in the localities over which unions do not have jurisdiction.

The terms "prevailing wage", "minimum wage rate per hour", and "prevailing rate" as used in the contract, shall mean "prevailing wage rate" as defined in Minnesota Statutes §177.42.

Pursuant to Minnesota Statutes §§177.41 to 177.44 and corresponding Rules 5200.1000 to 5200.1120, all construction contracts funded in whole or in part by state funds are subject to the prevailing wages as established by the Minnesota Department of Labor and Industry. Specifically, all Contractors and subcontractors must pay all laborers and mechanics the established prevailing wages for work performed under the contract. Failure to comply with the aforementioned may result in civil or criminal penalties.

2.2.

Pursuant to the Ramsey County Prevailing Wage Ordinance No. 2013-329, the Prevailing Wage Rate must be paid under any contract with Ramsey County or under a subcontract to that contract with Ramsey County with an anticipated Project Completion Cost or anticipated Services contract value over $25,000.

2.3.

Throughout the term of this Agreement, the Contractor shall submit Certified Payroll Records within 14 days of the end of a pay period and in accordance with the requirements of Ramsey County Prevailing Wage Ordinance No. 2013-329. Failure of the Contractor to submit the Certified Payroll Records in accordance with the Ordinance may result in criminal or civil enforcement by the County, including, but not limited to termination of the agreement for cause and withholding of payments.

3. Part 2 Bond Requirements

3.1.

The Contractor shall furnish bonds as described below, covering the faithful performance of the Contract and the payments of all obligations arising thereunder. The Part 2 Agreement will not be signed until the County has received the proper bonds specified under this clause, issued by a bonding company licensed to do business in Minnesota, and on the current list of Companies Holding Certificates of Authority as acceptable Sureties on Federal Bonds and as acceptable reinsuring companies as published in Circular 570

(Amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the authority to act.

3.2.
The bonds shall each be in the amount of 100% of the Construction Cost. The term "contract", as used herein, shall include the original agreement plus all subsequent change orders and/or amendments. The contract price to which the principal is bound shall be the amount of the Construction Cost as reflected by the terms of the contract.

3.3.
Duly executed, notarized and updated Acknowledgments of both the Principal and Surety and the Surety's Power of Attorney must be attached to each of the two required bonds.

3.4.
Bond amounts shall not exceed the single bond limit for the Contractor's bonding company as set forth in the Federal Register current as of the bid date.

3.5.
Bonds shall indemnify the County as required by Minn. Stat. Sec. 574.26

4. Part 2 Insurance Requirements

4.1.
During Part 2, the Contractor shall continue to maintain the insurance coverage required for Part 1 services, except that Section 3.10.3 is revised to read as follows:

"3.10.3.Commercial general liability of no less than $500,000 per claim, $5,000,000 per occurrence, $5,000,000 aggregate, $5,000,000 products/completed operations total limit, $5,000,000 personal injury and advertising liability."

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4.2. Property Insurance

4.2.1.
The County shall purchase and maintain, in a company or companies authorized to do business in the jurisdiction in which the Project is located, property insurance upon the Work to the fullest insurable value thereof on a replacement cost basis, subject to a deductible of $100,000.00 per occurrence. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the County has an insurable interest in the property required by this Section 2) to be insured, whichever is earlier. This insurance shall include interests of the County, the Contractor, and their respective contractors and subcontractors in the Work. The Contractor shall be responsible for the deductible of $100,000.00 per occurrence under this policy, and all other costs not covered by property insurance up to the date of Substantial Completion, and all such costs shall be considered as a Price of the Work.

4.2.2.
Property insurance shall be on an all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including, without duplication of coverage, theft, and debrisremoval including demolition occasioned by enforcement of any applicable legal

requirements, and shall cover reasonable compensation for the services and expenses of the Contractor's Architect and other professionals required as a result of such insured loss. Coverage for other perils shall not be required unless otherwise provided in the Contract Documents.

4.2.3.
Unless otherwise provided, the County shall purchase and maintain such boiler and machinery insurance required by this Part 2 Agreement or by law, which shall specifically cover such insured objects during installation and until final acceptance by the County. This insurance shall include interests of the County, the Contractor, the Contractor's contractors and subcontractors in the Work, and the Contractor's Architect and other design professionals. The County and the Contractor shall be named insureds.

4.2.4.
A loss insured under the County's property insurance shall be adjusted by the County as fiduciary and made payable to the County as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 2.6). The Contractor shall pay contractors their shares of insurance proceeds received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require contractors to make payment to their subcontractors in similar manner.

4.2.5.
Before an exposure to loss may occur, the County shall file with the Contractor a copy of a Certificate of Insurance for each policy that includes insurance coverages required by this Section 2). Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire until at least thirty (30) business days' prior written notice has been given to the Contractor.

4.2.6.
The County and the Contractor waive all rights against each other and the Architect and other design professionals, contractors, subcontractors, agents and employees, each of the other, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Section 2) or other property insurance applicable to the Work, except such rights as they may have to proceeds of such insurance held by the County as trustee. The County or Contractor, as appropriate, shall require from contractors and subcontractors by appropriate agreements, written where legally required for validity, similar waivers each in favor of the parties enumerated in this Section 2). The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

4.2.7.
The County as trustee shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing, within five (5) business days after such notification of the County's intent to exercise this power; if such objection be made, the parties shall enter into dispute resolution under procedures provided in this Part 2 Agreement. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

4.2.8.
Partial occupancy or use prior to Substantial Completion shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The County and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall not, without mutual written consent, take any action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of coverage.

4.3.
The County shall be responsible for purchasing and maintaining the County's usual liability insurance and/or self-insurance program.

4.4.
[Reserved].

4.5. Umbrella Liability

4.5.1.
$10,000,000 per occurrence
$10,000,000 general aggregate

4.5.2.
The County, its officials, employees, and agents, shall be an additional insured as required under the Commercial General Liability policy.

4.5.3.
The policy will provide excess coverage over the commercial general liability and automobile liability policies.

5. Termination

5.1 Termination by the County

5.1.1
If the Contractor defaults or persistently fails or neglects to carry out the Work in accordance with the Contract Documents or fails to perform the provisions of this Part 2 Agreement, the County may give written notice that the County intends to terminate this Part 2 Agreement. If the Contractor fails to correct the defaults within seven (7) business days after being given notice, the County may then give a second written notice and, after an additional seven (7) business days, the County may without prejudice to any other remedy terminate the agreement with the Contractor and take possession of the site and of all materials purchased as part of this Part 2 Agreement and finish the Work by whatever method the County may deem expedient. If the unpaid balance of the Contract Sum exceeds the expense of finishing the Work and all damages incurred by the County, such excess shall be paid to the Contractor. If the expense of completing the Work and all damages incurred by the County exceeds the unpaid balance, the Design/Builder shall pay the difference to the County. This obligation for payment shall survive termination of this Part 2 Agreement.

5.1.2
Reserved.

5.1.3
The County may terminate this Part 2 Agreement without cause and for any reason whatsoever effective upon sixty days prior written notice to the Contractor. In such event, the Contractor shall be entitled to receive compensation for the materials and services provided in a satisfactory manner up to and including the effective date of termination.

5.1.4
Any termination by the County shall be without prejudice to the rights of the County to pursue other remedies against the Contractor.

5.2. Termination by the Contractor

5.2.1
If the County fails to make payment of undisputed amounts or breaches this Agreement, the Contractor may give written notice of the Contractor's intention to terminate this Part 2 Agreement. If the Contractor fails to receive payment of the undisputed amounts within seven
(7) business days after receipt of such notice by the County or the County fails to cure the breach within sixty (60) days, the Contractor may give a second written notice and, seven (7) business days after receipt of such second written notice by the County, may terminate this Part 2 Agreement. If such termination occurs, the County shall pay the Contractor for Work completed in a satisfactory manner up to and including the effective date of termination. A good faith dispute by the County regarding the amount of payment and failure to pay disputed amounts, which is subject to the provisions of the Minnesota Prompt Pay Act, does not constitute grounds for termination by the Contractor under this paragraph.

6. Safety Compliance

6.1
The Contractor and all subcontractors shall at all times during the performance of the Work under this Part 2 Agreement be and remain in compliance with and responsible for any conditions imposed upon the County by OSHA requirements.

6.2
A risk control program must be implemented on site during this project.

Exhibit G to the Part 2 Agreement

SBE Utilization and Labor Goals

Exhibit H to the Part 2 Agreement [Reserved]

Exhibit I to the Part 2 Agreement

Certificate of Substantial Completion and Final Project Acceptance Certificate

Exhibit J to the Part 2 Agreement

Guarantee and M&V Services Agreement and Honeywell Forge for Buildings Performance Order Quote

Exhibit K to the Part 2 Agreement

Project Summary Report

Exhibit L to the Part 2 Agreement

Hazardous Materials

Aldrich – Year Built 1962

Aldrich Arena was constructed in 1962 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl belt drive compressors, two Russel air cooling condensers located on the roof, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction and building material, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Gustafson-Phalen – Year Built 1975

Gustafson-Phalen Arena was constructed in 1975 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Russel air cooling condenser located on the ground, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction and building material, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Harding - Year Built 1975

Harding Arena was constructed in 1975 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Russel air cooling condenser located on the ground, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction and building material, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Charles M. Schulz - Highland Arena (2 Sheets) – Year Built South rink 1973, North Rink 1998

Charles M. Schulz - Highland Arena was constructed in two different building phases. The south rink was constructed in 1973 with a concrete floor (seasonal ice) and the north rink was constructed in 1998 with a sand floor (year-round ice). Facility operation for both rinks include of heating/cooling, ventilation and ice management consisting of a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Vilter 350ES, two Russel air cooling condenser located on the roof, and seasonal ice/year-round for skating/hockey activities. It should be noted that different construction materials may have been used on both rinks due to the current construction year and building materials utilized. The South rink was constructed in 1973 and may contain certain hazardous materials such as asbestos found in certain glues, caulking, and window glazing. The North rink was constructed in 1998 and should be free of hazardous building materials. Mechanical equipment within both rinks may contain freon or other glycol-based material.

Ken Yackel Westside - Year Built 1973

Ken Yackel Westside Arena was constructed in 1973 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Russel air cooling condenser located on the roof, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Oscar Johnson - Year Built 1971

Oscar Johnson Arena was constructed in 1971 and used current building methods at that time. Facility

operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 320 direct drive compressors, one Russel air cooling condenser located on the ground, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Pleasant - Year Built 1973

Pleasant Arena was constructed in 1973 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Bohn air cooling condenser located on the ground, concrete floor, and year-round ice for skating/hockey activities. Due to the current year of construction, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Shoreview - Year Built 1974

Shoreview Arena was constructed in 1974 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Russel air cooling condenser located on the ground, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

TCO Sports Garden (2 sheets) – Year Built 2010

TCO Sports Garden was constructed in 2010 and used current building methods at that time. The TCO Sports Garden facility includes two sheets of ice, and an indoor turf field. The indoor turf field was reconstructed in 2020 and used current building materials at that time. Facility operation for both rinks include of heating/cooling, ventilation and ice management consisting of a R507 indirect system (glycol base), four Carlyle 5h80 direct drive compressors, four BAC water cooled condensing towers located on the roof, concrete floor, and year-round ice for skating/hockey activities. Due to the current year(s) of construction and building material utilized, the facility should be free of hazardous building materials. Mechanical equipment within both rinks may contain freon or other glycol-based material.

White Bear - Year Built 1973

White Bear Arena was constructed in 1973 and used current building methods at that time. Facility operation for heating/cooling, ventilation and ice management includes a R22 indirect system (glycol base), two Vilter 450xl direct drive compressors, one Russel air cooling condenser located on the ground, concrete floor, and seasonal ice for skating/hockey activities. Due to the current year of construction, certain hazardous materials such as asbestos may be found in certain glues, caulking, and window glazing. Mechanical equipment within the facility may contain freon or other glycol-based material.

Parks Administration Building – Year Built 1985

The Parks and Recreation Administration building was constructed in 1985 and used current building methods at that time. Due to the current year and building material at that time, the building should be free of hazardous building materials, but certain equipment may contain freon for mechanical HVAC use. Other potential hazardous products that may be found within the building for park operations consist of petroleum products, chemical sprays, and fertilizer material.

PART 1 – PRODUCTS & EXECUTION

1. Lighting Upgrades

1.1 Scope of Work

Honeywell shall provide lighting systems upgrades as detailed in *Exhibit A1 – Lighting Room-by-Room Report*. A list of the buildings included in scope is provided in Table 1 below.

Table 1 - Buildings Included in Lighting Scope of Work

Building	Included in Lighting Scope
Charles M. Schulz-Highland Arena	▪
Gustafson-Phalen Arena	▪
Harding Arena	▪
Ken Yackel-West Side Arena	▪
Oscar Johnson Arena	▪
Pleasant Arena	▪
Shoreview Ice Arena	▪
White Bear Lake Arena	▪

General Scope of Work

1) Existing 4' (10) T5HO lamp high bay fixtures will be replaced with new 235-Watt LED high bay fixtures.
2) Existing 4' (8) T8 lamp high bay fixtures will be replaced with new LED high bay fixtures.
3) Existing 4' (2), (3) and (4) T8 lamp fixtures will be retrofitted with Type B (internal driver) T8 LED lamps. Bypass and remove existing ballasts.
4) Existing CFL screw-in lamps will be retrofitted with LED lamps.
5) Existing incandescent screw-in lamps will be retrofitted with LED lamps.
6) Existing LED fixtures will be left alone.
7) Existing defective LED exit signs and emergency fixtures will be replaced with new LED exit signs and emergency fixtures. Existing fixtures with emergency battery backup ballasts will have new Type B compatible emergency battery backup drivers installed.
8) Exterior – Existing LED wall pack, flood and canopy fixtures will be left alone.
9) At Shoreview Ice Arena – Existing HID wall packs with new LED wall packs with integral photocells.
10) At Shoreview Ice Arena - Existing CFL screw-in lamp jelly jars will be retrofitted with new LED lamps.

1.2 General Clarifications and Exclusions

1) Situations that could not be assessed in the provided documentation or during site visits are excluded: concealed conditions past the existing fixture, asbestos, or lead paint abatement, and areas that require restricted access, permits, or specialized escort conditions.
2) Honeywell assumes that the existing electrical wiring, the grounding, the existing circuit breakers, and lighting fixtures are in good operable condition and in compliance with existing codes. Any major components or wiring discovered by Honeywell in

need of repair shall be noted and submitted to the customer. Any such repairs will be the responsibility of the customer to remedy in a timely manner.

3) Fixtures recessed in asbestos containing ceilings will not be replaced.
4) No lenses or diffusers will be replaced on any retrofitted fixtures unless specifically noted in the scope of work.
    a. Any pre-existing damage to a fixture diffuser (i.e. lens) including but not limited to discoloring (yellow lenses), cracks, broken pieces, dents, chips, diffusers completely missing, melted plastic, permanent fingerprints, or foreign matter stains (such as ballast tar leaks) is the sole responsibility of the customer. This scope of work does not include any replacement or repair to any damaged lenses or any other pre-existing damaged luminaire components.
5) Emergency lighting will not be installed or added to any facility, unless specifically state in this scope of work.
6) Installation beyond the scope of work described herein is excluded.
7) Customer shall provide agreeable access to perform given scope of work.
8) Customer and Honeywell Measurement & Verification shall review and sign off on pre and post lighting measurements.
9) The Customer shall designate a mutually agreeable staging and storage areas(s) for equipment and material storage.

1.3 Warranty

1) Honeywell shall provide a workmanship warranty for a period of one year after substantial completion. Specific damage to the lighting system caused by lightning, significant changes in power quality, power surges, physical damage to the equipment or abnormal operation are excluded from this warranty. The warranty shall commence upon completion and acceptance by the customer of the lighting retrofit. As a result, the lighting retrofit warranty(s) will commence in advance of the overall project completion.

2) During the warranty period, the Customer's staff shall replace all defective lamps and ballasts under warranty. A two (2) percent supply of replacement lamps and ballasts, or a minimum of two for each type, shall be maintained at the Customer's site throughout the manufacturer's warranty period by Honeywell's lighting subcontractor. During the warranty period, all material exchanges will be processed by the Customer directly through the manufacturer with the assistance of the lighting subcontractor. Material warranties vary based on type of material; these warranties will be provided to customer at completion of installation.

2. Building Envelope Upgrades

2.1 Scope of Work

Honeywell shall provide building envelope and weatherization improvements as summarized in Table 2 below. The quantities listed in Table 2 are approximate and subject to change during installation.

Table 2 - Summary of Building Envelope Upgrades

Building	Penetrations sealed with polyurethane sealant (SF)	Wall cracks, window / door frames & vents sealed with polyurethan sealant (LF)	Sets of weather-strip DF	Door sweeps	Door Sweep (OH Door)	Astragals (weather-strip for center of double door)	Sets of weather-strip DF (Over Head (OH) Door)	Ea – Magnetite Window System in window openings (alternate scope)	Seal off Zamboni Louver (ea)
Charles M. Schulz – Highland Arena	0.01	-	37	37	1	8	3	-	-
Gustafson - Phalen Arena	-	12	19	19	2	6	2	-	-
Harding Arena	-	-	17	17	2	6	2	-	-
Ken Yackel - West Side Arena	-	-	14	14	1	4	2	-	-
Oscar Johnson Arena	-	-	3	3	-	1	-	-	-
Parks and Recreation Offices	0.03	-	13	13	-	1	10	64	-
Pleasant Arena	-	-	19	19	1	6	1	-	-
Shoreview Ice Arena	-	-	3	3	-	1	-	-	-
White Bear Lake Arena	-	-	14	14	1	1	2	-	3

2.2 General Notes

1) Weather-stripping kits shall be installed along the door perimeters of single doors. Doors will be tested for proper operation.
2) Silicone sealants shall be installed for silicone weather-strip applications.
3) Exterior edges of any EPDM glazing gaskets shall be capped, and joints shall be sealed between non-porous surfaces such as metal and glass unless otherwise specified.
4) Astragals on double doors shall be replaced and/or installed.
5) New bottom door sweeps shall be installed on single and double doors.

6) Building penetrations such as wall cracks, concrete cracks, mortar cracks, control joints, and exterior applications shall be sealed with Polyurethane sealants, unless otherwise specified.

2.3 Exclusions and Clarifications

1) Situations that could not be assessed in the provided documentation or during site visits are excluded: concealed conditions past the existing fixture junction, asbestos or lead paint abatement, and areas that require restricted access permits or specialized escort conditions.
2) Removal of Caulking, Coatings, Mastics, Flashings, Insulation or any other materials is excluded, unless clearly specified.
3) Repair or installation of Brick or other Masonry Materials or Systems is excluded.
4) Repair or installation of Window or Door Systems is excluded, unless clearly identified.
5) Repair or installation of any Structural Systems is excluded.

3 Controls Upgrades

3.1 General Requirements

The scope consists of labor and material as specifically listed below and required to control the points/equipment identified, including system commissioning and checkout, wiring and the required on-site owner training. Energy conservation programming shall be provided for optimum start/stop.

3.2 County-Wide Scope

1) Install Niagara 4 Supervisor to serve as the county-building management system.
2) Provide graphics, remote access, alarming, and point trending.
3) Server shall reside on County-provided virtual server.
4) Integrate new control systems listed herein.
5) All devices that connect to a TCP/IP network will be configured to use the Building Automation System VLAN managed by Ramsey County
6) All devices that connect to a TCP/IP network will be reviewed and approved for use on a Ramsey County Network by the Informations Services Security Team.
7) The Vendor will utilize the Ramsey County SecureLink Remote Administration

3.3 Parks and Recreation Offices

a. Furnace – Typical of 7
    i. Furnish and install DDC panel to provide control of the 2nd floor MER equipment. Provide the following control points:
        1. Space Temperature
        2. Temperature Setpoint
        3. CO2
        4. Fresh Air Damper (furnish and install new actuator)
        5. Heat Enable – x1 (one unit has 2 stages)
        6. Cooling Enable – x1
        7. Fan Enable
        8. Fan Status
        9. Discharge Air Temperature

b. Rooftop Unit – Typical of 1
    i. Furnish and install communicating thermostat and integrate to the BMS. Provide the following control points:
        1. Space Temperature
        2. Temperature Setpoint
        3. Heat Enable – x2
        4. Cooling Enable – x2
        5. Fan Enable

c. Garage Area
    i. Furnish and install DDC panel to provide control of the Garage Area Equipment. Provide the following control points:
        1. Garage Bay Temperature – x3
        2. Infrared (IR) Heater Enable – x3
        3. Unit Heater (UH) Enable – x2
        4. Garage Office Temperature – x2
        5. Garage Office Electric Heat Enable – x2

3.4 Ken Yackel-West Side Arena, Oscar Johnson Arena, Shoreview Ice Arena and White Bear Lake Arena

a. Chiller Control
    i. Furnish and install new Honeywell UDC2800 PID controller (or approved equal) to replace the existing PID controller and integrate to the BMS via a new Modbus interface. Provide control of ice temperature setpoint and implement setback policy.
    ii. Provide Modbus or BACnet interface for the new condenser fan VFD (installed by others) and provide monitoring.
    iii. Provide Modbus interface for the new MMIMYK Gateway (installed by others) and provide monitoring.
b. Furnaces
    i. Furnish and install (2) new TC500 thermostats (or approved equal) to replace the existing programmable thermostats.
    ii. Furnish and install (1) new wall plate space temperature sensor in a locker room on the exterior wall. Sensor shall be wired to the TC500 input for setpoint control.
    iii. Integrate into the supervisor via BACnet IP over Wi-Fi.
c. Compressor Power Monitoring
    i. Furnish and install a new electric submeter to measure the (2) chiller compressors and integrate into the building management system.
d. Zamboni IR Heater
    i. Provide DDC points to provide control of the Zamboni Area IR heater. Provide the following control points:
        1. Zamboni Bay Temperature
        2. IR Heater Enable
        3. UH Enable
        4. Zamboni Entrance Temperature
e. Chiller IR Heater
    ii. Provide DDC points to provide control of the Chiller Room IR heater. Provide the following control points:
        1. Chiller Room Temperature
        2. IR Heater Enable
f. Bleacher IR Heater
    iii. Provide DDC points to provide control of the Bleacher IR heater. Provide the following control points:
        1. IR Heater Interrupt Relay
g. Hot Water Boiler Temperature Monitoring
    iv. Provide DDC points to provide monitoring of the hot water system. Provide the following control points:
        1. Hot Water Temperature

3.5 General Exclusions and Clarifications

1) Honeywell excludes installation or wiring of any component not provided under this scope.
2) Excludes furnishing and installing or repair of dampers and/or Fire Smoke Dampers.

3) Excludes Fire Alarm tie-in and associated work.
4) Excludes any work associated with life safety systems and emergency power.
5) The Owner will assign permanent IP address for all new data drops upon request from Honeywell.
6) Installation of new IT network (LAN) data drops is included. Honeywell will utilize a Ramsey County approved low-voltage wiring vendor. That vendor will follow the State of Minnesota's low-voltage wiring standards.
7) IT coordination and implementation of firewalls, owner hosted storage capacity requirements, equipment, and other IT upgrades are excluded.
8) Repairs, replacement, testing, or cleaning of existing mechanical equipment is excluded, unless specifically stated in this scope of work
9) All testing for, identification and work with hazardous materials, including asbestos, is excluded, and shall be performed by Ramsey County. Honeywell will not perform any work in areas where asbestos is present and will notify the city immediately if asbestos is suspected.
10) Any piping/plumbing work is excluded, except where specifically noted.
11) Facility construction such as roof, ceiling, and wall patching, repair, or painting, and thermostat safety covers is excluded.
12) Site construction such as demolition, concrete drilling, coring, sawing, excavation, trenching, and underground conduits is excluded.
13) Temporary work such as temporary power, networking, utility charges, and site restoration is excluded.
14) Test, Adjust, and Balance of Airside and Water-side systems is excluded, unless specifically noted.
15) The table below represents the network-connected devices associated with the controls upgrades:

Building	Device	IP Address Needed?	Physical Port Needed?	POE Required?
Parks & Rec Office	JACE	Yes	Yes	No
Parks & Rec Office	Wi-Fi Thermostat	Yes	No	No
West Side Arena	JACE	Yes	Yes	No
West Side Arena	Wi-Fi Thermostat	Yes	No	No
West Side Arena	Wi-Fi Thermostat	Yes	No	No
Oscar Johnson Arenda	JACE	Yes	Yes	No
Oscar Johnson Arenda	Wi-Fi Thermostat	Yes	No	No
Oscar Johnson Arenda	Wi-Fi Thermostat	Yes	No	No
Shoreview Arena	JACE	Yes	Yes	No
Shoreview Arena	Wi-Fi Thermostat	Yes	No	No
Shoreview Arena	Wi-Fi Thermostat	Yes	No	No
White Bear Arena	JACE	Yes	Yes	No
White Bear Arena	Wi-Fi Thermostat	Yes	No	No
White Bear Arena	Wi-Fi Thermostat	Yes	No	No

4 Mechanical Upgrades

4.1 Replace existing Gas Furnaces and Condensing Units as described below.

Building	Label	Qty	Fuel	Existing Unit Manuf. Date	Heating Existing & Proposed	Proposed Unit (or approved equal)	Cooling Existing & Proposed
Ken Yackel - West Side Arena	F1	1	Natural Gas	TRANE / 2007	140 MBH	Carrier Infinity 98	-N/A
Ken Yackel - West Side Arena	F2	1	Natural Gas	TRANE / 2007	140 MBH	Carrier Infinity 98	- N/A
Parks and Recreation Office	S-1	1	Natural Gas	Trane / 2010	80 MBH	Carrier Infinity 98	2.5 ton
Parks and Recreation Office	S-2	1	Natural Gas	BRYAN T / 2006	90 MBH	Carrier Infinity 98	4 ton
Parks and Recreation Office	S-3	1	Natural Gas	TRANE / 2010	140 MBH	Carrier Infinity 98	4 ton
Parks and Recreation Office	S-4	1	Natural Gas	TRANE / 2009	120 MBH	Carrier Infinity 98	3 ton
Parks and Recreation Office	S-5	1	Natural Gas	TRANE / 2009	120 MBH	Carrier Infinity 98	2.5 ton
Parks and Recreation Office	S-6	1	Natural Gas	TRANE / 2018	120 MBH	Carrier Infinity 98	5 ton
Parks and Recreation Office	S-7	1	Natural Gas	TRANE / 2009	140 MBH	Carrier Infinity 98	5 ton
White Bear Lake Arena	F1	1	Natural Gas	TRANE / 2008	140 MBH	Carrier Infinity 98	- N/A
White Bear Lake Arena	F2	1	Natural Gas	TRANE / 2008	140 MBH	Carrier Infinity 98	- N/A

1) Furnish and install natural gas furnaces as stated above.
   a. Furnish and install ductwork as needed.
   b. Furnish and install piping as needed.
   c. Furnish and install flue as needed.
   d. Penetrations as required.
   e. Insulation as required.
   f. Hoisting as required.
   g. Permits as required.

h. Provide start-up, testing and commissioning.

2) Furnish and install condensing units as stated above.
   a. Furnish matching cased A coils.
   b. Furnish or clean line sets as needed.
   c. Furnish and install ductwork as needed.
   d. Furnish and install piping as needed.
   e. Insulation as required.
   f. Hoisting as required.
   g. Permits as required.
   h. Provide start-up, testing and commissioning.

3) Furnish and install two fresh air economizers with associated controls and necessary duct work and penetrations on the two furnace systems with 5-ton condensing units.

4.2 Refrigerant System Upgrades

1) Condenser VFDs

Modify each air-cooled condenser on ice sheet refrigeration systems to regulate refrigerant R22 head pressure to adjustable pressure setpoints allowing lower head pressure while maintaining refrigerant liquid flow for proper refrigeration performance.

a. Applicable facilities
   i. Ken Yackel-West Side Arena
   ii. Oscar Johson Arena
   iii. Shoreview Ice Arena
   iv. White Bear Lake Arena

b. Each air-cooled condenser shall be modified as follows:
   i. Replace two (2) single phase fan motors on each of the four (4) condensers with two (2) 1.5 Hp three (3) phase motors rated @ 1,200 RPM each matching each unit voltage and existing three (3) phase motors.
   ii. Motors selected and submitted for approval will match frame and performance of existing three (3) phase motors.
   iii. Motor wiring size to match nameplate voltage and amperage requirements.
   iv. Wiring to the new three (3) phase motors to be flexible stranded MTW with 600V AC rating. No solid wiring allowed. New wiring to be routed to condenser electrical enclosure and secured.
   v. Old motors removed to become the property of building owner for disposal.
   vi. Motors to be TEAO vertical mounted with weather tight electrical junction boxes by motor manufacturer or approved equal. Rain slingers to be required.
   vii. Replace condenser fan blades with new blades matching diameter, blade pitch and shaft diameter to fit the new three (3) phase motors.
   viii. Condenser fan shafts to be properly coated with anti-seize for ease of future service replacement.
   ix. Shaft ends exposed to weather will be fitted with seal caps or a coating of silicone caulk to prevent corrosion of shafts to blade hubs.
   x. Verify motors have individual overload protection.
   xi. If overload protection is needed, provide for each fan motor in the condenser.

xii. Install one (1) VFD to operate eight (8) 1.5 Hp condenser fans in parallel on each condenser.
xiii. VFD to be FUJI MEGA (or approved equal) with disconnect switch and bypass and BACnet card communication.
xiv. VFD may be mounted indoors in NEMA 1 enclosure with new outside three (3) phase disconnect switch with interlock to VFD.
xv. Provide single refrigerant pressure transducer (Penn P499VAP-105K with 0-10V DC output or approved equal) rated for R22.
xvi. Wire pressure transducer to FUJI MEGA (or approved equal) drive.
xvii. Program VFD to maintain refrigerant head pressure.
xviii. Interlock VFD to chiller to prove compressor on/off operation enabling VFD when compressors are operational.
xix. Provide factory startup testing and commissioning of the VFD.

2) Electronic Expansion Valves (EEVs)

Modify the existing R22 Thermostatic Expansion Valves, replace with Electronic Expansion Valves and associated connections, controllers, etc. to provide closer chiller approach temperatures and higher superheat, allowing lower head pressure while maintaining refrigerant liquid flow for proper refrigeration performance.

a. Applicable facilities
    i. Ken Yackel-West Side Arena
    ii. Oscar Johson Arena
    iii. Shoreview Ice Arena
    iv. White Bear Lake Arena

a. Modify the existing expansion valves as follows:
    i. Pump down and reclaim R22 from system, remove existing thermostatic expansion valves (TXVs.)
    ii. Install Danfoss Electronic Expansion Valve (integral stepper motor) (2) units per arena or approved equal.
    iii. Install Danfoss Pressure Transducer for Superheat Controller (2) units per arena or approved equal.
    iv. Install Danfoss Temperature Transducer for Superheat Controller (2) units per arena or approved equal.
    v. Evacuate and leak test and re-fill system with R22, adjust compressor lubricant as needed.
    vi. Provide parts, installation and wiring for new EEVs at each arena.
    vii. Install Danfoss (or approved equal) cable sets for expansion valve and stepper motor: (2) per arena.
    viii. Install Danfoss Superheat Controller (or approved equal): (2) per arena and programming the Danfoss Gateway for the Superheat Controller (to connect to laptop) (1) per arena.
    ix. Connect Danfoss Pressure Transducer to Superheat Controller using Cable Connector (or approved equal): (2) each per arena.
    x. Connect Danfoss Temperature Transducer to Superheat Controller using Cable Connector (or approved equal): (2) per arena
    xi. Provide start-up, testing and commissioning.

4.3 General Exclusions and Clarifications

1) Situations that could not be assessed in the provided documentation or during site visits are excluded: concealed conditions past the existing fixture, asbestos, or lead paint abatement, and areas that require restricted access, permits, or specialized escort conditions.
2) Structural steel installation and/or engineering is excluded.
3) Roofing work is excluded.
4) All testing for, identification and work with hazardous materials, including asbestos, is excluded, and shall be performed by Ramsey County. Honeywell will not perform any work in areas where asbestos is present and will notify the city immediately if asbestos is suspected.
5) Additional work not specifically included and stated in this scope but requested or called out by inspection or called for by applicable code, is excluded.

5 Solar Photovoltaic

5.1 Aldrich Arena

1) Install rooftop solar panels on Aldrich Arena based on design load. Provide and install gear necessary to connect to building load on customer side of tariff meter per code.

2) Provide for access lanes and clearance around roof mounted equipment, roof drains, etc. for maintenance, roof edge clearance.

3) Solar PV Description, or approved equal:

Equipment	Approx. Quantity	Description
Solar Panels	586	Trina Solar TSM-655-DE21
Inverters	6	Ginlong Technologies Solis-50K

4) Solar System Size: The output is limited by export rules.

Approx. Power Rating	383.8 kW-DC
Power Rating not to exceed	339.5 kW-AC-CEC

Figure 1 – Potential Rooftop Solar Layout – Aldrich Arena

5.2 TCO Sports Garden (Vadnais)

1) Install rooftop solar panels on TCO Sports Garden (Vadnais) based on design load. Provide and install gear necessary to connect to building load on customer side of tariff meter per code.

2) Provide for access lanes and clearance around roof mounted equipment, roof drains, etc. for maintenance, roof edge clearance.

3) Solar PV Description, or approved equal:

Equipment	Approx. Quantity	Description
Solar Panels	1,616	Trina Solar TSM-655-DE21
Inverters	9	Ginlong Technologies Solis-100K-5G-US

4) Solar System Size:

Approx. Power Rating	1,058.5 kW-DC
Approx. Power Rating	936.3 kW-AC-CEC

Figure 2 – Potential Rooftop Solar Layout – TCO Sports Garden

5.3 General Clarifications and Exclusions

1) Structural modifications and reinforcements are excluded
2) Utility tie-ins are excluded
3) Utility infrastructure upgrades are excluded

6. Carbon and Energy Manager (CEM) Monitor and Control

6.1 Deploy CEM Monitor and Control software package to the facilities listed below.

Building	CEM Deployment	
	Electric	Natural Gas
Aldrich Arena	▪	▪
Charles M. Schulz-Highland Arena	▪	▪
Gustafson-Phalen Arena	▪	▪
Harding Arena	▪	▪
Ken Yackel-West Side Arena	▪	▪
Oscar Johnson Arena	▪	▪
Parks and Recreation Offices	▪	▪
Pleasant Arena	▪	▪
Shoreview Ice Arena	▪	▪
TCO Sports Garden (Vadnais)	▪	▪
White Bear Lake Arena	▪	▪

6.2 CEM scope of work

1) Interface new Niagara BMS with the CEM cloud.

2) Tie newly installed submeters into CEM control system.

3) Utility data interface to be included in CEM software package.

    a. Tailor dashboards based on the number, type and location of meters to show energy usage and carbon emissions.
    b. Evaluate carbon and energy footprints.
    c. Monitor Scope 1 and Scope 2 emissions through user friendly visualization tools.
    d. Track renewable energy generation.
    e. Track energy costs.
    f. Track sustainability goals.
    g. Receive energy alerts.
    h. Analyze Energy Usage Intensity (EUI).

6.3 Submetering scope of work

1) Install submetering on existing and new Niagara Cloud Connector, Solar MFG Cloud Integration and CEM Monitoring

    a. Utility Meters: Eleven (11) natural gas utility meters and (11) electricity utility meters, all serviced by Xcel Energy, are encompassed within the scope.

Honeywell will collaborate with a third-party company to gather billed utility information (with the customer providing access to utility account data).

b. Refrigeration System Electric Sub-meters: Four (4) electric sub-meters for refrigeration systems, one (1) at each of the following locations: Ken Yackel – West Side Arena, Oscar Johnson Arena, Shoreview Ice Arena, and White Bear Lake Arena.
c. Solar PV System Electricity Consumption: Two (2) meters to monitor electricity consumption from Solar PV systems, one (1) each at Aldrich Arena and TCO Sports Garden (Vadnais).

A summary of the CEM Metering is provided in the table below

Building Name	Utility		Ice Ref.	
	Electricity	Natural Gas	Power C1	Solar Power
Aldrich Arena	1	1		1
Charles M. Schulz -Highland Arena	1	1		
Gustafson - Phalen Arena	1	1		
Harding Arena	1	1		
Ken Yackel - West Side Arena	1	1	1	
Oscar Johnson Arena	1	1	1	
Parks and Recreation Offices	1	1		
Pleasant Arena	1	1		
Shoreview Ice Arena	1	1	1	
TCO Sports Garden (Vadnais)	1	1		1
White Bear Lake Arena	1	1	1	

Niagara Cloud Connector – New BMS

Solar MFG Cloud Integration

API – CEMs Monitor

PART 2 – GENERAL

A. GENERAL CONDITIONS

1. Honeywell is not responsible for bringing existing lighting/electrical systems up to code.
2. Lamp warranty will be provided by the lamp manufacturer. The warranty on the lamps operates by the Customer sending the old ballasts back to the manufacturer and in return a new ballast will be provided to be installed by the Customer's work force.
3. If Honeywell encounters any materials or substances classified as toxic or hazardous in performance of the Work, including asbestos, Honeywell will notify Customer and will stop work in that area until such area has been made safe by the Customer, or Customer's Representative, at Customer's expense. In the event such conditions cause a delay in Honeywell's performance, Honeywell shall be entitled to recovery of all costs associated with such delay, as well as an extension of time of performance.
4. Where demolition of certain areas of a building are required for removal and installation of equipment and that demolition is included in the scope of work defined herein, Honeywell will make every effort to replace such areas with similar materials as available. If such materials are not available, materials of similar quality will be supplied and installed.
5. Electrical: Honeywell will only be responsible for repairing existing electrical wiring problems that occur within three feet (36 inches) of the device being installed or the nearest wall or ceiling penetration, whichever is smaller.
6. Piping: Honeywell will only be responsible for repairing existing piping problems that occur within two feet (24 inches) of the device being installed or the nearest wall or ceiling penetration, whichever is smaller. Piping includes, but is not limited to, domestic hot and cold water, cooling cold water, heating hot water, condensate, fuel oil, and cooling tower condensing water.
7. Routine Maintenance: Routine maintenance up such as vacuuming, coil cleaning and filter change of air handling devices, etc. is the responsibility of the Customer, or as included in Exhibit J.
8. Utility Meter: If new utility meters are required, provision and coordination of utility meters is the responsibility of the customer.
9. Remote Access: CUSTOMER is responsible for implementation and costs for remote Honeywell access through CUSTOMER's firewall(s) to the controllers and front-end computer(s) by one (1) remote user designated by Honeywell using one or more of the following processes:
   - TCP/IP Remote Access: A dedicated static IP address, installation and on-going maintenance and subscription and licensing fees for access hardware and software and one (1) station license dedicated to the remote user, or
   - Phone Lines: To be provided by customer for off-site monitoring, up to two (2) lines for each front end, as needed, one (1) line for each separate remote bus, as well as on-going maintenance of the lines.

   If remote access is interrupted, at any time during the Guarantee Term, Honeywell reserves the right to suspend any reporting requirements until remote access has been restored.
10. Efficiency Values: Honeywell will install equipment and lighting components (hereto referred as "equipment") under the scope described herein with specific energy and water efficiency values. The customer is required to replace any failed "equipment" no longer warranted by

Honeywell or a Honeywell subcontractor, with "equipment" of equal or greater efficiency for the full contract guarantee term.

11. [Reserved]
12. Honeywell will provide information necessary to apply for utility incentives. Actual dollar amount of incentive will be determined by the Utility and is not guaranteed by Honeywell.
13. The following areas are specifically excluded from this scope of work. Correction of problems in these areas, if required by Federal, State or local law or ordinance, will be considered additional work and will be chargeable (with approval) to the Customer.
    a. Any work not specifically stated and outlined in this scope of work.
    b. Painting and patching of areas beyond those areas directly related to work.
    c. Existing non-code conditions (examples: existing electrical wiring which requires correction or approval by appropriate inspectors, existing penetrations in need of fire stopping, etc).
14. Extended Warranties or Service Plans: Honeywell will transfer to the Customer manufacturer warranties and service plans to the extent they extend beyond the one year Honeywell warranty. Following the one-year Honeywell warranty the Customer will contact the manufacturer directly for warranty or service issues. Honeywell does not guarantee that the manufacturer or service provider will be available throughout the term of the manufacturer's warranty.

B. RELATED WORK SPECIFIED ELSEWHERE

1. Provision of equipment, material, and labor to provide functional measurement and verification systems coordinated under Exhibit J – Guarantee and M&V Services Agreement.

Exhibit B
Project Schedule

Honeywell

ID	Task Name	Duration	Start	Finish
1	**Construction**	**352 days**	**Tue 11/19/24**	**Fri 4/17/26**
2	**Pre-Construction**	**120 days**	**Tue 11/19/24**	**Tue 5/13/25**
3	Notice to Proceed	0 days	Tue 11/19/24	Tue 11/19/24
4	Final Equipment Selection / Submittals Review / Procurement	6 mons	Tue 11/19/24	Tue 5/13/25
5	**Construction**	**327 days**	**Fri 12/27/24**	**Fri 4/17/26**
6	Lighting Upgrades	8 wks	Tue 2/4/25	Tue 4/1/25
7	Building Envelope Improvements	8 wks	Fri 12/27/24	Tue 2/25/25
8	Mechanical Upgrades	16 wks	Mon 5/19/25	Thu 9/11/25
9	Controls Upgrade and CEM	14 wks	Mon 7/14/25	Mon 10/20/25
10	Solar PV	**210 days**	**Mon 6/16/25**	**Fri 4/17/26**
11	Aldrich Arena	16 wks	Mon 6/16/25	Wed 10/8/25
12	TCO Sports Garden	26 wks	Thu 10/9/25	Fri 4/17/26
13	**Administrative Closeout**	**15 days**	**Mon 4/20/26**	**Fri 5/8/26**
14	Substantial Completion / Punchlist / Training / Acceptance	3 wks	Mon 4/20/26	Fri 5/8/26

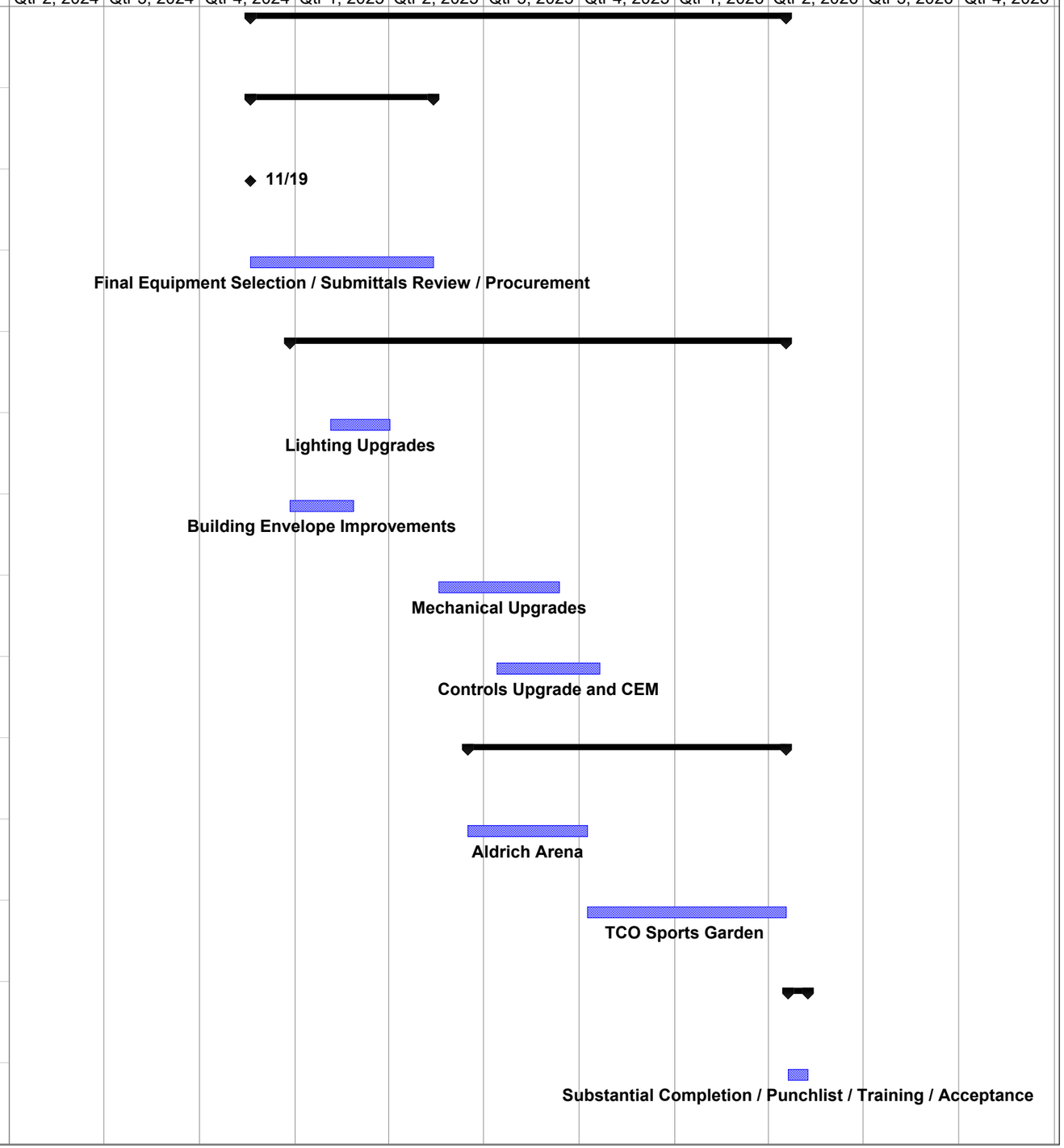

Exhibit C

Installation Price

ECM No.	Description	Installation Price	
1	Lighting Upgrades	$	442,645
2	Building Envelope Upgrades	$	122,721
3	Controls Upgrades	$	290,402
4	Mechanical Upgrades	$	704,007
5	Solar Photovoltaic	$	4,896,095
6	CEM Monitor & Control	$	32,371
	Total Installation Price	***$***	***6,488,241***

EXHIBIT D
PAYMENT SCHEDULE

1. The following payment schedule has been established for the Work:

1.1 The payment schedule reflected below has been established for the Work. Payment shall be made net thirty-five (35) days of invoice date. If issues surrounding lack of payment are not remedied within seven (7) business days, HONEYWELL may suspend all Work until payment is made.

Total payments are: $ 6,488,241

Customer may withhold retainage as set forth in Section 5.1 of the Agreement. No retainage shall be withheld from the Initial Payment made by Customer to Honeywell.

1.2 Progress Payments

	Amount Due
Initial Payment upon Contract Signature:	$1,622,060
Monthly Progress Payments:	$4,866,181
Total Payments:	**$6,488,241**

The entire contract price less the initial payment will be billed monthly as a percentage complete. Following the end of each month, during the construction period of the Project, HONEYWELL will provide to CUSTOMER an Application for Payment using the Schedule of Values (SOV) provided herein to identify the work performed during that month.

2. The following payment schedule has been established for Support Services:

2.1 The first invoice will be issued upon completion of the Work and prior to commencement of Support Services and CUSTOMER shall pay or cause to be paid to HONEYWELL the full price for the Services as specified in Exhibit J.

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Honeywell

APPLICATION NO	1
APPLICATION DATE	11/5/2024
PERIOD TO	11/5/2024

SCHEDULE OF VALUES

DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		TOTAL COMPLETED AND STORED TO DATE		BALANCE TO FINISH	
		FROM PREVIOUS APPLICATIONS	THIS PERIOD	AMOUNT	(%)		
Initial Payment (25%)	$ 1,622,060.25		$ 1,622,060.25	$ 1,622,060.25	100.00%	$ -	
				$ -		$ -	
AIA Hard Costs				$ -		$ -	
ECM 1: Lighting Upgrades	$ 250,548.52			$ -		$ 250,548.52	
ECM 2: Building Envelope Upgrades	$ 69,463.08			$ -		$ 69,463.08	
ECM 3: Controls Upgrades	$ 158,217.95			$ -		$ 158,217.95	
ECM 4: Mechanical Upgrades	$ 383,559.58			$ -		$ 383,559.58	
ECM 5: Solar Photovoltaic Systems	$ 2,714,869.71			$ -		$ 2,714,869.71	
ECM 6: CEM Monitor & Control	$ 17,716.31			$ -		$ 17,716.31	
Fixed Fees							
Investment Grade Energy Audit	$ 149,948.56			$ -		$ 149,948.56	
Design Engineering Fees	$ 106,426.55			$ -		$ 106,426.55	
Construction Management & Project Administration	$ 111,306.96			$ -		$ 111,306.96	
System Commissioning	$ 80,173.80			$ -		$ 80,173.80	
Equipment Initial Training Fees	$ 74,571.85			$ -		$ 74,571.85	
ESCO Overhead	$ 371,022.70			$ -		$ 371,022.70	
ESCO Profit	$ 222,613.18			$ -		$ 222,613.18	
Owner Controlled Contingency	$ 155,742.00			$ -		$ 155,742.00	
SUBTOTAL:	**$ 6,488,241.00**	**$ -**	**$ 1,622,060.25**	**$ 1,622,060.25**	**25.00%**	**$ 4,866,180.75**	

Exhibit G

Small Business Utilization and Labor Goals

Summary of Bidding Results

Scope	Subcontractor	Cost	Registered in CERT	Registered with DnB
Lighting	Premier Lighting	$ 289,992	SBE, WBE	
Building Envelope	I-Star	$ 70,737		SBE
Building Envelope	Yale Mechanical	$ 9,662		
Controls	Total Mechanical	$ 180,791	SBE	
Mechanical	Total Mechanical	$ 438,283	SBE	
Solar PV	All Energy	$ 3,102,207		SBE
CEM	Honeywell	$ 22,125		

Total Project Price	$ 6,488,241

Comparison with Utilization Goals (% of Project Price)

Labor Category	Utilization	
	Goal	Planned
MBE	32%	0%
WBE	20%	4%
SBE	25-35%	63%

Abbreviations:

1. CERT = Central Certification Program
2. DnB = Dun & Bradstreet
3. MBE = Minority Business Enterprise
4. WBE = Women Business Enterprise
5. SBE = Small Business Enterprise

EXHIBIT I
PROJECT ACCEPTANCE PROCEDURE

As portions of the Project near completion, the Honeywell Project Manager will start the project close-out process.

The following Exhibits and Tables are attached hereto and made a part of the Agreement:

Exhibit I-1	Schedule of Substantial Completion Acceptance
Exhibit I-2	Certificate of Substantial Completion
Exhibit I-3	Final Project Acceptance Certificate

A.1 Substantial Completion Procedure

The Honeywell Project Manager shall use the Scope-of-Work (SOW) listed in Attachment A as the basis for the close-out process and shall demonstrate to the Customer's Representative that each separate item of the SOW is substantially complete. The sign off process will be by portion of the Scope of Work, by building/site/Equipment Unit or by individual Energy Conservation Measure (ECM) as listed in Exhibit I-1 below. After each portion of the Scope of Work has been demonstrated and a "Punch List" detailing minor deficiencies, if any, is generated, the Customer's Representative shall execute the Exhibit I-2 Certificate of Substantial Completion (CSC) to acknowledge substantial completion and Honeywell will complete the "Punch List" within two weeks. Exhibit I-1 based on the Customer's signature dates will track the progress towards Final Project Acceptance. Warranty shall start in accordance with the terms of the Agreement.

Exhibit I-1

SCHEDULE OF SUBSTANTIAL COMPLETION

Schedule of Substantial Completion: The acceptance process will be performed according to the following schedule.

Schedule of Certificates of Substantial Completion (CSC)		
Scope of Work Segmentation	**CSC Acceptance By:**	**Punchlist Acceptance By:**

A.2 Final Project Acceptance Procedure

Once Exhibit I-1 and all punch lists are complete the Honeywell Project Manager and Customer shall use Exhibit I-3 to signify Final Project Acceptance.

Exhibit I-2

CERTIFICATE OF SUBSTANTIAL COMPLETION

Project Name: _____

Building/Site/Equipment Unit or individual Energy Conservation Measure (ECM): _____

To: Honeywell International Inc.

Reference is made to the above listed Agreement between the undersigned and Honeywell International Inc. and to the Scope of Work as defined in Attachment A herein. In connection therewith, we confirm to you the following:

1. The Building/Site/Equipment Unit or individual Energy Conservation Measure (ECM) referenced above and also listed in Attachment A of the Agreement has been demonstrated to the satisfaction of the Customer's Representative as being substantially complete.
2. The Punch List [circle which applies]:
   (a) has been developed by the parties and delivered to Honeywell and the deficiencies noted therein will be corrected within 2 weeks of the date hereon; or
   (b) has not been developed by the parties and delivered to Honeywell but will be developed and delivered on or before _____, 202_ after which the deficiencies noted therein will be corrected within 2 weeks of the date thereon.
3. All of the Work has been delivered to and received by the undersigned and that said Work has been examined and /or tested and is in good operating order and condition and is in all respects satisfactory to the undersigned and as represented, and that said Work has been accepted by the undersigned and complies with all terms of the Agreement. Consequently, you are hereby authorized to invoice for payment, as defined in Attachment E, Payment Schedule.
4. Warranty shall start in accordance with the terms of the Agreement.
5. If Customer will be self-performing maintenance on equipment associated with this ECM, then as of the date of Customer signature the Customer is responsible for maintenance.
6. If Honeywell will be performing maintenance on equipment associated with this ECM, then Honeywell will start the Support Services Agreement on the Support Services Effective Date as defined in accordance with Attachment D.

Customer Name: _____

By: _____	_____
(Authorized Signature)	(Authorized Signature)
_____	_____
(Printed Name and Title)	(Printed Name and Title)
_____	_____
(Date)	(Date)

Exhibit I-3

FINAL PROJECT ACCEPTANCE CERTIFICATE

Project Name: _____

Scope-of-Work (SOW): _____

To: Honeywell International Inc.

Reference is made to the above listed Agreement between the undersigned and Honeywell International Inc. and to the Scope of Work as defined in Attachment A herein. In connection therewith, we confirm to you the following:

1. The entirety of the Scope of Work (SOW) referenced above and set forth in Attachment A of the Agreement has been demonstrated to the satisfaction of the Customer's Representative as being accepted as is evidenced by Customer's signature on Certificates of Substantial Completion for the entirety of the Work.
2. The Punch List(s) has been completed.
3. You are hereby authorized to invoice for Final Payment, as defined in Attachment E, Payment Schedule.
4. The date of Customer's signature below shall be known as the date of Final Project Acceptance.

Customer Name:

By: _____
(Authorized Signature)

_____
(Printed Name and Title)

_____
(Date)

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Exhibit J
SERVICES AGREEMENT

(INCLUDING M&V SERVICES, GUARANTEE TERMS, SCHEDULE OF GUARANTEED SAVINGS, AND HONEYWELL FORGE FOR BUILDINGS PERFORMANCE)

Project Name: Ramsey County
Date: 7/23/2024

Honeywell International Inc.
715 Peachtree Rd. NE
Atlanta, GA 30308

Ramsey County
2015 Van Dyke St.
Maplewood, MN 55109

Service Location Name(s):

Parks and Recreation Office	2015 Van Dyke St. Maplewood, MN 55109-3711
Aldrich Arena	1850 White Bear Ave. N. Maplewood, MN 55109-3704
Oscar Johnson Arena	1039 Decourcy Cir., Saint Paul, MN 55108-2600
Shoreview Ice Arena	877 highway 96 W. Shoreview, MN 55126
White Bear Lake Arena	2160 Orchard Lane, White Bear Lake, MN 55110
TCO Sports Garden	1490 County Road E. Vadnais Heights, MN 55110
Highland Arena	800 Snelling Ave. S. Saint Paul, MN 55116
Phalen Arena	1320 Walsh St. Saint Paul, MN 55106
Harding Arena	1496 6TH St. E. Saint Paul, MN 55106
West Side Arena	44 Isabel St. E. Saint Paul, MN 55107
Pleasant Arena	2015 Van Dyke St. Maplewood, MN 55109-3711

M&V Services Agreement Term ("M&V Services Term"): Three (3) years from the M&V Services Effective Date.

M&V Services Agreement Effective Date ("M&V Services Effective Date"): First (1st) day of the month following the date of Final Project Acceptance of the Work.

Price for Year 1: Eighteen Thousand sixty-one dollars ($18,061). See Section A.6.2 for price in subsequent years.

Payment Terms: Annual in Advance

☐ Sales/Use Tax will be Invoiced Separately ☐ Sales/Use Tax is Included in the Price ☒ This Sale is Tax Exempt

Honeywell International Inc., through its Honeywell Building Solutions strategic business unit ("Honeywell"), will provide, or cause to be provided, to Customer the services (the "M&V Services") set forth in the attached work scope documents in Part B of this Exhibit J ("M&V Services Scope") with respect to the Service Location(s) in accordance with the M&V Services Scope, and the terms and conditions set forth in Part A of this Exhibit J, which together with the guarantee terms and Schedule of Guaranteed Savings set forth in Part C and Part D, respectively, of this Exhibit J, and Part E of this Exhibit J ("Honeywell Forge for Buildings Performance") constitute this Services Agreement. This Services Agreement is entered into as Exhibit J to, and by execution of, the accompanying Honeywell Agreement between Honeywell and Customer (the "Main Agreement"). Together, the Main Agreement and M&V Services Agreements are the "Agreement."

Part A –M&V Services Terms & Conditions
Part B –M&V Services Scope Description
Part C – Guarantee Terms
Part D – Schedule of Guaranteed Savings
Part E – Carbon and Energy Manager (CEM) Software Terms
Exhibits - The following Exhibits are attached hereto and are made a part of the Agreements: Exhibit J-1 Baseline Operating Parameters Exhibit J-2 Guarantee Period Operating Parameters Exhibit J-3 Baseline Conditions, Utility Use, Utility Unit Costs Exhibit J-4 Engineered Cost Avoidance Calculations Exhibit J-5 M&V Options by Building & ECM Exhibit J-6 M&V Plan Summary Exhibit J-7 Operations Cost Avoidance Methodology

PART A. STANDARD TERMS AND CONDITIONS FOR M&V SERVICES

The following terms and conditions, in Sections A.1 to A.8, apply to all M&V Services.

A.1 Reserved

A.2 Working Hours

A.2.1 Unless otherwise stated, all M&V Services will be performed during the hours of 8:00am - 4:30pm local time Monday through Friday, excluding federal or state holidays. If for any reason Customer requests Honeywell to perform M&V Services outside such hours, any overtime or additional expenses incurred by Honeywell will be billed to and paid by Customer.

A.3 Proprietary Information

A.3.1 Customer agrees that Honeywell may use non-proprietary information pertaining to the Agreements, and the work or services performed under the Agreements, for press releases, case studies, data analysis, promotional purposes, and other similar documents or statements to be publicly released, as long as Customer approves such document or statement in writing beforehand. Honeywell may, during and after the term of the Agreements, compile and use, and disseminate in anonymous and aggregated form, all data and information related to building optimization and energy usage obtained in connection with the Agreements. The rights and obligations in this Section A.3 shall survive termination or expiration of the Agreements. The electronic platform, code and arrangement upon which the legible Energy Savings Calculations are published is "Proprietary."

A.4 Limitation of Liability

A.4.1 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE AGGREGATE LIABILITY OF HONEYWELL FOR ANY CLAIMS ARISING OUT OF OR RELATED TO THIS M&V SERVICES AGREEMENT WILL IN NO CASE EXCEED THE ANNUAL M&V SERVICES AGREEMENT PRICE; PROVIDED, HOWEVER, THAT THIS LIMITATION SHALL NOT APPLY TO THE SPECIFIC SAVINGS GUARANTEE OBLIGATIONS OF HONEYWELL SET FORTH IN THIS EXHIBIT J.

A.5 Coverage of M&V Services

A.5.1 Customer agrees to provide Honeywell access to all equipment and software necessary to Honeywell's performance of the M&V Services. Honeywell will be free to start and stop all equipment incidental to the operation of the mechanical, control, automation, and life safety system(s) as arranged with Customer's representative.

A.5.2 Honeywell has no obligation to repair or replace parts of any systems, including, but not limited to, ductwork, piping, shell and tube (for boilers, evaporators, condensers, and chillers), unit cabinets, boiler refractory material, heat exchangers, insulating material, electrical wiring, hydronic and pneumatic piping, structural supports and other non-moving parts pursuant to this M&V Services Agreement. Costs to repair or replace such parts will be the sole responsibility of Customer.

A.5.3 Honeywell will not load software, or make repairs or replacements necessitated by reason of negligence or misuse of any equipment, or necessitated by lightning, electrical storm, or other violent weather or by any other cause pursuant to this M&V Services Agreement. Honeywell may provide such services at Customer's request and at an additional charge.

A.5.4 Honeywell is not responsible for maintaining a supply of, furnishing and/or replacing lost or needed chlorofluorocarbon (CFC) based refrigerants not expressly required to be provided by Honeywell under this M&V Services Agreement. Customer is solely responsible for the cost of material and labor relating to any such refrigerant.

A.5.5 Honeywell is not obligated to provide replacement software, equipment, components and/or parts pursuant to this M&V Services Agreement.

A.5.6 Unless otherwise expressly provided in this M&V Services Agreement, Customer retains all responsibility for maintaining LANs, WANs, leased lines and/or other communication mediums incidental or essential to the operation of the system(s).

A.5.7 Honeywell may install diagnostic devices and/or software at Honeywell's expense to enhance system operation and support. Upon termination or expiration of this M&V Services Agreement, Honeywell may remove these devices and return the applicable system(s) to their original operation. Customer agrees to provide, at its sole expense, connection to the switched telephone network for the diagnostic devices and/or software.

A.5.8 Customer will promptly notify Honeywell of any malfunction in the system(s) that comes to Customer's attention**.**

A.6 Terms of Payment

A.6.1 Customer will pay or cause to be paid to Honeywell the full price for the M&V Services, as specified on the first-year line of the M&V Services Pricing Table (Section A.6.2) and such price may be adjusted in accordance with this M&V Services Pricing Table. Honeywell will submit invoices to Customer in advance for M&V Services to be performed during the subsequent billing period, and payment shall be due thirty (30) days after Customer's receipt of each such invoice, as set forth in the "Payment Terms" provisions at the beginning of this Exhibit J. Payments for M&V Services past due more than five (5) days shall accrue interest from the due date to the date of payment at the rate of one and one-half percent (1.5%) per month, compounded monthly, or the highest legal rate, whichever is lower. Customer will pay all attorney and/or collection fees incurred by Honeywell in collecting any past due amounts.

A.6.2 Honeywell will annually adjust the amounts charged for the M&V Services provided under the M&V Services Agreement **[** as set forth in the schedule below]. In addition, Honeywell reserves the right, in its discretion, to increase the price payable by Customer in the event that tariffs (or similar governmental charges) imposed by the United States or other countries result in any increase in the costs that Honeywell used to determine such price.

Year 1	$18,061
Year 2	$18,603
Year 3	$19,161

A.6.3 UPON WRITTEN NOTICE TO HONEYWELL, SUCH NOTICE TO BE PROVIDED NO LESS THAN THIRTY (30) DAYS' BEFORE THE END OF YEAR 3 AND EACH SUBSEQUENT APPLICABLE YEAR, CUSTOMER MAY EXTEND THE M&V SERVICE AGREEMENT FOR AN ADDITIONAL YEAR. ANY SUCH EXTENSION BY THE CUSTOMER SHALL BE AT THE COST OF THREE PERCENT (3%) ABOVE THE APPLICABLE PRIOR YEAR'S PRICE (FIRST EXTENSION TO BE APPLIED TO YEAR 3, AND THEN APPLIED YEAR-OVER-YEAR FOR EACH SUBSEQUENT EXTENSION). CUSTOMER MAY NOT EXTEND THE M&V SERVICES AGREEMENT BEYOND YEAR 20. AS SUCH, THE PRICE OF M&V SERVICES SHALL

FOLLOW THE PRICING SCHEDULE LISTED BELOW FOR EACH YEAR THAT THE CUSTOMER EXTENDS THE M&V SERVICE AGREEMENT:

Year 4	$19,767
Year 5	$20,360
Year 6	$20,971
Year 7	$21,600
Year 8	$22,248
Year 9	$22,915
Year 10	$23,602
Year 11	$24,311
Year 12	$25,040
Year 13	$25,791
Year 14	$26,565
Year 15	$27,362
Year 16	$28,183
Year 17	$29,028
Year 18	$29,899
Year 19	$30,796
Year 20	$31,720

A.7 Termination. This M&V Services Agreement may be terminated for the reasons set forth below. Should this M&V Services Agreement be terminated in whole or in part for any reason, the Guarantee Term shall also terminate on the same date. In the event this M&V Services Agreement is terminated, the Guaranteed Savings for all subsequent Guarantee Years shall be null and void and Honeywell shall have no further obligation with respect to the Guarantee set forth herein.

By Customer:

A.7.1 For Cause. Customer may terminate this M&V Services Agreement for cause if Honeywell defaults in the performance of any material term of this M&V Services Agreement, or fails or neglects to carry forward the M&V Services in accordance with this M&V Services Agreement, after giving Honeywell written notice of its intent to terminate. If, within forty five (45) days following receipt of such notice, Honeywell fails to cure such default, Customer may, by written notice to Honeywell, terminate this M&V Services Agreement. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

A.7.2 For Convenience. To the extent permitted by applicable law, each year at the anniversary of the commencement of the term of this M&V Services Agreement, Customer may terminate the M&V Services Agreement by giving Honeywell written notice at least forty five (45) days prior to the anniversary date. In the event Customer elects to terminate this M&V Services Agreement at any other time during the year, Customer shall be billed on a pro rata basis and Customer will not receive an M&V Report at the end of the year.

A.7.3 Customer's Premises are Destroyed. Customer may terminate this M&V Services Agreement in the event Customer's premises are destroyed. In the event of such termination under this Section, neither party shall be liable for damages or subject to any penalty, except that Customer will remain liable for M&V Services performed to the date of termination. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

By Honeywell:

A.7.4 For Cause. Honeywell may terminate this Agreement for cause if Customer materially breaches this Agreement (including, but not limited to, Customer's failure to make payments as agreed herein or Customer's failure to provide Honeywell access to Customer site or Customer's data). If, within thirty (30) days following Honeywell's

notice of breach, Customer fails to make the payments then due, or otherwise fails to cure such breach, Honeywell may, by written notice to Customer, terminate this Agreement and recover from Customer payment for Work performed and for losses sustained, including but not limited to, reasonable overhead, profit and applicable damages. In the event of termination of this Agreement by Honeywell for cause, all liabilities associated with the Guarantee will be deemed satisfied and no M&V Services deliverables will be provided by Honeywell after the Agreement is terminated for any Guarantee Years.

A.7.5 Honeywell Equipment is Destroyed or Substantially Damaged. Either party may terminate this M&V Services Agreement in the event Honeywell equipment on Customer's premises is destroyed or substantially damaged. In the event of such termination under this Section, neither party shall be liable for damages or subject to any penalty, except that Customer will remain liable for M&V Services performed to the date of termination. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

A.8 Appropriations and Essential Use

A.8.1 Customer reasonably believes that sufficient funds can be obtained to make all payments for the initial term, as described in the summary at the beginning of this M&V Services Agreement. Customer hereby covenants that it shall do all things lawfully within its power to obtain funds from which such payments may be made, including making provisions for such payments, to the extent necessary, in each budget submitted for the purpose of obtaining funding, using its bona fide best efforts to have such portion of the budget approved and exhausting all available administrative reviews and appeals in the event such portion of the budget is not approved. It is Customer's intent to make the payments for the initial term if funds are legally available therefore and in that regard Customer represents that (a) the use of the M&V Services is essential to its proper, efficient and economic functioning or to the services that is provided to its citizens; (b) Customer has an immediate need for and expects to make immediate use of substantially all the M&V Services, which need is not temporary or expected to diminish in the foreseeable future; and (c) the M&V Services shall be used by Customer only for the purpose of performing one or more of its governmental or proprietary functions consistent with the permissible scope of its authority.

A.8.2 In the event no funds or insufficient funds are appropriated and budgeted for the acquisition, retention or operation of the M&V Services under the M&V Services Agreement, then Customer shall, not less than sixty (60) days prior to the end of such applicable fiscal period, in writing, notify Honeywell (and its assignee, if any) of such occurrence. The M&V Services Agreement shall thereafter terminate and be rendered null and void on the last day of the fiscal period for which appropriations were made without penalty, liability or expense to Customer of any kind, except as to (i) the portions of the payments herein agreed upon for which funds have been appropriated and budgeted or are otherwise available, and (ii) Customer's other obligations and liabilities under the Agreement relating to, accruing or arising prior to such termination. In the event of such termination, Customer agrees to peaceably surrender to Honeywell (or its assignee, if any) possession of any equipment that is provided by Honeywell under the M&V Services Agreement, on the date of such termination, packed for shipment in accordance with manufacturer's specifications and eligible for manufacturer's maintenance, and freight prepaid and insured to any location in the continental United States designated by Honeywell, all at Customer's expense. Honeywell (or its assignee, if any) may exercise all available legal and equitable rights and remedies in retaking possession of any equipment provided by Honeywell under this M&V Services Agreement.

A.8.3 Notwithstanding the foregoing, Customer agrees (a) that if the M&V Services Agreement is terminated in accordance with the preceding paragraph, Customer shall not contract with any other party for any services similar to or that take the place of the M&V Services provided under the M&V Services Agreement, and shall not permit such functions to be performed by its own employees or by any agency or entity affiliated with or hired by Customer for the balance of the fiscal period in which such termination occurs or the next succeeding fiscal period thereafter, and (b) that it shall not, during the initial term, give priority in the application of funds to any other functionally similar equipment or services.

PART B. M&V SERVICES SCOPE DESCRIPTION

B.1 Guarantee Analysis Services

B.1.1 Scope – Honeywell will implement the guarantee analysis services outlined in Section B.1.3 (the **"M&V Services"**) for the following ECMs. The M&V Services are to be performed consistent with the terms of the guarantee set forth in Part C, and the Schedule of Guaranteed Savings and related provisions set forth in Part D, in each case of this Exhibit J. Certain defined terms are set forth in Part C.

List of Covered Facilities, Meters, Energy Conservation Measures ("ECMs) by Service Offering:

(a)	(b)	(c)	(d)
Facility	**LDC-Meter # / Utility Type**	**ECMs** (list only ECMs associated with meter listed in Column (b))	**Related M&V Services Subsection**
Parks and Recreation Office	000020061025/electric 000000700604/natural gas	2.0 – Building Envelope, 3.0 – Controls Upgrades, 4.0 – Mechanical Upgrades	Option A
Aldrich Arena	000017083043 / electric 000000710401 / natural gas	5.0 – Solar PV Project	Option A
Oscar Johnson Arena	000017066353 / electric 000000434606 / natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
Shoreview Ice Arena	000017066651 / electric 000000846614 /natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
White Bear Lake Arena	000017066474 / electric 000020917263/ natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
TCO Sports Garden	000017035306 / electric 000010003987 / natural gas	5.0 – Solar PV Project	Option A
Highland Arena	000017082947 / electric 000010012165 / natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
Phalen Arena	000017053926 / electric 0000100000850/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
Harding Arena	000017054023/electric 000020935746/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
West Side Arena	000017053914/electric 000000464854/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
Pleasant Arena	000003627482 / electric 00000071146	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A

B.1.1.1 General Descriptions – The following are general descriptions of one or more approaches to providing guarantee analysis services. The specific details of the M&V Services relating to the Retrofit as set forth in this M&V Services Agreement take precedence over these descriptions.

Option A—Retrofit Isolation with Key Parameter Measurement
This option is based on a combination of measured and estimated factors when variations in factors are not expected. Measurements are spot or short-term and are taken at the component or system level, both in the baseline and post-installation cases. Measurements should include the key performance parameter(s) which define the energy use of the ECM. Estimated factors are supported by historical or manufacturer's data. Savings are determined by means of engineering calculations of baseline and post-installation energy use based on measured and estimated values. Savings are calculated using direct measurements and estimated values, engineering calculations and/or component or system models often developed through regression analysis. Adjustments to models are not typically required.

Option B—Retrofit Isolation with All Parameter Measurement
This option is based on periodic or continuous measurements of energy use taken at the component or system level when variations in factors are expected. Energy or proxies of energy use are measured continuously. Periodic spot or short-term measurements may suffice when variations in factors are not expected. Savings are determined from analysis of baseline and reporting period energy use or proxies of energy use. Savings are calculated using direct measurements, engineering calculations, and/or component or system models often developed through regression analysis. Adjustments to models may be required.

Option C – Utility Data Analysis
This option is based on long-term, continuous, whole-building utility meter, facility level, or sub-meter energy (or water) data. Savings are determined from analysis of baseline and reporting period energy data. Typically, regression analysis is conducted to correlate with and adjust energy use to independent variables such as weather, but simple comparisons may also be used. Savings calculations use regression analysis of utility meter data to account for factors that drive energy use. Adjustments to models are typically required.

Option D—Calibrated Computer Simulation
Computer simulation software is used to model energy performance of a whole-facility (or sub-facility). Models must be calibrated with actual hourly or monthly billing data from the facility. Implementation of simulation modeling requires engineering expertise. Inputs to the model include facility characteristics; performance specifications of new and existing equipment or systems; engineering estimates, spot-, short-term, or long-term measurements of system components; and long-term whole-building utility meter data. After the model has been calibrated, savings are determined by comparing a simulation of the baseline with either a simulation of the performance period or actual utility data. Savings calculations are done based on computer simulation model (such as eQUEST) calibrated with whole-building or end-use metered data or both. Adjustments to models are required.

B.1.2 Coverage – The M&V Services includes all labor, travel, and expenses to perform the services and frequency described in Section B.1.3. In general, and subject to details of the M&V Plan, Honeywell will provide a single (1) reporting submission of the determination of the amount of Cost Avoidance for each Guarantee Year. Services not explicitly described in Section B.1.3, including Customer Guarantee Responsibilities, are not included.

B.1.3 M&V Plan: In general, the M&V Services:

(a) are required to be performed for the entire Guarantee Term;
(b) may employ one or more of Options A, B, C or D; and
(c) include delivering a report on an annual basis, for either the entire Guarantee Term, or for a shorter M&V reporting term.

The details of the M&V Services are set forth in the M&V Plan, as described in detail in Exhibit J-6, which takes precedence over the general description in this Section B.1.3.

B.1.4 M&V Offerings – In coordination with Section B.1.1, HONEYWELL will perform the Measurement & Verification (M&V) offerings checked below:

☒ B.**1.4.1 Retrofit Isolation Energy Audit for Option A Verified ECMs –** HONEYWELL will provide *Option A* energy guarantee auditing services as detailed in Exhibit J, and Exhibits to Exhibit J for specific Energy Conservation Measures (ECMs) identified in Exhibit J and/or Exhibits to Exhibit J as using *Option A* methodologies for Measurement and Verification. HONEYWELL will provide this one-time determination of the quantity of energy avoidance of the CUSTOMER'S facility for the First Guarantee Year only. Option A methods will be applied on an ECM specific basis (i.e., isolated to the retrofit) and Energy Cost Avoidance for a Guarantee Year will be quantified and summarized on an ECM basis. After the ECM's potential-to-save has been verified (Section B.1.3) HONEYWELL shall either stipulate the quantity of cost avoidance or determine the cost avoidance from engineering calculations and measurement of specific variables as described in Section D.1.1.1. Utility bill auditing (Option C) and reconciliation of Option A results to utility meter bill data is not included. The Option A retrofit isolation method was selected by the CUSTOMER to provide an economical reconciliation method and to minimize the interactive effects on the determination of cost avoidance due to changes to the site or facilities from the baseline conditions.

HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided.
3. Record current manual set points and manual settings. Collect BAS data for analysis and verification that the ECM is still operating to the intended specifications. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECM's or the building energy consumption.

HONEYWELL will provide a single (1) reporting submission of the determination of energy avoidance for the First Guarantee Year. The Energy Avoidance quantified in the First Guarantee Year will be stipulated as the annual Energy Avoidance for each Guarantee Year of the remaining contract term. Reporting of Cost Avoidance will occur each year of the term and the monetization of Cost Avoidance will be determined as described in Section D.1.1.1.

Work Coverage: Utility Meters listed in Section B.1.1 designated as Option A

Term Coverage: Year 1 Monitoring; Year 2 to End of Term stipulated based on Year 1 Results

Option A/B Audit Report section will be submitted: ☐ 1-Time Only ☐ Quarterly ☐ Semi-Annually ☒ Annually

☐ B.**1.4.2 Energy Advisory Report–Level 1 (No Travel/ No On-Site Services) –** HONEYWELL will provide a report advisory and qualitative in its description based on material provided by the CUSTOMER to HONEYWELL as described below. The intent of the report is to describe deficiencies in the current operations in the buildings and their possible impact on the ECMs to the extent possible via CUSTOMER provided documents only. All travel and on-site services are excluded unless a Level-2 offering is included. It will be the responsibility of the CUSTOMER to investigate and correct the reported deficiencies. It will be the responsibility of the CUSTOMER to provide to the M&V specialist:

1. Verification that equipment installed to perform the ECMs has been properly maintained, including but not limited to provision of maintenance records.
2. Current status of the buildings (i.e., occupancy level and use, hours of operation, ownership, etc.).
3. Records of CUSTOMER initiated changes in equipment set points, start/stop conditions, usage patterns.
4. Records of CUSTOMER initiated changes in operation of mechanical systems, which may impact the ECMs.
5. Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
6. Copies of monthly utility bills and utility summary data on a *monthly* basis, and access to utility accounts through an authorization by the CUSTOMER to the Utility to allow the release of data to a Honeywell representative.

Work Coverage: Reserved

Term Coverage: Reserved

Advisory reports will be submitted: ☐ Quarterly ☐ Semi-Annually ☐ Annually.

☒ B.**1.4.3 Energy Advisory Report–Level 2 (With Travel & On-Site Services) –** In addition to the Level 1 Energy Advisory Report offering, HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL per Level 1 Energy Advisory Report offering. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided per Section B.1.4.2.
3. Record current manual set points and manual settings. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECMs or the building energy consumption.

Site walk-through observations will be conducted: ☐ Quarterly ☐ Semi-Annually ☒ Annually.

Site walk-through observations are limited to no more than: two (2) day(s) per year,
and limited to one (1) day(s) per trip.

Work Coverage: Utility Meters listed in Section B.1.1 designated as Option A

Term Coverage: Year 1 Monitoring; Year 2 to End of Term – Stipulated based on Year 1 Results

☐ B.**1.4.4** **Retrofit Isolation Energy Audit for Option B Verified ECMs** – HONEYWELL will provide *Option B* energy guarantee auditing services as detailed in Exhibit J and Exhibits to Exhibit J for specific Energy Conservation Measures (ECMs) identified in Exhibit J and/or Exhibits to Exhibit J as using *Option B* methodologies for Measurement and Verification to quantify the derived Energy Cost Avoidance of the CUSTOMER's facility. Option B methods will be applied on an ECM specific basis (i.e., isolated to the retrofit) and Energy Cost Avoidance for a Guarantee Year will be quantified and summarized on an ECM basis. After the ECM's potential-to-save has been verified (Section B.1.3) HONEYWELL shall determine the cost avoidance from the engineering calculations in Exhibit J-4 and *on-going* measurements of specific variables defined below. Utility bill auditing (Option C) is not included and reconciliation of Option B results to utility meter bill data is not included. The Option B retrofit isolation method was selected by the CUSTOMER to provide an economical reconciliation method and to minimize the interactive effects on the determination of cost avoidance due to changes to the site or facilities from the baseline conditions. Reporting of Cost Avoidance will occur each year of the term and the monetization of Cost Avoidance will be determined as described in Section D.1.1.1.

HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided.
3. Record current manual set points and manual settings. Collect BAS data for analysis and verification that the ECM is still operating to the intended specifications. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECM's or the building energy consumption.

Work Coverage: Reserved

Term Coverage: Reserved

Option B Audit Report section will be submitted: ☐ Quarterly ☐ Semi-Annually ☐ Annually

PART C. GUARANTEE TERMS

C.1. Definitions

When used in this Agreement, the following capitalized words shall have the meanings ascribed to them below:

"Annual Scheduled Savings" means for any applicable Guarantee Year, the amount set forth in the Schedule of Guaranteed Savings in Section D.1.

"Baseline" or **"Base Year"** is the description that defines the Baseline Usage unit costs and facilities, systems, or equipment operations and characteristics, and environmental conditions that are to be used as the benchmark for determining Cost Avoidance. It may not always be one contiguous element of time and may be different from a 365-day annual period.

"Baseline Period" is the period of time (specified in Part D) coordinated with the Baseline Usage, including for the purpose of utility bill analysis, to allow the comparison of a Guarantee Year against a Baseline. The Baseline Period may not always be one contiguous element of time and may be different from a 365-day annual period. Baseline information from non-contiguous elements of time may be normalized and assigned to a specified Baseline Period.

"Baseline," "Baseline Usage" or "Baseline Demand" is the calculated or measured Energy usage (demand) by a piece of equipment or a site prior to the implementation of the ECMs. Baseline physical conditions, such as equipment counts, nameplate data, and control strategies, will typically be determined through surveys, inspections, and/or metering at the site.

"Construction Period" is the time period between the start of the project installation and the date of Final Project Acceptance.

"Cost Avoidance" means the difference between the actual cost incurred during a selected time period versus what the cost *would have been* had the ECM not been implemented, including without limitation avoided, defrayed, or reallocated costs.

"Customer Guarantee Practices" are those practices identified herein, intended to achieve Cost Avoidance or necessary to the analysis thereof, as set forth in Section C.4.

"Energy" means utilities and may include electricity and fuels to operate HVAC equipment, facility mechanical and lighting systems, and energy management systems, and water and sewer usage, and secondary utilities such as district steam or compressed air as applicable.

"Energy Costs" means the cost of Energy.

"ECM" means an energy conservation measure, which is the installation of equipment or systems, or modification of equipment or systems as described in Exhibit A, for the purpose of avoiding utility (energy, water, etc.) consumption and demand and costs and/or non-utility (O&M, operational) costs.

"Excess Savings" means for any Guarantee Year, the amount, if any, by which the Cost Avoidance applicable to that Guarantee Year exceeds the Annual Scheduled Savings.

"Facilities" shall mean those buildings, or any other facility, location or infrastructure, where Savings will be realized.

"Financing Document" refers to that document, if any, executed between Customer and a third-party financing entity providing for payments from Customer to third-party financing entity.

"Final Project Acceptance" refers to date of Customer signature of the Final Project Acceptance Certificate (see Exhibit I) indicating Customer acceptance of the installation of all of the ECMs.

"First Guarantee Year" is defined as the period beginning on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed and ending on the day prior to the first (1st) anniversary thereof.

"Guarantee Period" is defined as the period beginning on the first (1st) day of the First Guarantee Year and ending on the last day of the final Guarantee Year, also known as the **"Measurement and Verification Phase",**

"Measurement and Verification Period", "Performance Period", or "Performance Phase".

"Guarantee Year" is defined as the First Guarantee Year and each of the successive twelve (12) month periods commencing on the anniversary of the commencement of the First Guarantee Year throughout the Guarantee Term.

"Guaranteed Savings" is defined as the total scheduled amount of Cost Avoidance that Honeywell is guaranteeing, as set forth in Section D.1 of Part D.

"Guarantee Term" shall have the meaning as defined in Section C.2.1 hereof, also referred to as "Term."

"M&V" means measurement and verification.

"M&V Systems and Equipment" as used in this Guarantee means the systems and equipment identified in Honeywell's Scope of Work and M&V Services, including as set forth in Section C.4.1.

"**Material Change**" is defined as any change in the following which reasonably could be expected to increase or decrease Energy or Operational Costs at a Facility by a value more than five percent (5%) of the Annual Scheduled Savings per utility meter or submeter, as applicable:

(1) manner of use of the Facility by Client;
(2) hours of operation of any equipment, building or energy system contained in the Facility;
(3) occupancy of the Facility;
(4) structure of the Facility;
(5) types of equipment used in the Facility; or
(6) conditions affecting energy use in the Facility.

"Measurement and Verification Plan" or "M&V Plan" is defined as the plan providing details on how the Guaranteed Savings will be verified.

"Operational Costs" commonly referred to as O&M costs, shall include the cost of operating and maintaining the Facilities, such as, but not limited to, the cost of inside and outside labor to repair and maintain affected systems and equipment, the cost of custodial supplies, the cost of replacement parts, the cost of deferred maintenance, the cost of lamp and ballast disposal, and the cost of new capital equipment.

"Potential-to-Save" or "Potential-to-Perform" by an ECM is satisfied when a measure is properly installed and has the potential to generate predicted levels of Cost Avoidance. Verification of an ECM's "potential-to-save" is satisfied upon Customer's signing of a Certificate of Substantial Completion, as set forth in Exhibit I, or its equivalent.

"Retrofit" is the work provided by Honeywell as defined by the "ECMs."

"Retrofit Costs" are the sum of (i) the price for the Work; (ii) interest and other direct fees for financing required to be made by Customer pursuant to the Financing Document; and (iii) the payments required to be made by Customer for the M&V Services.

"Retrofit Isolation Method", **"RIM"**, **"RIM Approach"** or **"Retrofit Isolation Method Approach"** is an M&V approach that verifies the Guaranteed Savings using techniques that isolate the Energy use of the ECM and affected systems separate from the Energy use of the rest of the Facility. This method is used to mitigate the interactive Energy effects of changes made to the Facility outside of Honeywell's control.

"Savings" is another term for Cost Avoidance.

"Total Guarantee Year Savings" is defined as the summation of Cost Avoidance realized by Facilities in each Guarantee Year as a result of the Retrofit, and M&V Services provided by Honeywell, as well as Excess Savings, if any, carried forward from previous years.

C.2. Term and Termination

C.2.1 Guarantee Term. The Guarantee Term shall commence on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed pursuant to this Agreement, and shall terminate at the end of

the M&V Services Term (as defined at the beginning of this Exhibit J), unless terminated earlier as provided for in Part A of this M&V Services Agreement.

C. 2.2 Guarantee Term Extension Option. Subject to Customer extending the M&V Services Agreement, for each year Customer elects to extend the M&V Services Agreement, per A.6.3, the Guarantee Term shall extend for an equivalent period. Such extension of the Guarantee Term shall be limited to being no longer than Year 20 and may not be extended without extension of the M&V Services Agreement. For each additional year of the Guarantee Term as referenced in Section D.1, the following escalations shall apply: An annual increase of 4% for the Energy Savings , and a 3% annual increase for Operational Savings; each such increase to be applied year-over-year with each annual extension of this Agreement.

C.3. Savings Guarantee

Guaranteed Savings Calculations Details

C.3.1 Guarantee of Savings. Honeywell guarantees to Customer that the identified Facilities will realize the total Guaranteed Savings through the combined value of all ECMs over the Guarantee Term, as defined herein.

C.3.1.1 Additional Savings Before Final Project Acceptance. All Cost Avoidance realized by Customer that result from activities undertaken by Honeywell prior to Final Project Acceptance, including any utility rebates or other incentives earned as a direct result of the installed ECMs or M&V Services provided by Honeywell, will be applied toward the Guaranteed Savings for the First Guarantee Year.

C.3.1.2 Additional Savings After Final Project Acceptance. Additional Cost Avoidance, including any utility rebates or other incentives, that can be demonstrated, or earned, as a result of Honeywell's efforts that result in no additional costs to Customer beyond the costs identified in this Agreement will be included in the M&V Report (as defined in Section C.3.2 below) for the applicable Guarantee Year(s).

C.3.1.3 Satisfaction of Guarantee. The Guaranteed Savings in each Guarantee Year are considered satisfied if the Total Guarantee Year Savings for such Guarantee Year equals or exceeds the Annual Scheduled Savings.

C.3.1.4 Excess Savings. Excess Savings shall be carried forward and applied to the next Guarantee Year(s). In the event Honeywell has paid Customer for a Guaranteed Savings shortfall in the immediately previous Guarantee Year, pursuant to Section C.3.1.5, then Excess Savings in current Guarantee Year shall be billed to Customer (but only up to any amounts previously paid by Honeywell for a shortfall) and Customer shall pay Honeywell within thirty (30) days after receipt of such bill, and any remaining Excess Savings shall be carried forward and applied against Guaranteed Savings shortfalls in any future Guarantee Year.

C.3.1.5 Savings Shortfalls. In the event that the Total Guarantee Year Savings in any Guarantee Year is less than the Annual Scheduled Savings, after giving credit for any Excess Savings carried forward from previous Guarantee Years pursuant to Section C.3.1.4, Honeywell shall, upon receipt of written demand from Customer, compensate Customer the amount of any such shortfall, in such form as agreed to by the parties, limited by the total value of the Guaranteed Savings, within sixty (60) days. Resulting compensation shall be Honeywell's sole liability for any shortfall in the Guaranteed Savings. In case of a shortfall, Honeywell reserves the right, subject to Customer approval, which shall not be unreasonably withheld, to implement additional operational improvements or conservation measures, at no cost to Customer, that will generate additional savings in future years of the Guarantee Term, and Honeywell has the option of extending its M&V Services to verify successful performance.

C.3.1.6 Aggregation of Savings. The parties mutually agree that the Guaranteed Savings for this Agreement and the Guaranteed Savings for all previous active projects with guaranteed savings for this Customer shall be combined each year until the end of the original guarantee term for each project. Throughout the duration of the term for each specific phase the total savings will be utilized as an aggregate in satisfying the sum of the respective guarantees.

Guaranteed Savings Reconciliation Process

C.3.2 Guaranteed Savings Reconciliation Documentation. As part of the M&V Services, and as set forth in the M&V Plan, Honeywell will provide Customer with a Guaranteed Savings reconciliation report ("**M&V Report**") within ninety (90) days after receipt of the information Customer is to provide as part of the Customer Guarantee Practices that is reasonably necessary to the preparation of the M&V Report. Data and calculations utilized by Honeywell in the preparation of its M&V Report will be made available to Customer, along with such explanations and clarifications as Customer may reasonably request.

C.3.2.1 Acceptance of M&V Report. Customer will have forty-five (45) days to review the M&V Report and provide written notice to Honeywell of non-acceptance of the Guaranteed Savings for that Guarantee Year. Failure to provide written notice within forty-five (45) days of the receipt of the M&V Report will deem it accepted by Customer.

C.3.2.2 Guaranteed Savings Reconciliation. Guaranteed Savings will be determined in accordance with the methodology(s), operating parameters, formulas, and constants as described in this Exhibit J and the exhibits, using the M&V Services as defined herein, and/or additional methodologies defined by Honeywell that may be negotiated with Customer at any time. Upon contract execution, Customer agrees to and accepts the standard methods that Honeywell uses to conduct M&V Services, including, but not limited to, RIM and Option C Utility Data Analysis (see Part C for RIM and Option C definitions as further detailed in the Measurement and Verification Plan in this Exhibit J and the exhibits), as well as cost avoidance calculations, as inferenced by, referenced by or included in the energy calculations developed by Honeywell and attached hereto as an Exhibit J-4 Engineered Cost Avoidance Calculations.

C.3.2.3 Base Year Adjustments. The Baseline shall be adjusted to reflect:

(a) changes in occupied square footage;
(b) changes in energy-consuming equipment, including any repairs or improvements made to the equipment as part of this Agreement;
(c) changes in the Facilities;
(d) changes in Customer Guarantee Practices adversely affecting energy consumption and/or demonstrated operational changes;
(e) changes in weather between the Baseline Period and the Guarantee Year; and
(f) documented or otherwise conclusively established metering errors for the Baseline Period and/or any Guarantee Year adversely affecting Energy usage measurement.

C.3.2.4 Other Potential Guarantee Adjustments. Honeywell's Guaranteed Savings obligations under this Agreement are contingent upon:

(a) Customer following each of the Customer Guarantee Practices set forth herein;
(b) no alterations or additions being made by Customer to any of the M&V Systems and Equipment without prior notice to and agreement by Honeywell;
(c) The absence of any event Customer is to report under Section C.4.5; and
(d) Honeywell's ability to render services not being impaired by circumstances beyond its control.

To the extent Customer defaults in or fails to perform fully any of its obligations under the Agreement, including without limitation any of the Customer Guarantee Practices, or the occurrence of any event Customer is to report under Section C.4.5, Honeywell may, in its sole discretion, adjust its Guaranteed Savings obligation or deem it met; provided, however, that no adjustment hereunder shall be effective unless Honeywell has first provided Customer with written notice of Customer's default(s) or failure(s) to perform and Customer has failed to cure its default(s) or failure(s) to perform within thirty (30) days after the date of such notice.

In addition, if for any reason any Facility and/or utility meter covered under this Agreement is materially unoccupied, closed, or discontinued, the Savings will be deemed realized for such Facility or meter, and the Guaranteed Savings will be adjusted accordingly. Honeywell will provide written notice of such adjustment to the Customer.

C.3.2.5 Adjustments for Material Changes. In the event of any increase or decrease in energy consumption and demand for any month resulting from a reported Material Change (see Section C.4.5.1) or unreported Material Change (see Section C.3.2.6), the amount of that increase shall be subtracted from, or that decrease shall be added to, the total energy consumption and demand for that month prior to the calculation of energy savings. If a reported or unreported Material Change affected energy consumption and demand in the same calendar month in the preceding year, the *next preceding* contract year where a Material Change has not occurred will be used to compute the value of the Material Change and the energy savings for the current month.

C.3.2.6 Unreported Material Changes. In the absence of any Material Change in the Facilities or in their operations reported by Customer under Section C.4.5.1 below, energy consumption and demand should not change from year to year. Therefore, if energy consumption and demand per utility meter or submeter for any month increases by five percent (5%) or more of the Annual Scheduled Savings per meter from the Energy consumption and demand for the same month of the *preceding* year, after adjustment for changes to climactic conditions, then such increase shall be deemed to have resulted from a Material Change, except where such increase is due to equipment malfunction, faulty repair or other acts of negligence by Honeywell.

C.3.2.7 Guarantee Based on Agreement Only. Customer's request for proposal or qualifications, Honeywell's proposal and any other documents submitted by Honeywell to the Customer prior to negotiation of this Agreement are expressly excluded from and are not a part of this Agreement. The parties agree that although the Honeywell proposal may have contained scope items, guaranteed savings and M&V options other than those stated in the Agreement, the final scope of work, Schedule of Guaranteed Savings, and M&V Plan were developed jointly by the parties through negotiation. The Customer has chosen to purchase the scope of work set forth in Exhibit A. The Customer accepts the Guaranteed Savings and agrees to the M&V Plan set forth herein.

C.4 Customer Guarantee Practices

C.4.1 Equipment Subject to these Provisions. M&V Systems and Equipment affecting the Guaranteed Savings include:

(a) equipment provided as per Exhibit A – Scope of Work;
(b) modifications made to existing equipment as outlined in Exhibit A – Scope of Work;
(c) existing or new equipment not provided or modified under this Agreement, but materially affected by the work provided per Exhibit A – Scope of Work and consuming energy or water via utility meters covered by the Agreement.

C.4.2 Hours and Practices. To achieve the Savings, Honeywell and Customer agree upon the Guaranteed Period operating parameters described in Exhibit(s) J-1. The Customer agrees to operate, or cause to effect the operation of, the M&V Systems and Equipment in such manner that is in accordance with these Guaranteed Period operating parameters.

C.4.3 Customer Maintenance and Replacement Responsibilities. During the term of this M&V Services Agreement, for all equipment affecting the Guaranteed Savings, the Customer shall perform on-going maintenance and accomplish component replacement and equipment repairs in accordance with manufacturer's standards and practices and take all reasonable measures to insure the equipment is operating at full efficiency. Component replacement and equipment repairs must be accomplished in a timely fashion. Additionally, Customer shall insure such equipment is operated at all times in accordance with applicable manufacturer's specifications, Honeywell specifications, and the requirements contained herein. For all non-Honeywell maintenance actions, Customer shall document and make available to Honeywell maintenance dates and tasks accomplished, the start date and duration of all deficient equipment operation and the subsequent corrective action and/or repair dates. Customer shall replace any vandalized or any failed equipment or component no longer warranted by Honeywell or the manufacturer, with equipment or components of equal or greater efficiency value than installed by Honeywell, for the full Guarantee Term. Customer shall be responsible to investigate and correct any reported deficiencies not covered under this M&V Services Agreement.

C.4.4 Facility Operational Changes. Except in the case of emergencies, Customer agrees it will not, without the consent of an authorized representative of Honeywell:

(a) make any significant deviations from the applicable Customer Guarantee Practices;
(b) put any system or item of equipment in a permanent "on" position, if the same would constitute a deviation from the applicable Customer Guarantee Practices; or
(c) assume manual control of any energy management system or item of equipment, if the same would constitute a deviation from the applicable Customer Guarantee Practices.

C.4.5 Customer Reporting Responsibilities. Customer shall report to Honeywell in writing within fifteen (15) days of the following changes or events:

(a) any additional energy source or change in existing energy source or supplier that the Customer may negotiate during the term of this Guarantee and/or,
(b) any material change in system or equipment status, including replacement of, addition to, or modification of existing energy and/or water consuming systems or equipment and/or,
(c) any long term temporary (equal to or greater than 10 days) or permanent changes in operating schedules and/or,
(d) any material changes in the payment schedule, such as due to refinancing or variable interest rate and/or,
(e) for any reason any Facility and/or utility meter covered under this Agreement is materially unoccupied, closed, or discontinued

Customer shall promptly notify Honeywell of any other activities known to Customer which could adversely impact the ability to realize the Guaranteed Savings.

C.4.5.1 Reported Material Changes. Customer shall deliver to Honeywell a written notice describing and explaining all actual or proposed Material Changes (as defined above in Section C.1) in a Facility or in the operations in a Facility and their anticipated effect on Energy or Operational Costs. Said notice must be delivered to Honeywell no less than seven (7) days before any actual or proposed Material Change occurs.

C.4.6 Customer Granted Access for Remote Diagnostics. Customer shall allow Honeywell to perform remote diagnostics on all equipment associated with the Guaranteed Savings for operational compliance with the manufacturer's specifications, and the requirements contained herein. Customer is responsible for implementation and costs for remote Honeywell access through Customer's firewall(s) to the controllers and front-end computer(s) for two (2) remote users designated by Honeywell using the following process:

- TCP/IP Remote Access: A dedicated static IP address, installation and on-going maintenance and subscription and licensing fees for remote access hardware and software including but not limited to VPN, RDP, station licenses dedicated to at least two remote users.

If remote access or data retrieval/push-send is interrupted or data received from the site is corrupted, at any time during the Guarantee Term, Honeywell reserves the right to suspend any reporting requirements and deem any savings from associated ECMs as achieved until remote access/data transfer has been restored.

C.4.7 Customer Provided Documentation. It will be the responsibility of the Customer to provide to an individual designated by Honeywell on a minimum monthly basis (unless noted otherwise):

(a) Verification that equipment installed to perform the ECMs has been properly maintained, including but limited to provision of maintenance records.
(b) Current status of the buildings (i.e., occupancy level and use, hours of operation, etc.).
(c) Records of customer-initiated changes in equipment setpoints, start/stop conditions, usage patterns.
(d) Records of customer-initiated changes in operation of mechanical systems, which may impact the ECMs.
(e) Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
(f) Copies of monthly utility bills and utility summary data on a *monthly* basis, and fuel storage tank levels, including without limitation fuel oil and biomass levels, in each case within two (2) weeks following the Customer's receipt thereof, and access to utility accounts through an authorization by the Customer to the Utility to allow the release of data to a Honeywell representative, together with access to relevant records relating to such utility costs.
(g) Access to any maintenance records, drawings, control system trend data, or other data reasonably deemed necessary by Honeywell to perform the M&V Services.

C.4.8 Customer Governmental Unit Reporting Responsibilities. Customer is solely responsible for reports to be submitted to the Department of Commerce, Public Utilities/Services Commission, or any other governmental agency or governmental unit.

C.4.9 Customer Rebate and Ratchet Reset Responsibilities. It is understood that all energy rebates and/or refunds are the result of an agreement between Customer and the utility company and Honeywell assumes no responsibility for obtaining said rebates and/or refunds. It is understood that said rebates and/or refunds are not included in the Guaranteed Savings. The Customer is responsible for procuring a ratchet reset from the local utility company, as applicable.

PART D. SCHEDULE OF GUARANTEED SAVINGS

D.1. Schedule of Guaranteed Savings

The Guaranteed Savings over the Guaranteed Term is equal to or greater than $736,573 which is the Total Energy and Operational Savings over the Guaranteed Term. The Guaranteed Savings and the Annual Scheduled Savings are set forth in the table below (such table, the "**Schedule of Guaranteed Savings**"):

YEAR	Energy Savings	Operational Savings*	Capital Cost Avoidance Savings*	Total Savings
1	$174,084	$62,491	$14,175	**$250,750**
2	$181,047	$64,366	$14,175	**$259,588**
3	$188,289	$66,297	$14,175	**$268,761**
TOTALS	**$543,420**	**$193,153**	**$42,525**	**$779,098**

YEAR	Energy Savings	Operational Savings	Total Savings
1	$174,084	$62,491	**$236,575**
2	$181,047	$64,366	**$245,413**
3	$188,289	$66,297	**$254,586**
TOTALS	**$543,420**	**$193,153**	**$736,573**

*Note: Operational Savings are stipulated and deemed satisfied at Contract signature.

Provided however, that, notwithstanding the above, in no event shall the Guaranteed Savings exceed the total Retrofit Costs over the Guaranteed Term. For sake of clarity, actual or pro forma budget neutral or positive cash flows are not guaranteed.

D.1.2 Schedule of Guaranteed Savings – Extension Upon written notice to Honeywell, such notice to be provided no less than thirty (30) days before the end of Year 3 and each subsequent applicable year, Customer may extend the M&V Service Agreement for an additional year. Any such extension by the Customer shall extend the Guarantee 4% per year for the unit cost of electric utilities, 4% per year for gas utilities, and 3% per year for operational savings above the applicable prior year's Guarantee (first extension to be applied to Year 3, and then applied year-over-year for each subsequent extension). Customer may not extend the M&V Services Agreement beyond Year 20. As such, the Schedule of Guaranteed Savings will follow the schedule listed below for each year that the Customer extends the M&V Service Agreement:

YEAR	Energy Savings	Operational Savings	Total Savings
4	$195,821	$68,949	**$264,769**
5	$203,653	$71,017	**$274,671**
6	$211,800	$73,148	**$284,947**
7	$220,271	$75,342	**$295,614**
8	$229,082	$77,603	**$306,685**
9	$238,246	$79,931	**$318,176**
10	$247,775	$82,329	**$330,104**
11	$257,686	$84,798	**$342,485**
12	$267,994	$87,342	**$355,336**

13	$278,714	$89,963	**$368,676**
14	$289,862	$92,662	**$382,524**
15	$301,457	$95,441	**$396,898**
16	$313,515	$98,305	**$411,820**
17	$326,056	$101,254	**$427,309**
18	$339,098	$104,291	**$443,389**
19	$352,662	$107,420	**$460,082**
20	$366,768	$110,643	**$477,411**

*Note: Operational Savings are stipulated and deemed satisfied at Contract signature.

D.1.3 Energy Savings. The first year amount of Savings for Energy Costs is the sum of the below listed ECMs. Actual Savings may be lower than as set forth in the Schedule of Guaranteed Savings because of an absolute increase in Energy use due to the implementation of measures to increase environmental comfort as directed by the Customer, and other baseline adjustments (see Section D.2). The Guaranteed Savings are less than the projected Savings, represented in Exhibit J-4. Cost Avoidance is based on the Customer Guarantee Practices set forth in Section C.4.

[a] Att. A: Exhibit A – Scope of Work.

ECM Description	Electric Year 1	Non-Electric Year 1	Water Year 1	Total Year 1
Lighting Upgrades	$36,655	$0	$0	**$36,655**
Building Envelope Upgrades	$0	$7,895	$0	**$7,895**
Controls Upgrades	$559	$4,098	$0	**$4,656**
Mechanical Upgrades	$10,194	$2,845	$0	**$13,039**
Solar PV Project	$111,838	$0	$0	**$111,838**
TOTALS (Excludes Vent Adj)	**$159,246**	**$14,838**	**$0**	**$174,084**

Customer agrees that the baseline for the unit cost of Energy will be adjusted each year of the Guarantee Term. This annually adjusted value of Energy unit cost is stipulated as the new baseline in each succeeding year. Customer agrees that Baseline adjustment is stipulated to be an escalation of 4% per year for the unit cost of electric utilities, 4% per year for gas utilities, and 3% per year for operational savings used in the determination of Cost Avoidance each year.

D.1.3.1 Calculating Cost Avoidance

(a) Customer agrees that the baseline for the unit cost of Utilities will be adjusted each year of the Guarantee Term to reflect a stipulated escalation rates as laid out in Section D.1.1. This annually adjusted value of Energy unit cost is stipulated as the new baseline in each succeeding year and may be used in the determination of Cost Avoidance each year in accordance with Section D.1.1.1(b).

(b) The calculation of Cost Avoidance is based upon the utility rate paid during the Guarantee Year, or the Baseline Period utility rate plus escalation (represented in Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs), whichever produces the highest Cost Avoidance and/or as defined below:

(i) The Guarantee Year current rate for Option A will be the annual average determined from 12 months of utility billing data in that Guarantee Year. Customer will provide the utility data per Section C.4.7 and if such data is not provided, the baseline utility rate plus annual escalation (see paragraph D.1.1.1 (a)) shall be used.

(ii) Option A analysis for all ECMs will use $/kW and unblended $/kWh for electric to monetize demand and energy savings. For buildings with thermal savings for ECM 1 Lighting (Heating Penalty) only, cost avoidance will be calculated using the baseline rate in Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs, escalated as indicated in Section D.1.1.

(iii) Option C analysis utilizes Metrix™, an independent 3rd party industry-standard utility accounting and normalization software platform. The energy and cost avoidance for Option C analysis using Metrix or

otherwise is determined on a monthly basis. Energy Avoidance is monetized by comparing the blended unit cost from each month's utility bill with the baseline contractual rate, escalated per Section D.1.1.1 (a), to determine the rate to use for calculation of monthly cost avoidance per Section D.1.1.1 (b).

(c) Fuel Conversion: is essentially a rate change measure, typically, intending to use a new energy type for a defined load. Since the new energy type (i.e., meter or tank, etc.) and its corresponding actual unit rate do not exist at the time of contract execution, the baseline rate for each fuel conversion ECM will be defined as presented in Baseline Rates, Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs. The new rate defined in Exhibit J-3 Escalated Future Baseline Rate for each Year of Term will be considered the Baseline rate as per Section D.1.1.1 (a).

(d) Cost Avoidance may also include, but is not limited to, savings from demand charges, power factor correction, taxes, ratchet charges, rate changes and other utility tariff charges that are reduced as a result of Honeywell involvement. In case the Customer does not procure any ratchet reset, rate change or other utility tariff charge reduction, or in the event that such ratchet, rate or tariff changes before the Guarantee Period ends, Cost Avoidance nonetheless will be calculated as if the ratchet, rate or tariff has been reset at the end of the installation of demand-reducing ECMs, or continues, as applicable.

(e) In the event, the current Guarantee Year utility tariff is significantly changed in structure from that which existed during the Baseline Period, including, but not limited to, the addition or deletion of measured or billed demand structures, Time of Use, Seasonal or Block & Tail billing structures, the Customer will not unreasonably withhold acceptance to abandon the new tariff (i.e., Current Rate) and will only use the baseline plus escalator as described in Section D.1.1.1 (a).

(f) The constants and/or stipulated values defined in the Exhibits, or as defined herein, are mutually agreed to by the Customer to be reasonable and may be used in the determination of Cost Avoidance.

D.1.3.2 Acceptance of Measurement & Verification Methods

Upon contract execution, Customer accepts the standard methods that Honeywell uses to conduct Retrofit Isolation Method (RIM) and Option C Measurement & Verification (M&V), as well as cost avoidance calculations, as described herein and inferenced by or included in the energy calculations and regression models attached hereto. Customer has the right and may to hire a consultant to review the calculations and comment before the contract is signed and the price accepted. Any future use of a consultant to review M&V methods and work product is at Customer's discretion and expense. Customer agrees that any such consultant's review shall be limited to the M&V methods as selected by the Customer prior to contract execution and as detailed and defined in this Agreement.

D.1.4 Operational Cost Savings. The first-year amount of Savings for Operational Costs is the sum of the below listed ECMs. The Savings are based on the Customer Guarantee Practices set forth in Section C.4. The Operational Costs Savings described below and identified in Section D.1 are deemed satisfied upon execution of the Part 2 Agreement. The Customer acknowledges and agrees that, if it did not enter into this Agreement, it would have to take future steps to achieve the same ends as does the Work included in Exhibit A, and that, in doing so, it would incur Operational Costs of at least the amount per year over the Guarantee Term as presented below and in the Schedule of Guaranteed Savings. The Customer agrees that, by entering into this Agreement, it will avoid future Operational Costs in at least these amounts.

Further, the Customer acknowledges that Operational Costs Savings categorized as capital cost avoidance are part of, or are causally connected to the Work specified in Exhibit A (i.e., the ECMs being implemented), and are documented by industry standard engineering methodologies acceptable to the Customer.

Customer agrees that the Baseline for the unit cost of Operational Costs will be adjusted each year of the Guarantee Term. This annually adjusted value of operational unit costs is stipulated as the new baseline in each succeeding year. Customer agrees that the Baseline adjustment is stipulated to be an escalation of 3% per year for Operational Costs used in the determination of Operational Costs Savings each year.

The Operational Costs Savings were identified, reviewed, and agreed to by a team of Customer's representatives led by Mark McGabe - Department Director of Ramsey County Parks and Recreation.

Operational Savings Description (OSD)	**Cost Avoidance Category (O&M, Capital)**	**1st Year Cost Avoidance**
Lighting Upgrades	O&M	$4,000
Solar PV Project	O&M	$58,491
Totals		**$62,491**

[a] O&M: operations and maintenance.

D.2 Baseline Operations and Adjustments

D.2.1 "Baseline Operating Parameters" are the Facility(ies) and system(s) operations measured and/or observed before commencement of the Work. Baseline Operating Parameters are stipulated in, and incorporated herein, as Exhibit J-1. See Energy Savings Calculations, attached hereto and incorporated herein as Exhibit J-4 for further information regarding stipulated Baseline Operating Parameters.

The data summarized will be used in the calculation of the Baseline energy consumption and/or demand and for calculating Baseline adjustments for changes in Facility operation that occur during the Guarantee Term. Honeywell and Customer agree that the Baseline Operating Parameters specified in this Section are representative of equipment operating characteristics during the Baseline Period specified in this Agreement. The following data was collected with the assistance Mark McGabe - Department Director of Ramsey County Parks and Recreation.

The Baseline Period is defined as 01/2023 to 12/2023.

The Baseline consists of the Baseline conditions and Baseline Operating Parameters collected from the Baseline Period and modified by Baseline adjustments, as necessary, as defined herein and by the Exhibits.

D.2.2 Pre-Retrofit Baseline Adjustments: The following describes the adjustments that have been made during the determination of the Baseline, prior to the determination of the projected Cost Avoidance and the Guaranteed Savings. The adjustments are due to those projects included in Exhibit A, or other known events, which increase Energy use prior to the application of the ECMs.

D.2.3 Post-Retrofit Baseline Adjustments: The following describes known future events, events not captured in pre-retrofit Baseline adjustments in Section D.2.2, which generally increase Energy use compared to the Baseline Period. This Energy use is added to the Baseline to determine an adjusted Baseline against which the Energy Costs Savings will be determined. Energy increases are variable and dependent on the actual use of equipment.

D.3 Guarantee Term Operations

D.3.1 "Guarantee Term Operating Parameters" are the Facility(ies) and system(s) operations as measured and/or observed after completion of Work. The data summarized will be used in the calculation of the post-retrofit Energy consumption and/or demand. Honeywell and Customer agree that the Guarantee Term Operating Parameters specified in this Section are representative of equipment operating characteristics during the Guarantee Term specified in this Agreement. And, further, that they are agreed to be reasonable and may be used in the calculation of the Cost Avoidance, as if the site is actually operating per the Guarantee Term Operating Parameters outlined in this Section.

Guarantee Term Operating Parameters are stipulated in <Guarantee Period Operating Parameters> attached hereto and incorporated herein as Exhibit J-2.

D.3.2 Operational Cost Avoidance: The following parameters, methodologies, and/or calculations were used in determining the Operational Costs and/or Cost Avoidance due to the Retrofit and M&V Services implementation and are agreed to be reasonable and may be used in the calculation of Savings.

Operational Costs Savings methodology and/or calculation details are attached hereto and are incorporated herein as the exhibits outlined in the following table.

Operational Savings Description	Cost Avoidance Methodology	Exhibit
1. Lighting	Maintenance reliability reduced failure rate	J-7
2. Solar Production Credit	Tariff Calculation per Engineering Calculation	J-7
The operational savings measures and which budget line items or invoice categories that are affected, are cross-referenced in each Operational Costs Savings Detail in the Exhibits.		

[a] O&M: operations and maintenance.

D.4 Other Energy and Operational Savings Measures

The following measures *were* not included in the Guaranteed Savings but may be used during the Guarantee Term in the determination of realized Cost Avoidance, or , calculation of performance versus the Guaranteed Savings, or to show value-add to the Customer:

Description of Exhibit A Tasks not included in Sections D.1.1 or D.1.2 above		
ECM Rebate	**Rebate Amount**	**Total Rebates**
Lighting Rebate	$48,450	$48,450
VFD Rebates	$5,000	$5,000
Xcel Energy Custom Rebate	TBD	TBD
Total Rebates		**$53,450**

Honeywell will apply for these rebates on behalf of Customer.

PART E. CARBON AND ENERGY MANAGER (CEM) SOFTWARE TERMS

1 The Offerings and Fees

All fees are quoted in USD and are exclusive of any applicable taxes, commissions, import duties or other similar taxes or fees. The offerings comprise the components set out below (the "Offering(s)").

1.1 Software as a Service

1.1.1 SaaS Offering, Use Rights and Pricing

SKU	SaaS Offering name	Site	Use Rights and Usage Metrics	SaaS Term Start Date	SaaS Subscription Term (the "SaaS Term")	Fee Basis /Quantity	Total Fee	Annual Fee
SBT-CEM-ADV	CEM CONTROL FOR 28 METERS	Meters as outlined in Exhibit A of this contract		Once deployment is complete	12 months	$8,950	$ 8,950	$8,950
	DEPLOYMENT - CEM CONTROL ENGG, SOLUTION SUPPORT & CLOUD CONNECTOR INSTALLATION					Included in installation price	Included in installation price	

* Unless the Customer provides prior written notice to Honeywell 30 days before the end of an initial "SaaS Term" or any renewal period, the subscription term shall auto-renew for successive periods of 12 months.

1.2 Total Fees

Year	Annual SAAS Fee
1	**$8,950**
2	**$9,219**
3	**$9,495**

1.3 Sites

The customer locations agreed for deployment of the Offering may be on a per site basis (a "**Site**"). Customer will ensure Site access, availability, and readiness for the Parties to meet all the dates provided in this Order Form.

Site name	Site Designation
Ramsey County	11 Sites as listed in Exhibit A.

Access and use of CEM is governed by the following terms and conditions:

SAAS TERMS

1. **SaaS**. These SaaS terms (the "**SaaS Terms**") set out the terms and conditions applicable to the software-as-a-service, online or cloud-based service or feature made available by Honeywell ("**SaaS**) as identified in the Order Form and form part of the Agreement. The SaaS Terms take precedence over other Agreement terms in relation to the SaaS. SaaS is an Offering under this Agreement.

2. **Use Rights**. Subject to Buyer's compliance with the terms and conditions of this Agreement, Honeywell: (a) will provide Buyer access to the SaaS via means authorized and provided by Honeywell (which may include online portals or interfaces such as https, VPN or API); and (b) hereby grants not Buyer a limited, non-transferable, non-exclusive, revocable non-sublicensable right and license to: (i) access and use the SaaS through such means; (ii) download, install, update or allow Honeywell to update (when applicable), and use software Honeywell provides solely in support of Buyer usage of the SaaS; and (iii) use Documentation for the SaaS as reasonably required in connection with the SaaS, in each case solely for Buyer's internal business purposes (collectively, "**SaaS Use Rights**"). SaaS Use Rights continue for the period stated in the applicable Order Form, or if no duration is stated, for 12 months from the Effective Date. Order Forms may list metrics, including user number, data volume, sensors or other means to measure usage or fees ("**SaaS Usage Metrics**"). SaaS Use Rights are subject to SaaS Usage Metrics and any other restrictions in this Agreement. If Buyer exceeds SaaS Usage Metrics, Honeywell may suspend Buyer's access until Buyer pays all required Fees. Buyer, its employees and any party accessing the SaaS on Buyer's behalf ("**Users**") may exercise SaaS Use Rights if Buyer binds them to the terms of this Agreement. Buyer is responsible, and Honeywell has no liability, for Users compliance with this Agreement, and for any breach, act, or omission by them. Buyer may not resell SaaS Use Rights or permit third parties (except Affiliates or service providers) to be Users and may not make copies of the SaaS (except for back up), in each case except as agreed by Honeywell in writing.

3. **Accounts**. Buyer may be required to download an app, or visit a website, through which Buyer accesses the SaaS and sets up accounts including issuance or authentication credentials. In operating Buyer's account Buyer and Users must: (a) maintain strict confidentiality of user names, passwords or other credentials; (b) assign accounts to unique individuals and not allow others to use Buyer's credentials or access Buyer's account, including sharing among multiple Users; (c) immediately notify Honeywell of any unauthorized use or breach of security or security incident related to Buyer's account; (d) submit only complete and accurate information; (e) maintain and promptly update information if it changes; and (f) manage User access. Honeywell may use rights management features (e.g. lockout) to prevent unauthorized use.

4. **Acceptable Use**. Buyer will not (and will not authorize, encourage or cooperate with any third party to): (a) reverse engineer, modify, adapt, make machine code human readable or creating derivative works or improvements of the SaaS; (b) circumvent or interfere with the technical protections, security or operation (including disrupting, interacting in an unauthorized manner, probing, scanning or testing the vulnerability of security measures or misrepresenting transmission sources) of the SaaS; (c) perform competitive analysis (including benchmark testing) or create, train or improve a substantially similar product or service to the SaaS; (d) access or use of the SaaS in a manner that infringes another's intellectual property rights; (e) employ the SaaS in hazardous environments or inherently dangerous applications, including any product, part, service or other application that could result in death personal injury requiring fail-safe performance where failure could lead directly or indirectly to personal injury or death or property or environmental damage; (f) employ the SaaS (or as a substitute for) a third-party monitored emergency notification system; (g) access or use the SaaS in a manner that would reasonably be expected to cause liability or harm to Honeywell or Honeywell's customers; (h) employ the SaaS for critical control of environments, emergency situations, life safety or critical purposes; (i) upload to or use with the SaaS any technical data or software controlled under the International Traffic in Arms Regulations (ITAR) or other Export/Import Control Laws; (j) train any machine learning or artificial intelligence algorithm, software or system using the SaaS, any Know-how or Buyer Specific Data; (k) sublicense, distribute or otherwise make available any portion of the SaaS (including any functionality of the SaaS) to a third party; (l) use or provide Know-how or Buyer Specific Data (directly or indirectly) in relation to development of any offering that may compete with the SaaS or any offerings of Honeywell or its Affiliates. Any violation of the restrictions in this Section constitute a material breach of this Agreement.

5. **Set Up, Support**. Initial set up and configuration are provided if stated in the Order Form. Honeywell will manage, maintain and support the SaaS ("**SaaS Support**") in accordance with the policies specified in the Order Form or, if none are specified, Honeywell will use commercially reasonable efforts to maintain the SaaS, repair reproducible defects and make the SaaS available subject to scheduled downtime, routine and emergency maintenance. Except as expressly set out in this Agreement, Buyer is responsible for the connectivity required to use the SaaS and for maintaining the equipment and infrastructure that connects to the SaaS. Set up and SaaS Support excludes device or Third-Party App set up unless stated in the Order Form. Honeywell is not responsible or liable for issues, problems, latency, unavailability, delay or security incidents arising from or related to: (i) conditions or events reasonably outside of Honeywell's control; (ii) cyberattack; (iii) public internet and communications networks; (iv) data, software, hardware, services, virtual machines, telecommunications, infrastructure or other equipment not provided by Honeywell, or acts or omissions of third parties Buyer retains; (v) Buyer and Buyer Users' negligence or failure to use the latest version or follow Documentation; (vi) modifications or alterations not made by Honeywell; (vii) loss or corruption of data; (viii) unauthorized access via Buyer's credentials; (ix) Buyer's failure to use commercially reasonable administrative, physical and technical safeguards to protect Buyer systems or data or follow industry-standard security practices; or (x) acts or omissions of Buyer, Users or other third parties Buyer retains, in breach of this Agreement. Honeywell reserves the right to modify the SaaS if such modification does not materially diminish the functionality of the SaaS. Honeywell may monitor Buyer's usage of the SaaS.

6. **Suspension, Termination**. Buyer may terminate its SaaS Use Rights upon 30-days' prior written notice to Honeywell. Upon termination or cancellation by Buyer, Buyer shall (a) receive a pro-rated refund of any pre-paid fees for its SaaS Use Rights equal to $750 for each month remaining on the term of the SaaS Use Rights, and (b) if requested, return or destroy all Confidential Information relating to the SaaS and certify the same in writing; except for automatically generated backup copies, anonymized data or if maintained for legal purposes. The Parties understand and agree Buyer's termination right to the SaaS Use Rights shall apply to SaaS only and does not impact any other part of this Agreement. Honeywell may without

liability immediately suspend Buyer's SaaS Use Rights without notice if Honeywell determines that Buyer or Users are or may be in violation this Agreement, pose a security threat or Buyer's use of the SaaS is likely to cause immediate and ongoing harm to Honeywell or others. During suspension, Buyer and Users will not have access to the SaaS and may be unable to access Input Data or Buyer Specific Data. Upon termination or expiry Buyer's SaaS Use Rights will expire and Buyer must cease use of the SaaS and delete all copies of SaaS documentation and credentials. Buyer will remain responsible for all Fees Buyer has accrued. Within a reasonable period of time after receipt of Buyer's request made within 30 days after the effective date of expiry or termination, Honeywell will, to the extent technically practical and available as a generally available feature of the SaaS, provide a file of Buyer's Input Data and Buyer Specific Data in a commonly used format. Honeywell will have no other obligation to maintain or provide to Buyer Input Data or Buyer Specific Data and may thereafter, unless legally prohibited, delete all Buyer's Input Data and Buyer Specific Data in Honeywell's possession or control.

7. **Buyer Specific Data**. Unless agreed otherwise in writing by Honeywell or its Affiliates and Buyer or its Affiliates, Buyer owns and reserves all right, title and interest, including all intellectual property rights, in output data generated by the SaaS that identifies the Buyer or its Users ("**Buyer Specific Data**"). Buyer hereby grants to Honeywell a non- exclusive, transferable, worldwide, perpetual, irrevocable, sublicensable (through multiple tiers), royalty-free and fully paid-up right and license to use to use the Buyer-Specific Data to develop, operate, improve and support Honeywell's products, services and offerings. Honeywell may use Buyer-Specific Data for any other purpose provided it is in an anonymized form that does not identify Buyer or any data subjects. Buyer Specific Data is Buyer's Confidential Information (except if anonymized).

8. **Know-how**. Honeywell and its Affiliates and licensors own and reserve all right, title and interest, including all intellectual property rights: (i) in and to the SaaS and all derivative works, modifications and improvements of the SaaS; and (ii) in and to know-how and information (excluding Input Data and Buyer Specific Data) that is developed by Honeywell or its Affiliates by analyzing Input Data or Buyer Specific Data or generated via, or derived from, providing or supporting the SaaS ("**Know-how**"). The operation of the SaaS and Know-how is Honeywell's Confidential Information. Subject to Buyer's compliance with the terms and conditions of this Agreement (including acceptable use), Honeywell hereby grants to Buyer a limited, non-transferable, non-exclusive, revocable, non-sublicensable right and license to use Know-how solely for its internal business purposes in connection with exercise of SaaS Use Rights.

9. **Security**. Security is governed by policies in the Order Form or if none are specified Honeywell will use commercially reasonable administrative, physical and technical safeguards designed to protect Personal Data, Input Data and Buyer Specific Data and follow industry-standard security practices, as set out in the Security Practices at https://hwll.co/securitypractices. Buyer is solely responsible for costs or liability incurred due to unauthorized use or access through Buyer's or Users account credentials or systems and for security of on-premises software and hardware.

10. **Third-Party Apps**. The SaaS may contain features designed to interoperate with applications, software or platforms provided by Buyer or a third party ("**Third-Party Apps**"). Buyer's use of a Third-Party App is subject to a separate agreement between Buyer and the relevant third party. Buyer grants Honeywell all rights necessary for Honeywell to facilitate interoperation between such Third party Apps and the SaaS. Honeywell does not warrant or support Third-Party Apps and cannot guarantee their continued security, availability or performance. Buyer's use of a Third-Party App may enable transfer of Input Data, Buyer Specific Data or Personal Data outside of the SaaS and Buyer is solely responsible any liability or loss relating to such transfer.

11. **Limitation**. LIABILITY FOR BREACH OF SECTION 2 (USE RIGHTS) OR 4 (ACCEPTABLE USE) ARE NOT SUBJECT TO THE LIMITATION ON LIABILTY SET OUT IN SECTION 11.6 OF THE PART 2 AGREEMENT.

12. **Disaster Recovery, Back up**. Honeywell maintains disaster recovery and business continuity plans to manage material loss or failure in the facilities, equipment or technologies used to provide the SaaS ("**Disaster Failure**"). Unless agreed otherwise in writing, Honeywell does not offer account recovery of data separately from that of any other customer and Honeywell is not responsible if backups fail, are incomplete, or could not be performed or Input Data or Buyer Specifci Data is lost or damaged. In the event of Disaster Failure Honeywell will use commercially reasonable efforts to restore to the most recently available backup. Honeywell's obligations set out in this section are Honeywell's sole obligations, and Buyer's sole and exclusive remedy, for Disaster Failure.

Honeywell International Inc., through its Honeywell Building Solutions strategic business unit ("Honeywell"), will provide, or cause to be provided, to Customer the services (the "M&V Services") set forth in the attached work scope documents in Part B of this Exhibit J ("M&V Services Scope") with respect to the Service Location(s) in accordance with the M&V Services Scope, and the terms and conditions set forth in Part A of this Exhibit J, which together with the guarantee terms and Schedule of Guaranteed Savings set forth in Part C and Part D, respectively, of this Exhibit J, and Part E of this Exhibit J ("Honeywell Forge for Buildings Performance") constitute this Services Agreement. This Services Agreement is entered into as Exhibit J to, and by execution of, the accompanying Honeywell Agreement between Honeywell and Customer (the "Main Agreement"). Together, the Main Agreement and M&V Services Agreements are the "Agreement."

Part A –M&V Services Terms & Conditions
Part B –M&V Services Scope Description
Part C – Guarantee Terms
Part D – Schedule of Guaranteed Savings
Part E – Carbon and Energy Manager (CEM) Software Terms
Exhibits - The following Exhibits are attached hereto and are made a part of the Agreements: Exhibit J-1 Baseline Operating Parameters Exhibit J-2 Guarantee Period Operating Parameters Exhibit J-3 Baseline Conditions, Utility Use, Utility Unit Costs Exhibit J-4 Engineered Cost Avoidance Calculations Exhibit J-5 M&V Options by Building & ECM Exhibit J-6 M&V Plan Summary Exhibit J-7 Operations Cost Avoidance Methodology

PART A. STANDARD TERMS AND CONDITIONS FOR M&V SERVICES

The following terms and conditions, in Sections A.1 to A.8, apply to all M&V Services.

A.1 Reserved

A.2 Working Hours

A.2.1 Unless otherwise stated, all M&V Services will be performed during the hours of 8:00am - 4:30pm local time Monday through Friday, excluding federal or state holidays. If for any reason Customer requests Honeywell to perform M&V Services outside such hours, any overtime or additional expenses incurred by Honeywell will be billed to and paid by Customer.

A.3 Proprietary Information

A.3.1 Customer agrees that Honeywell may use non-proprietary information pertaining to the Agreements, and the work or services performed under the Agreements, for press releases, case studies, data analysis, promotional purposes, and other similar documents or statements to be publicly released, as long as Customer approves such document or statement in writing beforehand. Honeywell may, during and after the term of the Agreements, compile and use, and disseminate in anonymous and aggregated form, all data and information related to building optimization and energy usage obtained in connection with the Agreements. The rights and obligations in this Section A.3 shall survive termination or expiration of the Agreements. The electronic platform, code and arrangement upon which the legible Energy Savings Calculations are published is "Proprietary."

A.4 Limitation of Liability

A.4.1 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE AGGREGATE LIABILITY OF HONEYWELL FOR ANY CLAIMS ARISING OUT OF OR RELATED TO THIS M&V SERVICES AGREEMENT WILL IN NO CASE EXCEED THE ANNUAL M&V SERVICES AGREEMENT PRICE; PROVIDED, HOWEVER, THAT THIS LIMITATION SHALL NOT APPLY TO THE SPECIFIC SAVINGS GUARANTEE OBLIGATIONS OF HONEYWELL SET FORTH IN THIS EXHIBIT J.

A.5 Coverage of M&V Services

A.5.1 Customer agrees to provide Honeywell access to all equipment and software necessary to Honeywell's performance of the M&V Services. Honeywell will be free to start and stop all equipment incidental to the operation of the mechanical, control, automation, and life safety system(s) as arranged with Customer's representative.

A.5.2 Honeywell has no obligation to repair or replace parts of any systems, including, but not limited to, ductwork, piping, shell and tube (for boilers, evaporators, condensers, and chillers), unit cabinets, boiler refractory material, heat exchangers, insulating material, electrical wiring, hydronic and pneumatic piping, structural supports and other non-moving parts pursuant to this M&V Services Agreement. Costs to repair or replace such parts will be the sole responsibility of Customer.

A.5.3 Honeywell will not load software, or make repairs or replacements necessitated by reason of negligence or misuse of any equipment, or necessitated by lightning, electrical storm, or other violent weather or by any other cause pursuant to this M&V Services Agreement. Honeywell may provide such services at Customer's request and at an additional charge.

A.5.4 Honeywell is not responsible for maintaining a supply of, furnishing and/or replacing lost or needed chlorofluorocarbon (CFC) based refrigerants not expressly required to be provided by Honeywell under this M&V Services Agreement. Customer is solely responsible for the cost of material and labor relating to any such refrigerant.

A.5.5 Honeywell is not obligated to provide replacement software, equipment, components and/or parts pursuant to this M&V Services Agreement.

A.5.6 Unless otherwise expressly provided in this M&V Services Agreement, Customer retains all responsibility for maintaining LANs, WANs, leased lines and/or other communication mediums incidental or essential to the operation of the system(s).

A.5.7 Honeywell may install diagnostic devices and/or software at Honeywell's expense to enhance system operation and support. Upon termination or expiration of this M&V Services Agreement, Honeywell may remove these devices and return the applicable system(s) to their original operation. Customer agrees to provide, at its sole expense, connection to the switched telephone network for the diagnostic devices and/or software.

A.5.8 Customer will promptly notify Honeywell of any malfunction in the system(s) that comes to Customer's attention**.**

A.6 Terms of Payment

A.6.1 Customer will pay or cause to be paid to Honeywell the full price for the M&V Services, as specified on the first-year line of the M&V Services Pricing Table (Section A.6.2) and such price may be adjusted in accordance with this M&V Services Pricing Table. Honeywell will submit invoices to Customer in advance for M&V Services to be performed during the subsequent billing period, and payment shall be due thirty (30) days after Customer's receipt of each such invoice, as set forth in the "Payment Terms" provisions at the beginning of this Exhibit J. Payments for M&V Services past due more than five (5) days shall accrue interest from the due date to the date of payment at the rate of one and one-half percent (1.5%) per month, compounded monthly, or the highest legal rate, whichever is lower. Customer will pay all attorney and/or collection fees incurred by Honeywell in collecting any past due amounts.

A.6.2 Honeywell will annually adjust the amounts charged for the M&V Services provided under the M&V Services Agreement **[** as set forth in the schedule below]. In addition, Honeywell reserves the right, in its discretion, to increase the price payable by Customer in the event that tariffs (or similar governmental charges) imposed by the United States or other countries result in any increase in the costs that Honeywell used to determine such price.

Year 1	$18,061
Year 2	$18,603
Year 3	$19,161

A.6.3 UPON WRITTEN NOTICE TO HONEYWELL, SUCH NOTICE TO BE PROVIDED NO LESS THAN THIRTY (30) DAYS' BEFORE THE END OF YEAR 3 AND EACH SUBSEQUENT APPLICABLE YEAR, CUSTOMER MAY EXTEND THE M&V SERVICE AGREEMENT FOR AN ADDITIONAL YEAR. ANY SUCH EXTENSION BY THE CUSTOMER SHALL BE AT THE COST OF THREE PERCENT (3%) ABOVE THE APPLICABLE PRIOR YEAR'S PRICE (FIRST EXTENSION TO BE APPLIED TO YEAR 3, AND THEN APPLIED YEAR-OVER-YEAR FOR EACH SUBSEQUENT EXTENSION). CUSTOMER MAY NOT EXTEND THE M&V SERVICES AGREEMENT BEYOND YEAR 20. AS SUCH, THE PRICE OF M&V SERVICES SHALL

FOLLOW THE PRICING SCHEDULE LISTED BELOW FOR EACH YEAR THAT THE CUSTOMER EXTENDS THE M&V SERVICE AGREEMENT:

Year 4	$19,767
Year 5	$20,360
Year 6	$20,971
Year 7	$21,600
Year 8	$22,248
Year 9	$22,915
Year 10	$23,602
Year 11	$24,311
Year 12	$25,040
Year 13	$25,791
Year 14	$26,565
Year 15	$27,362
Year 16	$28,183
Year 17	$29,028
Year 18	$29,899
Year 19	$30,796
Year 20	$31,720

A.7 Termination. This M&V Services Agreement may be terminated for the reasons set forth below. Should this M&V Services Agreement be terminated in whole or in part for any reason, the Guarantee Term shall also terminate on the same date. In the event this M&V Services Agreement is terminated, the Guaranteed Savings for all subsequent Guarantee Years shall be null and void and Honeywell shall have no further obligation with respect to the Guarantee set forth herein.

By Customer:

A.7.1 For Cause. Customer may terminate this M&V Services Agreement for cause if Honeywell defaults in the performance of any material term of this M&V Services Agreement, or fails or neglects to carry forward the M&V Services in accordance with this M&V Services Agreement, after giving Honeywell written notice of its intent to terminate. If, within forty five (45) days following receipt of such notice, Honeywell fails to cure such default, Customer may, by written notice to Honeywell, terminate this M&V Services Agreement. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

A.7.2 For Convenience. To the extent permitted by applicable law, each year at the anniversary of the commencement of the term of this M&V Services Agreement, Customer may terminate the M&V Services Agreement by giving Honeywell written notice at least forty five (45) days prior to the anniversary date. In the event Customer elects to terminate this M&V Services Agreement at any other time during the year, Customer shall be billed on a pro rata basis and Customer will not receive an M&V Report at the end of the year.

A.7.3 Customer's Premises are Destroyed. Customer may terminate this M&V Services Agreement in the event Customer's premises are destroyed. In the event of such termination under this Section, neither party shall be liable for damages or subject to any penalty, except that Customer will remain liable for M&V Services performed to the date of termination. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

By Honeywell:

A.7.4 For Cause. Honeywell may terminate this Agreement for cause if Customer materially breaches this Agreement (including, but not limited to, Customer's failure to make payments as agreed herein or Customer's failure to provide Honeywell access to Customer site or Customer's data). If, within thirty (30) days following Honeywell's

notice of breach, Customer fails to make the payments then due, or otherwise fails to cure such breach, Honeywell may, by written notice to Customer, terminate this Agreement and recover from Customer payment for Work performed and for losses sustained, including but not limited to, reasonable overhead, profit and applicable damages. In the event of termination of this Agreement by Honeywell for cause, all liabilities associated with the Guarantee will be deemed satisfied and no M&V Services deliverables will be provided by Honeywell after the Agreement is terminated for any Guarantee Years.

A.7.5 Honeywell Equipment is Destroyed or Substantially Damaged. Either party may terminate this M&V Services Agreement in the event Honeywell equipment on Customer's premises is destroyed or substantially damaged. In the event of such termination under this Section, neither party shall be liable for damages or subject to any penalty, except that Customer will remain liable for M&V Services performed to the date of termination. In the event this Agreement is terminated pursuant to this Section, the Guaranteed Savings for a Guarantee Year in which such termination becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy Costs and Operational Costs.

A.8 Appropriations and Essential Use

A.8.1 Customer reasonably believes that sufficient funds can be obtained to make all payments for the initial term, as described in the summary at the beginning of this M&V Services Agreement. Customer hereby covenants that it shall do all things lawfully within its power to obtain funds from which such payments may be made, including making provisions for such payments, to the extent necessary, in each budget submitted for the purpose of obtaining funding, using its bona fide best efforts to have such portion of the budget approved and exhausting all available administrative reviews and appeals in the event such portion of the budget is not approved. It is Customer's intent to make the payments for the initial term if funds are legally available therefore and in that regard Customer represents that (a) the use of the M&V Services is essential to its proper, efficient and economic functioning or to the services that is provided to its citizens; (b) Customer has an immediate need for and expects to make immediate use of substantially all the M&V Services, which need is not temporary or expected to diminish in the foreseeable future; and (c) the M&V Services shall be used by Customer only for the purpose of performing one or more of its governmental or proprietary functions consistent with the permissible scope of its authority.

A.8.2 In the event no funds or insufficient funds are appropriated and budgeted for the acquisition, retention or operation of the M&V Services under the M&V Services Agreement, then Customer shall, not less than sixty (60) days prior to the end of such applicable fiscal period, in writing, notify Honeywell (and its assignee, if any) of such occurrence. The M&V Services Agreement shall thereafter terminate and be rendered null and void on the last day of the fiscal period for which appropriations were made without penalty, liability or expense to Customer of any kind, except as to (i) the portions of the payments herein agreed upon for which funds have been appropriated and budgeted or are otherwise available, and (ii) Customer's other obligations and liabilities under the Agreement relating to, accruing or arising prior to such termination. In the event of such termination, Customer agrees to peaceably surrender to Honeywell (or its assignee, if any) possession of any equipment that is provided by Honeywell under the M&V Services Agreement, on the date of such termination, packed for shipment in accordance with manufacturer's specifications and eligible for manufacturer's maintenance, and freight prepaid and insured to any location in the continental United States designated by Honeywell, all at Customer's expense. Honeywell (or its assignee, if any) may exercise all available legal and equitable rights and remedies in retaking possession of any equipment provided by Honeywell under this M&V Services Agreement.

A.8.3 Notwithstanding the foregoing, Customer agrees (a) that if the M&V Services Agreement is terminated in accordance with the preceding paragraph, Customer shall not contract with any other party for any services similar to or that take the place of the M&V Services provided under the M&V Services Agreement, and shall not permit such functions to be performed by its own employees or by any agency or entity affiliated with or hired by Customer for the balance of the fiscal period in which such termination occurs or the next succeeding fiscal period thereafter, and (b) that it shall not, during the initial term, give priority in the application of funds to any other functionally similar equipment or services.

PART B. M&V SERVICES SCOPE DESCRIPTION

B.1 Guarantee Analysis Services

B.1.1 Scope – Honeywell will implement the guarantee analysis services outlined in Section B.1.3 (the **"M&V Services"**) for the following ECMs. The M&V Services are to be performed consistent with the terms of the guarantee set forth in Part C, and the Schedule of Guaranteed Savings and related provisions set forth in Part D, in each case of this Exhibit J. Certain defined terms are set forth in Part C.

List of Covered Facilities, Meters, Energy Conservation Measures ("ECMs) by Service Offering:

(a)	(b)	(c)	(d)
Facility	**LDC-Meter # / Utility Type**	**ECMs** (list only ECMs associated with meter listed in Column (b))	**Related M&V Services Subsection**
Parks and Recreation Office	000020061025/electric 000000700604/natural gas	2.0 – Building Envelope, 3.0 – Controls Upgrades, 4.0 – Mechanical Upgrades	Option A
Aldrich Arena	000017083043 / electric 000000710401 / natural gas	5.0 – Solar PV Project	Option A
Oscar Johnson Arena	000017066353 / electric 000000434606 / natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
Shoreview Ice Arena	000017066651 / electric 000000846614 /natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
White Bear Lake Arena	000017066474 / electric 000020917263/ natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
TCO Sports Garden	000017035306 / electric 000010003987 / natural gas	5.0 – Solar PV Project	Option A
Highland Arena	000017082947 / electric 000010012165 / natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
Phalen Arena	000017053926 / electric 0000100000850/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
Harding Arena	000017054023/electric 000020935746/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A
West Side Arena	000017053914/electric 000000464854/natural gas	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades, 4.0 – Mechanical Upgrades	Option A
Pleasant Arena	000003627482 / electric 00000071146	1.0 – Lighting Upgrades, 2.0 – Building Envelope Upgrades	Option A

B.1.1.1 General Descriptions – The following are general descriptions of one or more approaches to providing guarantee analysis services. The specific details of the M&V Services relating to the Retrofit as set forth in this M&V Services Agreement take precedence over these descriptions.

Option A—Retrofit Isolation with Key Parameter Measurement
This option is based on a combination of measured and estimated factors when variations in factors are not expected. Measurements are spot or short-term and are taken at the component or system level, both in the baseline and post-installation cases. Measurements should include the key performance parameter(s) which define the energy use of the ECM. Estimated factors are supported by historical or manufacturer's data. Savings are determined by means of engineering calculations of baseline and post-installation energy use based on measured and estimated values. Savings are calculated using direct measurements and estimated values, engineering calculations and/or component or system models often developed through regression analysis. Adjustments to models are not typically required.

Option B—Retrofit Isolation with All Parameter Measurement
This option is based on periodic or continuous measurements of energy use taken at the component or system level when variations in factors are expected. Energy or proxies of energy use are measured continuously. Periodic spot or short-term measurements may suffice when variations in factors are not expected. Savings are determined from analysis of baseline and reporting period energy use or proxies of energy use. Savings are calculated using direct measurements, engineering calculations, and/or component or system models often developed through regression analysis. Adjustments to models may be required.

Option C – Utility Data Analysis
This option is based on long-term, continuous, whole-building utility meter, facility level, or sub-meter energy (or water) data. Savings are determined from analysis of baseline and reporting period energy data. Typically, regression analysis is conducted to correlate with and adjust energy use to independent variables such as weather, but simple comparisons may also be used. Savings calculations use regression analysis of utility meter data to account for factors that drive energy use. Adjustments to models are typically required.

Option D—Calibrated Computer Simulation
Computer simulation software is used to model energy performance of a whole-facility (or sub-facility). Models must be calibrated with actual hourly or monthly billing data from the facility. Implementation of simulation modeling requires engineering expertise. Inputs to the model include facility characteristics; performance specifications of new and existing equipment or systems; engineering estimates, spot-, short-term, or long-term measurements of system components; and long-term whole-building utility meter data. After the model has been calibrated, savings are determined by comparing a simulation of the baseline with either a simulation of the performance period or actual utility data. Savings calculations are done based on computer simulation model (such as eQUEST) calibrated with whole-building or end-use metered data or both. Adjustments to models are required.

B.1.2 Coverage – The M&V Services includes all labor, travel, and expenses to perform the services and frequency described in Section B.1.3. In general, and subject to details of the M&V Plan, Honeywell will provide a single (1) reporting submission of the determination of the amount of Cost Avoidance for each Guarantee Year. Services not explicitly described in Section B.1.3, including Customer Guarantee Responsibilities, are not included.

B.1.3 M&V Plan: In general, the M&V Services:

(a) are required to be performed for the entire Guarantee Term;
(b) may employ one or more of Options A, B, C or D; and
(c) include delivering a report on an annual basis, for either the entire Guarantee Term, or for a shorter M&V reporting term.

The details of the M&V Services are set forth in the M&V Plan, as described in detail in Exhibit J-6, which takes precedence over the general description in this Section B.1.3.

B.1.4 M&V Offerings – In coordination with Section B.1.1, HONEYWELL will perform the Measurement & Verification (M&V) offerings checked below:

☒ B.**1.4.1 Retrofit Isolation Energy Audit for Option A Verified ECMs –** HONEYWELL will provide *Option A* energy guarantee auditing services as detailed in Exhibit J, and Exhibits to Exhibit J for specific Energy Conservation Measures (ECMs) identified in Exhibit J and/or Exhibits to Exhibit J as using *Option A* methodologies for Measurement and Verification. HONEYWELL will provide this one-time determination of the quantity of energy avoidance of the CUSTOMER'S facility for the First Guarantee Year only. Option A methods will be applied on an ECM specific basis (i.e., isolated to the retrofit) and Energy Cost Avoidance for a Guarantee Year will be quantified and summarized on an ECM basis. After the ECM's potential-to-save has been verified (Section B.1.3) HONEYWELL shall either stipulate the quantity of cost avoidance or determine the cost avoidance from engineering calculations and measurement of specific variables as described in Section D.1.1.1. Utility bill auditing (Option C) and reconciliation of Option A results to utility meter bill data is not included. The Option A retrofit isolation method was selected by the CUSTOMER to provide an economical reconciliation method and to minimize the interactive effects on the determination of cost avoidance due to changes to the site or facilities from the baseline conditions.

HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided.
3. Record current manual set points and manual settings. Collect BAS data for analysis and verification that the ECM is still operating to the intended specifications. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECM's or the building energy consumption.

HONEYWELL will provide a single (1) reporting submission of the determination of energy avoidance for the First Guarantee Year. The Energy Avoidance quantified in the First Guarantee Year will be stipulated as the annual Energy Avoidance for each Guarantee Year of the remaining contract term. Reporting of Cost Avoidance will occur each year of the term and the monetization of Cost Avoidance will be determined as described in Section D.1.1.1.

Work Coverage: Utility Meters listed in Section B.1.1 designated as Option A

Term Coverage: Year 1 Monitoring; Year 2 to End of Term stipulated based on Year 1 Results

Option A/B Audit Report section will be submitted: ☐ 1-Time Only ☐ Quarterly ☐ Semi-Annually ☒ Annually

☐ B.**1.4.2 Energy Advisory Report–Level 1 (No Travel/ No On-Site Services) –** HONEYWELL will provide a report advisory and qualitative in its description based on material provided by the CUSTOMER to HONEYWELL as described below. The intent of the report is to describe deficiencies in the current operations in the buildings and their possible impact on the ECMs to the extent possible via CUSTOMER provided documents only. All travel and on-site services are excluded unless a Level-2 offering is included. It will be the responsibility of the CUSTOMER to investigate and correct the reported deficiencies. It will be the responsibility of the CUSTOMER to provide to the M&V specialist:

1. Verification that equipment installed to perform the ECMs has been properly maintained, including but not limited to provision of maintenance records.
2. Current status of the buildings (i.e., occupancy level and use, hours of operation, ownership, etc.).
3. Records of CUSTOMER initiated changes in equipment set points, start/stop conditions, usage patterns.
4. Records of CUSTOMER initiated changes in operation of mechanical systems, which may impact the ECMs.
5. Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
6. Copies of monthly utility bills and utility summary data on a *monthly* basis, and access to utility accounts through an authorization by the CUSTOMER to the Utility to allow the release of data to a Honeywell representative.

Work Coverage: Reserved

Term Coverage: Reserved

Advisory reports will be submitted: ☐ Quarterly ☐ Semi-Annually ☐ Annually.

☒ B.**1.4.3 Energy Advisory Report–Level 2 (With Travel & On-Site Services) –** In addition to the Level 1 Energy Advisory Report offering, HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL per Level 1 Energy Advisory Report offering. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided per Section B.1.4.2.
3. Record current manual set points and manual settings. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECMs or the building energy consumption.

Site walk-through observations will be conducted: ☐ Quarterly ☐ Semi-Annually ☒ Annually.

Site walk-through observations are limited to no more than: two (2) day(s) per year,
and limited to one (1) day(s) per trip.

Work Coverage: Utility Meters listed in Section B.1.1 designated as Option A

Term Coverage: Year 1 Monitoring; Year 2 to End of Term – Stipulated based on Year 1 Results

☐ B.**1.4.4** **Retrofit Isolation Energy Audit for Option B Verified ECMs** – HONEYWELL will provide *Option B* energy guarantee auditing services as detailed in Exhibit J and Exhibits to Exhibit J for specific Energy Conservation Measures (ECMs) identified in Exhibit J and/or Exhibits to Exhibit J as using *Option B* methodologies for Measurement and Verification to quantify the derived Energy Cost Avoidance of the CUSTOMER's facility. Option B methods will be applied on an ECM specific basis (i.e., isolated to the retrofit) and Energy Cost Avoidance for a Guarantee Year will be quantified and summarized on an ECM basis. After the ECM's potential-to-save has been verified (Section B.1.3) HONEYWELL shall determine the cost avoidance from the engineering calculations in Exhibit J-4 and *on-going* measurements of specific variables defined below. Utility bill auditing (Option C) is not included and reconciliation of Option B results to utility meter bill data is not included. The Option B retrofit isolation method was selected by the CUSTOMER to provide an economical reconciliation method and to minimize the interactive effects on the determination of cost avoidance due to changes to the site or facilities from the baseline conditions. Reporting of Cost Avoidance will occur each year of the term and the monetization of Cost Avoidance will be determined as described in Section D.1.1.1.

HONEYWELL will conduct walk-through observations of the ECMs noted under Work Coverage for this Section. It will be the responsibility of the CUSTOMER to investigate deficiencies beyond the contracted site visit frequency. It will be the responsibility of the CUSTOMER to correct the reported deficiencies.

The report will be limited to information that can be inferred from non-intrusive observations made during the allotted time for the walk-through observation and from the documents provided by the CUSTOMER to HONEYWELL. During the walk through, Honeywell will:

1. Verify through visual observation that each ECM is still installed.
2. Verify to the limits of visual observation that each ECM is still functional. Additional verification will be performed via service records provided.
3. Record current manual set points and manual settings. Collect BAS data for analysis and verification that the ECM is still operating to the intended specifications. Record changes in the operation, control sequences and control set points of the ECMs from original installed conditions.
4. Record observations about the current status of the building (i.e. occupancy, use), compare to CUSTOMER records, and compare against the contractual baseline and required post-retrofit operating conditions.
5. Record observed addition or deletion of site equipment, which may impact the ECMs or the building energy consumption and compare to CUSTOMER records.
6. Record observations regarding other changes on-site that may impact the ECM's or the building energy consumption.

Work Coverage: Reserved

Term Coverage: Reserved

Option B Audit Report section will be submitted: ☐ Quarterly ☐ Semi-Annually ☐ Annually

PART C. GUARANTEE TERMS

C.1. Definitions

When used in this Agreement, the following capitalized words shall have the meanings ascribed to them below:

"Annual Scheduled Savings" means for any applicable Guarantee Year, the amount set forth in the Schedule of Guaranteed Savings in Section D.1.

"Baseline" or **"Base Year"** is the description that defines the Baseline Usage unit costs and facilities, systems, or equipment operations and characteristics, and environmental conditions that are to be used as the benchmark for determining Cost Avoidance. It may not always be one contiguous element of time and may be different from a 365-day annual period.

"Baseline Period" is the period of time (specified in Part D) coordinated with the Baseline Usage, including for the purpose of utility bill analysis, to allow the comparison of a Guarantee Year against a Baseline. The Baseline Period may not always be one contiguous element of time and may be different from a 365-day annual period. Baseline information from non-contiguous elements of time may be normalized and assigned to a specified Baseline Period.

"Baseline," "Baseline Usage" or "Baseline Demand" is the calculated or measured Energy usage (demand) by a piece of equipment or a site prior to the implementation of the ECMs. Baseline physical conditions, such as equipment counts, nameplate data, and control strategies, will typically be determined through surveys, inspections, and/or metering at the site.

"Construction Period" is the time period between the start of the project installation and the date of Final Project Acceptance.

"Cost Avoidance" means the difference between the actual cost incurred during a selected time period versus what the cost *would have been* had the ECM not been implemented, including without limitation avoided, defrayed, or reallocated costs.

"Customer Guarantee Practices" are those practices identified herein, intended to achieve Cost Avoidance or necessary to the analysis thereof, as set forth in Section C.4.

"Energy" means utilities and may include electricity and fuels to operate HVAC equipment, facility mechanical and lighting systems, and energy management systems, and water and sewer usage, and secondary utilities such as district steam or compressed air as applicable.

"Energy Costs" means the cost of Energy.

"ECM" means an energy conservation measure, which is the installation of equipment or systems, or modification of equipment or systems as described in Exhibit A, for the purpose of avoiding utility (energy, water, etc.) consumption and demand and costs and/or non-utility (O&M, operational) costs.

"Excess Savings" means for any Guarantee Year, the amount, if any, by which the Cost Avoidance applicable to that Guarantee Year exceeds the Annual Scheduled Savings.

"Facilities" shall mean those buildings, or any other facility, location or infrastructure, where Savings will be realized.

"Financing Document" refers to that document, if any, executed between Customer and a third-party financing entity providing for payments from Customer to third-party financing entity.

"Final Project Acceptance" refers to date of Customer signature of the Final Project Acceptance Certificate (see Exhibit I) indicating Customer acceptance of the installation of all of the ECMs.

"First Guarantee Year" is defined as the period beginning on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed and ending on the day prior to the first (1st) anniversary thereof.

"Guarantee Period" is defined as the period beginning on the first (1st) day of the First Guarantee Year and ending on the last day of the final Guarantee Year, also known as the **"Measurement and Verification Phase",**

"Measurement and Verification Period", "Performance Period", or "Performance Phase".

"Guarantee Year" is defined as the First Guarantee Year and each of the successive twelve (12) month periods commencing on the anniversary of the commencement of the First Guarantee Year throughout the Guarantee Term.

"Guaranteed Savings" is defined as the total scheduled amount of Cost Avoidance that Honeywell is guaranteeing, as set forth in Section D.1 of Part D.

"Guarantee Term" shall have the meaning as defined in Section C.2.1 hereof, also referred to as "Term."

"M&V" means measurement and verification.

"M&V Systems and Equipment" as used in this Guarantee means the systems and equipment identified in Honeywell's Scope of Work and M&V Services, including as set forth in Section C.4.1.

"**Material Change**" is defined as any change in the following which reasonably could be expected to increase or decrease Energy or Operational Costs at a Facility by a value more than five percent (5%) of the Annual Scheduled Savings per utility meter or submeter, as applicable:

(1) manner of use of the Facility by Client;
(2) hours of operation of any equipment, building or energy system contained in the Facility;
(3) occupancy of the Facility;
(4) structure of the Facility;
(5) types of equipment used in the Facility; or
(6) conditions affecting energy use in the Facility.

"Measurement and Verification Plan" or "M&V Plan" is defined as the plan providing details on how the Guaranteed Savings will be verified.

"Operational Costs" commonly referred to as O&M costs, shall include the cost of operating and maintaining the Facilities, such as, but not limited to, the cost of inside and outside labor to repair and maintain affected systems and equipment, the cost of custodial supplies, the cost of replacement parts, the cost of deferred maintenance, the cost of lamp and ballast disposal, and the cost of new capital equipment.

"Potential-to-Save" or "Potential-to-Perform" by an ECM is satisfied when a measure is properly installed and has the potential to generate predicted levels of Cost Avoidance. Verification of an ECM's "potential-to-save" is satisfied upon Customer's signing of a Certificate of Substantial Completion, as set forth in Exhibit I, or its equivalent.

"Retrofit" is the work provided by Honeywell as defined by the "ECMs."

"Retrofit Costs" are the sum of (i) the price for the Work; (ii) interest and other direct fees for financing required to be made by Customer pursuant to the Financing Document; and (iii) the payments required to be made by Customer for the M&V Services.

"Retrofit Isolation Method", **"RIM"**, **"RIM Approach"** or **"Retrofit Isolation Method Approach"** is an M&V approach that verifies the Guaranteed Savings using techniques that isolate the Energy use of the ECM and affected systems separate from the Energy use of the rest of the Facility. This method is used to mitigate the interactive Energy effects of changes made to the Facility outside of Honeywell's control.

"Savings" is another term for Cost Avoidance.

"Total Guarantee Year Savings" is defined as the summation of Cost Avoidance realized by Facilities in each Guarantee Year as a result of the Retrofit, and M&V Services provided by Honeywell, as well as Excess Savings, if any, carried forward from previous years.

C.2. Term and Termination

C.2.1 Guarantee Term. The Guarantee Term shall commence on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed pursuant to this Agreement, and shall terminate at the end of

the M&V Services Term (as defined at the beginning of this Exhibit J), unless terminated earlier as provided for in Part A of this M&V Services Agreement.

C. 2.2 Guarantee Term Extension Option. Subject to Customer extending the M&V Services Agreement, for each year Customer elects to extend the M&V Services Agreement, per A.6.3, the Guarantee Term shall extend for an equivalent period. Such extension of the Guarantee Term shall be limited to being no longer than Year 20 and may not be extended without extension of the M&V Services Agreement. For each additional year of the Guarantee Term as referenced in Section D.1, the following escalations shall apply: An annual increase of 4% for the Energy Savings , and a 3% annual increase for Operational Savings; each such increase to be applied year-over-year with each annual extension of this Agreement.

C.3. Savings Guarantee

Guaranteed Savings Calculations Details

C.3.1 Guarantee of Savings. Honeywell guarantees to Customer that the identified Facilities will realize the total Guaranteed Savings through the combined value of all ECMs over the Guarantee Term, as defined herein.

C.3.1.1 Additional Savings Before Final Project Acceptance. All Cost Avoidance realized by Customer that result from activities undertaken by Honeywell prior to Final Project Acceptance, including any utility rebates or other incentives earned as a direct result of the installed ECMs or M&V Services provided by Honeywell, will be applied toward the Guaranteed Savings for the First Guarantee Year.

C.3.1.2 Additional Savings After Final Project Acceptance. Additional Cost Avoidance, including any utility rebates or other incentives, that can be demonstrated, or earned, as a result of Honeywell's efforts that result in no additional costs to Customer beyond the costs identified in this Agreement will be included in the M&V Report (as defined in Section C.3.2 below) for the applicable Guarantee Year(s).

C.3.1.3 Satisfaction of Guarantee. The Guaranteed Savings in each Guarantee Year are considered satisfied if the Total Guarantee Year Savings for such Guarantee Year equals or exceeds the Annual Scheduled Savings.

C.3.1.4 Excess Savings. Excess Savings shall be carried forward and applied to the next Guarantee Year(s). In the event Honeywell has paid Customer for a Guaranteed Savings shortfall in the immediately previous Guarantee Year, pursuant to Section C.3.1.5, then Excess Savings in current Guarantee Year shall be billed to Customer (but only up to any amounts previously paid by Honeywell for a shortfall) and Customer shall pay Honeywell within thirty (30) days after receipt of such bill, and any remaining Excess Savings shall be carried forward and applied against Guaranteed Savings shortfalls in any future Guarantee Year.

C.3.1.5 Savings Shortfalls. In the event that the Total Guarantee Year Savings in any Guarantee Year is less than the Annual Scheduled Savings, after giving credit for any Excess Savings carried forward from previous Guarantee Years pursuant to Section C.3.1.4, Honeywell shall, upon receipt of written demand from Customer, compensate Customer the amount of any such shortfall, in such form as agreed to by the parties, limited by the total value of the Guaranteed Savings, within sixty (60) days. Resulting compensation shall be Honeywell's sole liability for any shortfall in the Guaranteed Savings. In case of a shortfall, Honeywell reserves the right, subject to Customer approval, which shall not be unreasonably withheld, to implement additional operational improvements or conservation measures, at no cost to Customer, that will generate additional savings in future years of the Guarantee Term, and Honeywell has the option of extending its M&V Services to verify successful performance.

C.3.1.6 Aggregation of Savings. The parties mutually agree that the Guaranteed Savings for this Agreement and the Guaranteed Savings for all previous active projects with guaranteed savings for this Customer shall be combined each year until the end of the original guarantee term for each project. Throughout the duration of the term for each specific phase the total savings will be utilized as an aggregate in satisfying the sum of the respective guarantees.

Guaranteed Savings Reconciliation Process

C.3.2 Guaranteed Savings Reconciliation Documentation. As part of the M&V Services, and as set forth in the M&V Plan, Honeywell will provide Customer with a Guaranteed Savings reconciliation report ("**M&V Report**") within ninety (90) days after receipt of the information Customer is to provide as part of the Customer Guarantee Practices that is reasonably necessary to the preparation of the M&V Report. Data and calculations utilized by Honeywell in the preparation of its M&V Report will be made available to Customer, along with such explanations and clarifications as Customer may reasonably request.

C.3.2.1 Acceptance of M&V Report. Customer will have forty-five (45) days to review the M&V Report and provide written notice to Honeywell of non-acceptance of the Guaranteed Savings for that Guarantee Year. Failure to provide written notice within forty-five (45) days of the receipt of the M&V Report will deem it accepted by Customer.

C.3.2.2 Guaranteed Savings Reconciliation. Guaranteed Savings will be determined in accordance with the methodology(s), operating parameters, formulas, and constants as described in this Exhibit J and the exhibits, using the M&V Services as defined herein, and/or additional methodologies defined by Honeywell that may be negotiated with Customer at any time. Upon contract execution, Customer agrees to and accepts the standard methods that Honeywell uses to conduct M&V Services, including, but not limited to, RIM and Option C Utility Data Analysis (see Part C for RIM and Option C definitions as further detailed in the Measurement and Verification Plan in this Exhibit J and the exhibits), as well as cost avoidance calculations, as inferenced by, referenced by or included in the energy calculations developed by Honeywell and attached hereto as an Exhibit J-4 Engineered Cost Avoidance Calculations.

C.3.2.3 Base Year Adjustments. The Baseline shall be adjusted to reflect:

(a) changes in occupied square footage;
(b) changes in energy-consuming equipment, including any repairs or improvements made to the equipment as part of this Agreement;
(c) changes in the Facilities;
(d) changes in Customer Guarantee Practices adversely affecting energy consumption and/or demonstrated operational changes;
(e) changes in weather between the Baseline Period and the Guarantee Year; and
(f) documented or otherwise conclusively established metering errors for the Baseline Period and/or any Guarantee Year adversely affecting Energy usage measurement.

C.3.2.4 Other Potential Guarantee Adjustments. Honeywell's Guaranteed Savings obligations under this Agreement are contingent upon:

(a) Customer following each of the Customer Guarantee Practices set forth herein;
(b) no alterations or additions being made by Customer to any of the M&V Systems and Equipment without prior notice to and agreement by Honeywell;
(c) The absence of any event Customer is to report under Section C.4.5; and
(d) Honeywell's ability to render services not being impaired by circumstances beyond its control.

To the extent Customer defaults in or fails to perform fully any of its obligations under the Agreement, including without limitation any of the Customer Guarantee Practices, or the occurrence of any event Customer is to report under Section C.4.5, Honeywell may, in its sole discretion, adjust its Guaranteed Savings obligation or deem it met; provided, however, that no adjustment hereunder shall be effective unless Honeywell has first provided Customer with written notice of Customer's default(s) or failure(s) to perform and Customer has failed to cure its default(s) or failure(s) to perform within thirty (30) days after the date of such notice.

In addition, if for any reason any Facility and/or utility meter covered under this Agreement is materially unoccupied, closed, or discontinued, the Savings will be deemed realized for such Facility or meter, and the Guaranteed Savings will be adjusted accordingly. Honeywell will provide written notice of such adjustment to the Customer.

C.3.2.5 Adjustments for Material Changes. In the event of any increase or decrease in energy consumption and demand for any month resulting from a reported Material Change (see Section C.4.5.1) or unreported Material Change (see Section C.3.2.6), the amount of that increase shall be subtracted from, or that decrease shall be added to, the total energy consumption and demand for that month prior to the calculation of energy savings. If a reported or unreported Material Change affected energy consumption and demand in the same calendar month in the preceding year, the *next preceding* contract year where a Material Change has not occurred will be used to compute the value of the Material Change and the energy savings for the current month.

C.3.2.6 Unreported Material Changes. In the absence of any Material Change in the Facilities or in their operations reported by Customer under Section C.4.5.1 below, energy consumption and demand should not change from year to year. Therefore, if energy consumption and demand per utility meter or submeter for any month increases by five percent (5%) or more of the Annual Scheduled Savings per meter from the Energy consumption and demand for the same month of the *preceding* year, after adjustment for changes to climactic conditions, then such increase shall be deemed to have resulted from a Material Change, except where such increase is due to equipment malfunction, faulty repair or other acts of negligence by Honeywell.

C.3.2.7 Guarantee Based on Agreement Only. Customer's request for proposal or qualifications, Honeywell's proposal and any other documents submitted by Honeywell to the Customer prior to negotiation of this Agreement are expressly excluded from and are not a part of this Agreement. The parties agree that although the Honeywell proposal may have contained scope items, guaranteed savings and M&V options other than those stated in the Agreement, the final scope of work, Schedule of Guaranteed Savings, and M&V Plan were developed jointly by the parties through negotiation. The Customer has chosen to purchase the scope of work set forth in Exhibit A. The Customer accepts the Guaranteed Savings and agrees to the M&V Plan set forth herein.

C.4 Customer Guarantee Practices

C.4.1 Equipment Subject to these Provisions. M&V Systems and Equipment affecting the Guaranteed Savings include:

(a) equipment provided as per Exhibit A – Scope of Work;
(b) modifications made to existing equipment as outlined in Exhibit A – Scope of Work;
(c) existing or new equipment not provided or modified under this Agreement, but materially affected by the work provided per Exhibit A – Scope of Work and consuming energy or water via utility meters covered by the Agreement.

C.4.2 Hours and Practices. To achieve the Savings, Honeywell and Customer agree upon the Guaranteed Period operating parameters described in Exhibit(s) J-1. The Customer agrees to operate, or cause to effect the operation of, the M&V Systems and Equipment in such manner that is in accordance with these Guaranteed Period operating parameters.

C.4.3 Customer Maintenance and Replacement Responsibilities. During the term of this M&V Services Agreement, for all equipment affecting the Guaranteed Savings, the Customer shall perform on-going maintenance and accomplish component replacement and equipment repairs in accordance with manufacturer's standards and practices and take all reasonable measures to insure the equipment is operating at full efficiency. Component replacement and equipment repairs must be accomplished in a timely fashion. Additionally, Customer shall insure such equipment is operated at all times in accordance with applicable manufacturer's specifications, Honeywell specifications, and the requirements contained herein. For all non-Honeywell maintenance actions, Customer shall document and make available to Honeywell maintenance dates and tasks accomplished, the start date and duration of all deficient equipment operation and the subsequent corrective action and/or repair dates. Customer shall replace any vandalized or any failed equipment or component no longer warranted by Honeywell or the manufacturer, with equipment or components of equal or greater efficiency value than installed by Honeywell, for the full Guarantee Term. Customer shall be responsible to investigate and correct any reported deficiencies not covered under this M&V Services Agreement.

C.4.4 Facility Operational Changes. Except in the case of emergencies, Customer agrees it will not, without the consent of an authorized representative of Honeywell:

(a) make any significant deviations from the applicable Customer Guarantee Practices;
(b) put any system or item of equipment in a permanent "on" position, if the same would constitute a deviation from the applicable Customer Guarantee Practices; or
(c) assume manual control of any energy management system or item of equipment, if the same would constitute a deviation from the applicable Customer Guarantee Practices.

C.4.5 Customer Reporting Responsibilities. Customer shall report to Honeywell in writing within fifteen (15) days of the following changes or events:

(a) any additional energy source or change in existing energy source or supplier that the Customer may negotiate during the term of this Guarantee and/or,
(b) any material change in system or equipment status, including replacement of, addition to, or modification of existing energy and/or water consuming systems or equipment and/or,
(c) any long term temporary (equal to or greater than 10 days) or permanent changes in operating schedules and/or,
(d) any material changes in the payment schedule, such as due to refinancing or variable interest rate and/or,
(e) for any reason any Facility and/or utility meter covered under this Agreement is materially unoccupied, closed, or discontinued

Customer shall promptly notify Honeywell of any other activities known to Customer which could adversely impact the ability to realize the Guaranteed Savings.

C.4.5.1 Reported Material Changes. Customer shall deliver to Honeywell a written notice describing and explaining all actual or proposed Material Changes (as defined above in Section C.1) in a Facility or in the operations in a Facility and their anticipated effect on Energy or Operational Costs. Said notice must be delivered to Honeywell no less than seven (7) days before any actual or proposed Material Change occurs.

C.4.6 Customer Granted Access for Remote Diagnostics. Customer shall allow Honeywell to perform remote diagnostics on all equipment associated with the Guaranteed Savings for operational compliance with the manufacturer's specifications, and the requirements contained herein. Customer is responsible for implementation and costs for remote Honeywell access through Customer's firewall(s) to the controllers and front-end computer(s) for two (2) remote users designated by Honeywell using the following process:

- TCP/IP Remote Access: A dedicated static IP address, installation and on-going maintenance and subscription and licensing fees for remote access hardware and software including but not limited to VPN, RDP, station licenses dedicated to at least two remote users.

If remote access or data retrieval/push-send is interrupted or data received from the site is corrupted, at any time during the Guarantee Term, Honeywell reserves the right to suspend any reporting requirements and deem any savings from associated ECMs as achieved until remote access/data transfer has been restored.

C.4.7 Customer Provided Documentation. It will be the responsibility of the Customer to provide to an individual designated by Honeywell on a minimum monthly basis (unless noted otherwise):

(a) Verification that equipment installed to perform the ECMs has been properly maintained, including but limited to provision of maintenance records.
(b) Current status of the buildings (i.e., occupancy level and use, hours of operation, etc.).
(c) Records of customer-initiated changes in equipment setpoints, start/stop conditions, usage patterns.
(d) Records of customer-initiated changes in operation of mechanical systems, which may impact the ECMs.
(e) Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
(f) Copies of monthly utility bills and utility summary data on a *monthly* basis, and fuel storage tank levels, including without limitation fuel oil and biomass levels, in each case within two (2) weeks following the Customer's receipt thereof, and access to utility accounts through an authorization by the Customer to the Utility to allow the release of data to a Honeywell representative, together with access to relevant records relating to such utility costs.
(g) Access to any maintenance records, drawings, control system trend data, or other data reasonably deemed necessary by Honeywell to perform the M&V Services.

C.4.8 Customer Governmental Unit Reporting Responsibilities. Customer is solely responsible for reports to be submitted to the Department of Commerce, Public Utilities/Services Commission, or any other governmental agency or governmental unit.

C.4.9 Customer Rebate and Ratchet Reset Responsibilities. It is understood that all energy rebates and/or refunds are the result of an agreement between Customer and the utility company and Honeywell assumes no responsibility for obtaining said rebates and/or refunds. It is understood that said rebates and/or refunds are not included in the Guaranteed Savings. The Customer is responsible for procuring a ratchet reset from the local utility company, as applicable.

PART D. SCHEDULE OF GUARANTEED SAVINGS

D.1. Schedule of Guaranteed Savings

The Guaranteed Savings over the Guaranteed Term is equal to or greater than $736,573 which is the Total Energy and Operational Savings over the Guaranteed Term. The Guaranteed Savings and the Annual Scheduled Savings are set forth in the table below (such table, the "**Schedule of Guaranteed Savings**"):

YEAR	Energy Savings	Operational Savings*	Capital Cost Avoidance Savings*	Total Savings
1	$174,084	$62,491	$14,175	**$250,750**
2	$181,047	$64,366	$14,175	**$259,588**
3	$188,289	$66,297	$14,175	**$268,761**
TOTALS	**$543,420**	**$193,153**	**$42,525**	**$779,098**

YEAR	Energy Savings	Operational Savings	Total Savings
1	$174,084	$62,491	**$236,575**
2	$181,047	$64,366	**$245,413**
3	$188,289	$66,297	**$254,586**
TOTALS	**$543,420**	**$193,153**	**$736,573**

*Note: Operational Savings are stipulated and deemed satisfied at Contract signature.

Provided however, that, notwithstanding the above, in no event shall the Guaranteed Savings exceed the total Retrofit Costs over the Guaranteed Term. For sake of clarity, actual or pro forma budget neutral or positive cash flows are not guaranteed.

D.1.2 Schedule of Guaranteed Savings – Extension Upon written notice to Honeywell, such notice to be provided no less than thirty (30) days before the end of Year 3 and each subsequent applicable year, Customer may extend the M&V Service Agreement for an additional year. Any such extension by the Customer shall extend the Guarantee 4% per year for the unit cost of electric utilities, 4% per year for gas utilities, and 3% per year for operational savings above the applicable prior year's Guarantee (first extension to be applied to Year 3, and then applied year-over-year for each subsequent extension). Customer may not extend the M&V Services Agreement beyond Year 20. As such, the Schedule of Guaranteed Savings will follow the schedule listed below for each year that the Customer extends the M&V Service Agreement:

YEAR	Energy Savings	Operational Savings	Total Savings
4	$195,821	$68,949	**$264,769**
5	$203,653	$71,017	**$274,671**
6	$211,800	$73,148	**$284,947**
7	$220,271	$75,342	**$295,614**
8	$229,082	$77,603	**$306,685**
9	$238,246	$79,931	**$318,176**
10	$247,775	$82,329	**$330,104**
11	$257,686	$84,798	**$342,485**
12	$267,994	$87,342	**$355,336**

13	$278,714	$89,963	**$368,676**
14	$289,862	$92,662	**$382,524**
15	$301,457	$95,441	**$396,898**
16	$313,515	$98,305	**$411,820**
17	$326,056	$101,254	**$427,309**
18	$339,098	$104,291	**$443,389**
19	$352,662	$107,420	**$460,082**
20	$366,768	$110,643	**$477,411**

*Note: Operational Savings are stipulated and deemed satisfied at Contract signature.

D.1.3 Energy Savings. The first year amount of Savings for Energy Costs is the sum of the below listed ECMs. Actual Savings may be lower than as set forth in the Schedule of Guaranteed Savings because of an absolute increase in Energy use due to the implementation of measures to increase environmental comfort as directed by the Customer, and other baseline adjustments (see Section D.2). The Guaranteed Savings are less than the projected Savings, represented in Exhibit J-4. Cost Avoidance is based on the Customer Guarantee Practices set forth in Section C.4.

[a] Att. A: Exhibit A – Scope of Work.

ECM Description	Electric Year 1	Non-Electric Year 1	Water Year 1	Total Year 1
Lighting Upgrades	$36,655	$0	$0	**$36,655**
Building Envelope Upgrades	$0	$7,895	$0	**$7,895**
Controls Upgrades	$559	$4,098	$0	**$4,656**
Mechanical Upgrades	$10,194	$2,845	$0	**$13,039**
Solar PV Project	$111,838	$0	$0	**$111,838**
TOTALS (Excludes Vent Adj)	**$159,246**	**$14,838**	**$0**	**$174,084**

Customer agrees that the baseline for the unit cost of Energy will be adjusted each year of the Guarantee Term. This annually adjusted value of Energy unit cost is stipulated as the new baseline in each succeeding year. Customer agrees that Baseline adjustment is stipulated to be an escalation of 4% per year for the unit cost of electric utilities, 4% per year for gas utilities, and 3% per year for operational savings used in the determination of Cost Avoidance each year.

D.1.3.1 Calculating Cost Avoidance

(a) Customer agrees that the baseline for the unit cost of Utilities will be adjusted each year of the Guarantee Term to reflect a stipulated escalation rates as laid out in Section D.1.1. This annually adjusted value of Energy unit cost is stipulated as the new baseline in each succeeding year and may be used in the determination of Cost Avoidance each year in accordance with Section D.1.1.1(b).

(b) The calculation of Cost Avoidance is based upon the utility rate paid during the Guarantee Year, or the Baseline Period utility rate plus escalation (represented in Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs), whichever produces the highest Cost Avoidance and/or as defined below:

(i) The Guarantee Year current rate for Option A will be the annual average determined from 12 months of utility billing data in that Guarantee Year. Customer will provide the utility data per Section C.4.7 and if such data is not provided, the baseline utility rate plus annual escalation (see paragraph D.1.1.1 (a)) shall be used.

(ii) Option A analysis for all ECMs will use $/kW and unblended $/kWh for electric to monetize demand and energy savings. For buildings with thermal savings for ECM 1 Lighting (Heating Penalty) only, cost avoidance will be calculated using the baseline rate in Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs, escalated as indicated in Section D.1.1.

(iii) Option C analysis utilizes Metrix™, an independent 3rd party industry-standard utility accounting and normalization software platform. The energy and cost avoidance for Option C analysis using Metrix or

otherwise is determined on a monthly basis. Energy Avoidance is monetized by comparing the blended unit cost from each month's utility bill with the baseline contractual rate, escalated per Section D.1.1.1 (a), to determine the rate to use for calculation of monthly cost avoidance per Section D.1.1.1 (b).

(c) Fuel Conversion: is essentially a rate change measure, typically, intending to use a new energy type for a defined load. Since the new energy type (i.e., meter or tank, etc.) and its corresponding actual unit rate do not exist at the time of contract execution, the baseline rate for each fuel conversion ECM will be defined as presented in Baseline Rates, Exhibit J-3 Contractual Baseline Conditions, Utility Use, Utility Unit Costs. The new rate defined in Exhibit J-3 Escalated Future Baseline Rate for each Year of Term will be considered the Baseline rate as per Section D.1.1.1 (a).

(d) Cost Avoidance may also include, but is not limited to, savings from demand charges, power factor correction, taxes, ratchet charges, rate changes and other utility tariff charges that are reduced as a result of Honeywell involvement. In case the Customer does not procure any ratchet reset, rate change or other utility tariff charge reduction, or in the event that such ratchet, rate or tariff changes before the Guarantee Period ends, Cost Avoidance nonetheless will be calculated as if the ratchet, rate or tariff has been reset at the end of the installation of demand-reducing ECMs, or continues, as applicable.

(e) In the event, the current Guarantee Year utility tariff is significantly changed in structure from that which existed during the Baseline Period, including, but not limited to, the addition or deletion of measured or billed demand structures, Time of Use, Seasonal or Block & Tail billing structures, the Customer will not unreasonably withhold acceptance to abandon the new tariff (i.e., Current Rate) and will only use the baseline plus escalator as described in Section D.1.1.1 (a).

(f) The constants and/or stipulated values defined in the Exhibits, or as defined herein, are mutually agreed to by the Customer to be reasonable and may be used in the determination of Cost Avoidance.

D.1.3.2 Acceptance of Measurement & Verification Methods

Upon contract execution, Customer accepts the standard methods that Honeywell uses to conduct Retrofit Isolation Method (RIM) and Option C Measurement & Verification (M&V), as well as cost avoidance calculations, as described herein and inferenced by or included in the energy calculations and regression models attached hereto. Customer has the right and may to hire a consultant to review the calculations and comment before the contract is signed and the price accepted. Any future use of a consultant to review M&V methods and work product is at Customer's discretion and expense. Customer agrees that any such consultant's review shall be limited to the M&V methods as selected by the Customer prior to contract execution and as detailed and defined in this Agreement.

D.1.4 Operational Cost Savings. The first-year amount of Savings for Operational Costs is the sum of the below listed ECMs. The Savings are based on the Customer Guarantee Practices set forth in Section C.4. The Operational Costs Savings described below and identified in Section D.1 are deemed satisfied upon execution of the Part 2 Agreement. The Customer acknowledges and agrees that, if it did not enter into this Agreement, it would have to take future steps to achieve the same ends as does the Work included in Exhibit A, and that, in doing so, it would incur Operational Costs of at least the amount per year over the Guarantee Term as presented below and in the Schedule of Guaranteed Savings. The Customer agrees that, by entering into this Agreement, it will avoid future Operational Costs in at least these amounts.

Further, the Customer acknowledges that Operational Costs Savings categorized as capital cost avoidance are part of, or are causally connected to the Work specified in Exhibit A (i.e., the ECMs being implemented), and are documented by industry standard engineering methodologies acceptable to the Customer.

Customer agrees that the Baseline for the unit cost of Operational Costs will be adjusted each year of the Guarantee Term. This annually adjusted value of operational unit costs is stipulated as the new baseline in each succeeding year. Customer agrees that the Baseline adjustment is stipulated to be an escalation of 3% per year for Operational Costs used in the determination of Operational Costs Savings each year.

The Operational Costs Savings were identified, reviewed, and agreed to by a team of Customer's representatives led by Mark McGabe - Department Director of Ramsey County Parks and Recreation.

Operational Savings Description (OSD)	**Cost Avoidance Category (O&M, Capital)**	**1st Year Cost Avoidance**
Lighting Upgrades	O&M	$4,000
Solar PV Project	O&M	$58,491
Totals		**$62,491**

[a] O&M: operations and maintenance.

D.2 Baseline Operations and Adjustments

D.2.1 "Baseline Operating Parameters" are the Facility(ies) and system(s) operations measured and/or observed before commencement of the Work. Baseline Operating Parameters are stipulated in, and incorporated herein, as Exhibit J-1. See Energy Savings Calculations, attached hereto and incorporated herein as Exhibit J-4 for further information regarding stipulated Baseline Operating Parameters.

The data summarized will be used in the calculation of the Baseline energy consumption and/or demand and for calculating Baseline adjustments for changes in Facility operation that occur during the Guarantee Term. Honeywell and Customer agree that the Baseline Operating Parameters specified in this Section are representative of equipment operating characteristics during the Baseline Period specified in this Agreement. The following data was collected with the assistance Mark McGabe - Department Director of Ramsey County Parks and Recreation.

The Baseline Period is defined as 01/2023 to 12/2023.

The Baseline consists of the Baseline conditions and Baseline Operating Parameters collected from the Baseline Period and modified by Baseline adjustments, as necessary, as defined herein and by the Exhibits.

D.2.2 Pre-Retrofit Baseline Adjustments: The following describes the adjustments that have been made during the determination of the Baseline, prior to the determination of the projected Cost Avoidance and the Guaranteed Savings. The adjustments are due to those projects included in Exhibit A, or other known events, which increase Energy use prior to the application of the ECMs.

D.2.3 Post-Retrofit Baseline Adjustments: The following describes known future events, events not captured in pre-retrofit Baseline adjustments in Section D.2.2, which generally increase Energy use compared to the Baseline Period. This Energy use is added to the Baseline to determine an adjusted Baseline against which the Energy Costs Savings will be determined. Energy increases are variable and dependent on the actual use of equipment.

D.3 Guarantee Term Operations

D.3.1 "Guarantee Term Operating Parameters" are the Facility(ies) and system(s) operations as measured and/or observed after completion of Work. The data summarized will be used in the calculation of the post-retrofit Energy consumption and/or demand. Honeywell and Customer agree that the Guarantee Term Operating Parameters specified in this Section are representative of equipment operating characteristics during the Guarantee Term specified in this Agreement. And, further, that they are agreed to be reasonable and may be used in the calculation of the Cost Avoidance, as if the site is actually operating per the Guarantee Term Operating Parameters outlined in this Section.

Guarantee Term Operating Parameters are stipulated in <Guarantee Period Operating Parameters> attached hereto and incorporated herein as Exhibit J-2.

D.3.2 Operational Cost Avoidance: The following parameters, methodologies, and/or calculations were used in determining the Operational Costs and/or Cost Avoidance due to the Retrofit and M&V Services implementation and are agreed to be reasonable and may be used in the calculation of Savings.

Operational Costs Savings methodology and/or calculation details are attached hereto and are incorporated herein as the exhibits outlined in the following table.

Operational Savings Description	Cost Avoidance Methodology	Exhibit
1. Lighting	Maintenance reliability reduced failure rate	J-7
2. Solar Production Credit	Tariff Calculation per Engineering Calculation	J-7
The operational savings measures and which budget line items or invoice categories that are affected, are cross-referenced in each Operational Costs Savings Detail in the Exhibits.		

[a] O&M: operations and maintenance.

D.4 Other Energy and Operational Savings Measures

The following measures *were* not included in the Guaranteed Savings but may be used during the Guarantee Term in the determination of realized Cost Avoidance, or , calculation of performance versus the Guaranteed Savings, or to show value-add to the Customer:

Description of Exhibit A Tasks not included in Sections D.1.1 or D.1.2 above		
ECM Rebate	**Rebate Amount**	**Total Rebates**
Lighting Rebate	$48,450	$48,450
VFD Rebates	$5,000	$5,000
Xcel Energy Custom Rebate	TBD	TBD
Total Rebates		**$53,450**

Honeywell will apply for these rebates on behalf of Customer.

PART E. CARBON AND ENERGY MANAGER (CEM) SOFTWARE TERMS

1 The Offerings and Fees

All fees are quoted in USD and are exclusive of any applicable taxes, commissions, import duties or other similar taxes or fees. The offerings comprise the components set out below (the "Offering(s)").

1.1 Software as a Service

1.1.1 SaaS Offering, Use Rights and Pricing

SKU	SaaS Offering name	Site	Use Rights and Usage Metrics	SaaS Term Start Date	SaaS Subscription Term (the "SaaS Term")	Fee Basis /Quantity	Total Fee	Annual Fee
SBT-CEM-ADV	CEM CONTROL FOR 28 METERS	Meters as outlined in Exhibit A of this contract		Once deployment is complete	12 months	$8,950	$ 8,950	$8,950
	DEPLOYMENT - CEM CONTROL ENGG, SOLUTION SUPPORT & CLOUD CONNECTOR INSTALLATION					Included in installation price	Included in installation price	

* Unless the Customer provides prior written notice to Honeywell 30 days before the end of an initial "SaaS Term" or any renewal period, the subscription term shall auto-renew for successive periods of 12 months.

1.2 Total Fees

Year	Annual SAAS Fee
1	**$8,950**
2	**$9,219**
3	**$9,495**

1.3 Sites

The customer locations agreed for deployment of the Offering may be on a per site basis (a "**Site**"). Customer will ensure Site access, availability, and readiness for the Parties to meet all the dates provided in this Order Form.

Site name	Site Designation
Ramsey County	11 Sites as listed in Exhibit A.

Access and use of CEM is governed by the following terms and conditions:

SAAS TERMS

1. SaaS. These SaaS terms (the "**SaaS Terms**") set out the terms and conditions applicable to the software-as-a-service, online or cloud-based service or feature made available by Honeywell ("**SaaS**) as identified in the Order Form and form part of the Agreement. The SaaS Terms take precedence over other Agreement terms in relation to the SaaS. SaaS is an Offering under this Agreement.

2. **Use Rights**. Subject to Buyer's compliance with the terms and conditions of this Agreement, Honeywell: (a) will provide Buyer access to the SaaS via means authorized and provided by Honeywell (which may include online portals or interfaces such as https, VPN or API); and (b) hereby grants not Buyer a limited, non-transferable, non-exclusive, revocable non-sublicensable right and license to: (i) access and use the SaaS through such means; (ii) download, install, update or allow Honeywell to update (when applicable), and use software Honeywell provides solely in support of Buyer usage of the SaaS; and (iii) use Documentation for the SaaS as reasonably required in connection with the SaaS, in each case solely for Buyer's internal business purposes (collectively, "**SaaS Use Rights**"). SaaS Use Rights continue for the period stated in the applicable Order Form, or if no duration is stated, for 12 months from the Effective Date. Order Forms may list metrics, including user number, data volume, sensors or other means to measure usage or fees ("**SaaS Usage Metrics**"). SaaS Use Rights are subject to SaaS Usage Metrics and any other restrictions in this Agreement. If Buyer exceeds SaaS Usage Metrics, Honeywell may suspend Buyer's access until Buyer pays all required Fees. Buyer, its employees and any party accessing the SaaS on Buyer's behalf ("**Users**") may exercise SaaS Use Rights if Buyer binds them to the terms of this Agreement. Buyer is responsible, and Honeywell has no liability, for Users compliance with this Agreement, and for any breach, act, or omission by them. Buyer may not resell SaaS Use Rights or permit third parties (except Affiliates or service providers) to be Users and may not make copies of the SaaS (except for back up), in each case except as agreed by Honeywell in writing.

3. **Accounts**. Buyer may be required to download an app, or visit a website, through which Buyer accesses the SaaS and sets up accounts including issuance or authentication credentials. In operating Buyer's account Buyer and Users must: (a) maintain strict confidentiality of user names, passwords or other credentials; (b) assign accounts to unique individuals and not allow others to use Buyer's credentials or access Buyer's account, including sharing among multiple Users; (c) immediately notify Honeywell of any unauthorized use or breach of security or security incident related to Buyer's account; (d) submit only complete and accurate information; (e) maintain and promptly update information if it changes; and (f) manage User access. Honeywell may use rights management features (e.g. lockout) to prevent unauthorized use.

4. **Acceptable Use**. Buyer will not (and will not authorize, encourage or cooperate with any third party to): (a) reverse engineer, modify, adapt, make machine code human readable or creating derivative works or improvements of the SaaS; (b) circumvent or interfere with the technical protections, security or operation (including disrupting, interacting in an unauthorized manner, probing, scanning or testing the vulnerability of security measures or misrepresenting transmission sources) of the SaaS; (c) perform competitive analysis (including benchmark testing) or create, train or improve a substantially similar product or service to the SaaS; (d) access or use of the SaaS in a manner that infringes another's intellectual property rights; (e) employ the SaaS in hazardous environments or inherently dangerous applications, including any product, part, service or other application that could result in death personal injury requiring fail-safe performance where failure could lead directly or indirectly to personal injury or death or property or environmental damage; (f) employ the SaaS (or as a substitute for) a third-party monitored emergency notification system; (g) access or use the SaaS in a manner that would reasonably be expected to cause liability or harm to Honeywell or Honeywell's customers; (h) employ the SaaS for critical control of environments, emergency situations, life safety or critical purposes; (i) upload to or use with the SaaS any technical data or software controlled under the International Traffic in Arms Regulations (ITAR) or other Export/Import Control Laws; (j) train any machine learning or artificial intelligence algorithm, software or system using the SaaS, any Know-how or Buyer Specific Data; (k) sublicense, distribute or otherwise make available any portion of the SaaS (including any functionality of the SaaS) to a third party; (l) use or provide Know-how or Buyer Specific Data (directly or indirectly) in relation to development of any offering that may compete with the SaaS or any offerings of Honeywell or its Affiliates. Any violation of the restrictions in this Section constitute a material breach of this Agreement.

5. **Set Up, Support**. Initial set up and configuration are provided if stated in the Order Form. Honeywell will manage, maintain and support the SaaS ("**SaaS Support**") in accordance with the policies specified in the Order Form or, if none are specified, Honeywell will use commercially reasonable efforts to maintain the SaaS, repair reproducible defects and make the SaaS available subject to scheduled downtime, routine and emergency maintenance. Except as expressly set out in this Agreement, Buyer is responsible for the connectivity required to use the SaaS and for maintaining the equipment and infrastructure that connects to the SaaS. Set up and SaaS Support excludes device or Third-Party App set up unless stated in the Order Form. Honeywell is not responsible or liable for issues, problems, latency, unavailability, delay or security incidents arising from or related to: (i) conditions or events reasonably outside of Honeywell's control; (ii) cyberattack; (iii) public internet and communications networks; (iv) data, software, hardware, services, virtual machines, telecommunications, infrastructure or other equipment not provided by Honeywell, or acts or omissions of third parties Buyer retains; (v) Buyer and Buyer Users' negligence or failure to use the latest version or follow Documentation; (vi) modifications or alterations not made by Honeywell; (vii) loss or corruption of data; (viii) unauthorized access via Buyer's credentials; (ix) Buyer's failure to use commercially reasonable administrative, physical and technical safeguards to protect Buyer systems or data or follow industry-standard security practices; or (x) acts or omissions of Buyer, Users or other third parties Buyer retains, in breach of this Agreement. Honeywell reserves the right to modify the SaaS if such modification does not materially diminish the functionality of the SaaS. Honeywell may monitor Buyer's usage of the SaaS.

6. **Suspension, Termination**. Honeywell may without liability immediately suspend Buyer's SaaS Use Rights without notice if Honeywell determines that Buyer or Users are or may be in violation this Agreement, pose a security threat or Buyer's use of the SaaS is likely to cause immediate and ongoing harm to Honeywell or others. During suspension, Buyer and Users will not have access to the SaaS and may be unable to access Input Data or Buyer Specific Data. Upon termination or expiry Buyer's SaaS Use Rights will expire and Buyer must cease use of the SaaS and delete all copies of SaaS documentation and credentials. Buyer will remain responsible for all Fees Buyer has accrued. Within a reasonable period of time after receipt of Buyer's

request made within 30 days after the effective date of expiry or termination, Honeywell will, to the extent technically practical and available as a generally available feature of the SaaS, provide a file of Buyer's Input Data and Buyer Specific Data in a commonly used format. Honeywell will have no other obligation to maintain or provide to Buyer Input Data or Buyer Specific Data and may thereafter, unless legally prohibited, delete all Buyer's Input Data and Buyer Specific Data in Honeywell's possession or control.

7. **Buyer Specific Data**. Unless agreed otherwise in writing by Honeywell or its Affiliates and Buyer or its Affiliates, Buyer owns and reserves all right, title and interest, including all intellectual property rights, in output data generated by the SaaS that identifies the Buyer or its Users ("**Buyer Specific Data**"). Buyer hereby grants to Honeywell a non- exclusive, transferable, worldwide, perpetual, irrevocable, sublicensable (through multiple tiers), royalty-free and fully paid-up right and license to use to use the Buyer-Specific Data to develop, operate, improve and support Honeywell's products, services and offerings. Honeywell may use Buyer-Specific Data for any other purpose provided it is in an anonymized form that does not identify Buyer or any data subjects. Buyer Specific Data is Buyer's Confidential Information (except if anonymized).

8. **Know-how**. Honeywell and its Affiliates and licensors own and reserve all right, title and interest, including all intellectual property rights: (i) in and to the SaaS and all derivative works, modifications and improvements of the SaaS; and (ii) in and to know-how and information (excluding Input Data and Buyer Specific Data) that is developed by Honeywell or its Affiliates by analyzing Input Data or Buyer Specific Data or generated via, or derived from, providing or supporting the SaaS ("**Know-how**"). The operation of the SaaS and Know-how is Honeywell's Confidential Information. Subject to Buyer's compliance with the terms and conditions of this Agreement (including acceptable use), Honeywell hereby grants to Buyer a limited, non-transferable, non-exclusive, revocable, non-sublicensable right and license to use Know-how solely for its internal business purposes in connection with exercise of SaaS Use Rights.

9. **Security**. Security is governed by policies in the Order Form or if none are specified Honeywell will use commercially reasonable administrative, physical and technical safeguards designed to protect Personal Data, Input Data and Buyer Specific Data and follow industry-standard security practices, as set out in the Security Practices at https://hwll.co/securitypractices. Buyer is solely responsible for costs or liability incurred due to unauthorized use or access through Buyer's or Users account credentials or systems and for security of on-premises software and hardware.

10. **Third-Party Apps**. The SaaS may contain features designed to interoperate with applications, software or platforms provided by Buyer or a third party ("**Third-Party Apps**"). Buyer's use of a Third-Party App is subject to a separate agreement between Buyer and the relevant third party. Buyer grants Honeywell all rights necessary for Honeywell to facilitate interoperation between such Third party Apps and the SaaS. Honeywell does not warrant or support Third-Party Apps and cannot guarantee their continued security, availability or performance. Buyer's use of a Third-Party App may enable transfer of Input Data, Buyer Specific Data or Personal Data outside of the SaaS and Buyer is solely responsible any liability or loss relating to such transfer.

11. **Limitation**. LIABILITY FOR BREACH OF SECTION 2 (USE RIGHTS) OR 4 (ACCEPTABLE USE) ARE NOT SUBJECT TO THE LIMITATION ON LIABILTY SET OUT IN SECTION 11.6 OF THE PART 2 AGREEMENT.

12. **Disaster Recovery, Back up**. Honeywell maintains disaster recovery and business continuity plans to manage material loss or failure in the facilities, equipment or technologies used to provide the SaaS ("**Disaster Failure**"). Unless agreed otherwise in writing, Honeywell does not offer account recovery of data separately from that of any other customer and Honeywell is not responsible if backups fail, are incomplete, or could not be performed or Input Data or Buyer Specifci Data is lost or damaged. In the event of Disaster Failure Honeywell will use commercially reasonable efforts to restore to the most recently available backup. Honeywell's obligations set out in this section are Honeywell's sole obligations, and Buyer's sole and exclusive remedy, for Disaster Failure.

EXHIBIT K
SUMMARY OF INSTALLATION PRICE AND SAVINGS

A summary of the installation price, annual utility savings, and annual stipulated operational cost savings associated with each Energy Conservation Measure (ECM) is provided in the table below. The table below, along with the Scope of Work (Exhibit A), and the Services Agreement (Exhibit J) is provided to satisfy the requirements of the Minnesota Statutes Section 471.345 Subdivision 13.

ECM No.	Description	Installation Price	Annual Utility Savings	Annual Stipulated Operational Cost Savings
1	Lighting Upgrades	$442,645	$36,655	$4,000
2	Building Envelope Upgrades	$122,721	$7,895	$0
3	Controls Upgrades	$290,402	$4,656	$0
4	Mechanical Upgrades	$704,007	$13,040	$0
5	Solar Photovoltaic	$4,896,095	$111,838	$58,491
6	CEM Monitor & Control	$32,371	$0	$0
	Total	***$6,488,241***	***$174,084***	***$62,491***

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
CHARLESMSCHULZHIGHLANDARENA	1	2		MEETING RM	2,000	T5RA	14	72	2,016	LT3.1	14	29	798	1,218	EO	2	0	0	0	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	2	2		MEETING RM	0		0		0	LENS3	3	0	0	0		0	0	0	0		REPLACE 2X4 ACRYLIC TROFFER LENS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	3	2		MEETING RM	8,760	X5	2	2	35	X2	2	2	35	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	4	2		MEETING RM STORAGE	500	T5RA	4	72	144	LT3.1	4	29	57	87	EO	1	0	0	0	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	5	1		CDH GIRLS HOCKEY LOCKER RM	2,500	T5RA	5	72	900	LT3	5	29	356	544	O3	2	1,500	214	142	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	5	1		CDH GIRLS HOCKEY ENTRY	4,535	LED5	1	15	68	LA	1	15	68	0		0	0	0	0	DISC: WITH 15 WATTS LED	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	6	1		CDH GIRLS HOCKEY SHOWER	2,500	V1RA	2	48	240	LT2.1	2	19	95	145	O3	0	1,500	57	38	4' VAPOR TIGHT: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	CONTROLLED BY MAP 5.0
CHARLESMSCHULZHIGHLANDARENA	7	1		CDH GIRLS HOCKEY TEAM RM	2,500	T3RA	13	48	1,560	LT2	13	19	618	943	O3	1	1,500	371	247	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	8	1		CDH GIRLS HOCKEY TEAM RM	2,500	LD9	3	15	113	LA	3	15	113	0	O3	0	1,500	68	45	15 WATT PAR30 LED LAMP	LEAVE ALONE	CONTROLLED BY MAP 7.0
CHARLESMSCHULZHIGHLANDARENA	9	1		CDH GIRLS HOCKEY TEAM RM	2,500	T3RA	13	48	1,560	LT2	13	19	618	943	O3	1	1,500	371	247	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	10	1		CDH GIRLS HOCKEY TEAM RM	2,500	LD9	3	15	113	LA	3	15	113	0	O3	0	1,500	68	45	15 WATT PAR30 LED LAMP	LEAVE ALONE	CONTROLLED BY MAP 9.0
CHARLESMSCHULZHIGHLANDARENA	11	1		CDH GIRLS HOCKEY EQUIP RM	1,000	T5RA	1	72	72	LT3.1	1	29	29	44		0	0	0	0	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	12	1		CDH BOYS HOCKEY LOCKER RM	2,500	T5RA	5	72	900	LT3	5	29	356	544	O3	2	1,500	214	142	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	12	1		CDH BOYS HOCKEY ENTRY	4,535	LED5	1	15	68	LA	1	15	68	0		0	0	0	0	DISC: WITH 15 WATTS LED	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	13	1		CDH BOYS HOCKEY SHOWER	2,500	V1RA	2	48	240	LT2.1	2	19	95	145	O3	0	1,500	57	38	4' VAPOR TIGHT: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	CONTROLLED BY MAP 12.0
CHARLESMSCHULZHIGHLANDARENA	14	1		CDH BOYS HOCKEY TEAM RM	2,500	T3RA	13	48	1,560	LT2	13	19	618	943	O3	1	1,500	371	247	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	15	1		CDH BOYS HOCKEY TEAM RM	2,500	LD9	5	15	188	LA	5	15	188	0		0	0	0	0	15 WATT PAR30 LED LAMP	LEAVE ALONE	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
CHARLESMSCHULZHIGHLANDARENA	16	1		CDH BOYS HOCKEY TEAM RM	2,500	T3RA	13	48	1,560	LT2	13	19	618	943	O3	1	1,500	371	247	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	17	1		CDH BOYS HOCKEY TEAM RM	2,500	LD9	5	15	188	LA	5	15	188	0		0	0	0	0	15 WATT PAR30 LED LAMP	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	18	1		CDH BOYS HOCKEY EQUIP RM	1,000	T5RA	1	72	72	LT3.1	1	29	29	44		0	0	0	0	2X4 RECESS TROFFER: WITH (3) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	19	2		CORNERSTONE RM (MEETING)	2,500	T2RA	11	48	1,320	LT2	11	19	523	798	O2	2	1,500	314	209	2X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	20	2		CORNERSTONE RM (MEETING)	8,760	X4	2	2	35	X1	2	2	35	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	NEW REPLACEMENT LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	21	2		CORNERSTONE RM (MEETING)	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	22			ICE RINK (NORTH ARENA)	4,535	HB10	21	590	56,189	LED3	21	323	30,761	25,428		0	0	0	0	2X4 HIGHBAY: WITH (6) 4' 54 WATT T5HO LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 323 WATT LED, WIRE GUARD	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	23	2		ICE RINK STANDS (NORTH ARENA)	4,535	W1RA	12	48	2,612	LT2	12	19	1,034	1,578		0	0	0	0	4' WRAP: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	24	2		ICE RINK STANDS (NORTH ARENA)	0		0		0	LENS2	6	0	0	0		0	0	0	0		REPLACE 4' WRAP LENS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	25			ICE RINK (NORTH ARENA)	8,760	X5	3	2	53	X2	3	2	53	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	26			ICE RINK (NORTH ARENA)	8,760	X5	2	2	35	LA	2	2	35	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	27			ICE RINK (NORTH ARENA)	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	28	1		UNDER STANDS (STORAGE)	500	S5RA	8	96	384	LT4.1	8	38	152	232		0	0	0	0	8' STRIP: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) MAGNETIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	29	1		UNDER STANDS (STORAGE)	0	EM2	1	3	0	EM2	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	REPLACE EXISTING EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	30	1		UNDER STANDS (STORAGE)	0	EM2	3	3	0	LA	2	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	31	1		TEAM RM 8	2,720	ST3RA	6	48	783	LT2	6	19	310	473	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	32	1		TEAM RM 7	2,720	ST3RA	6	48	783	LT2	6	19	310	473	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
CHARLESMSCHULZHIGHLANDARENA	33	1		TEAM RM 6	2,720	ST3RA	6	48	783	LT2	6	19	310	473	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	34	1		TEAM RM 5	2,720	ST3RA	5	48	653	LT2	5	19	258	394	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	35	1		TEAM RM 5	2,720		0		0	LENS1	1	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	36	1		HALLWAY	3,175	ST3RA	3	48	457	LT2	3	19	181	276	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	37	1		LOBBY TO NORTH ARENA	4,535	ST3RA	10	48	2,177	LT2	10	19	862	1,315	O5	3	3,175	603	258	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS
CHARLESMSCHULZHIGHLANDARENA	37	1		LOBBY TO NORTH ARENA (NL)	8,760	ST3RA	2	48	841	LT2	2	19	333	508		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	37	1		LOBBY TO NORTH ARENA	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	37	1		LOBBY TO NORTH ARENA	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	37	1		LOBBY TO NORTH ARENA	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	38	1		SKATE SHARPENING (NA)	2,000	ST3RA	2	48	192	LT2	2	19	76	116	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	39	1		TEAM RM 3	2,720	ST3RA	3	48	392	LT2	3	19	155	237	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	40	1		TEAM RM 4	2,720	ST3RA	3	48	392	LT2	3	19	155	237	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	41	1		ELEV EQUIP RM (NA)	500	I1RA	1	48	24	LT2.1	1	19	10	15		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	42	1		ELECTRICAL	500	S5RA	3	96	144	LT4.1	3	38	57	87		0	0	0	0	8' STRIP: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) MAGNETIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	43	1		ZAMBONI GARAGE	4,535	S5RA	5	96	2,177	LT4	5	38	862	1,315		0	0	0	0	8' STRIP: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) MAGNETIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	44	1		ZAMBONI GARAGE (NL)	8,760	S5RA	1	96	841	LT4	1	38	333	508		0	0	0	0	8' STRIP: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) MAGNETIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	45	1		ZAMBONI GARAGE (NL)	8,760	S2RA	1	48	420	LT2	1	19	166	254		0	0	0	0	4' STRIP: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
CHARLESMSCHULZHIGHLANDARENA	46	1		ZAMBONI GARAGE	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	47	1		ZAMBONI GARAGE	0	I1RA	6	48	0	LT2.2	6	19	0	0	EO	1	0	0	0	4' INDUSTRIAL: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	48	1		ZAMBONI GARAGE (NL)	8,760		1		0	LA	0					0	0	0	0		LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	49	1		COMPRESSOR RM	500	I1RA	6	48	144	LT2.2	6	19	57	87	EO	1	0	0	0	4' INDUSTRIAL: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	50	1		COMPRESSOR RM	500	F3	1	23	12	LD2	1	9	5	7		0	0	0	0	23 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	51	1		COMPRESSOR RM	500	I1LD	1	30	15	LA	1	30	15	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	52	1		JANITOR	500	F2	2	18	18	LD2	2	9	9	9		0	0	0	0	18 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	53	1		LOCKER RM	2,000	ST3RA	1	48	96	LT2	1	19	38	58		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	54	1		LOBBY TO SOUTH ARENA	4,535	ST3RA	7	48	1,524	LT2	7	19	603	921	O5	1	3,175	422	181	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS
CHARLESMSCHULZHIGHLANDARENA	54	1		LOBBY TO SOUTH ARENA	8,760	X5	1	2	18	X2	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	54	1		LOBBY TO SOUTH ARENA	0		0		0	LENS1	1	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	55	1		LOBBY TO SOUTH ARENA (NL)	8,760	ST3RA	1	48	420	LT2	1	19	166	254		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	56	1		TEAM RM 2	4,535	ST3RA	6	48	1,306	LT2	6	19	517	789	O3	1	2,721	310	207	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	57	1		TEAM RM 1	4,535	ST3RA	6	48	1,306	LT2	6	19	517	789	O3	1	2,721	310	207	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	58	1		M. REST	4,535	ST3RA	3	48	653	LT2	3	19	258	395	O3	1	2,721	155	103	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	59	1		W. REST	4,535	ST3RA	3	48	653	LT2	3	19	258	395	O3	1	2,721	155	103	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	60			SOUTH ARENA	4,535	HB8	45	296	60,406	LED1	45	174	35,509	24,897		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
CHARLESMSCHULZHIGHLANDARENA	61			SOUTH ARENA	4,535	V1LD	1	30	136	LA	1	30	136	0		0	0	0	0	4' VAPOR TIGHT: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	62			SOUTH ARENA	8,760	X5	6	2	105	X2	6	2	105	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	63	1		SOUTH ARENA STORAGES (NA)	500	C3	2	75	75	LD2	2	9	9	66		0	0	0	0	75 WATT A19 INCANDESCENT LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	64	1		LOCKER RM	4,535	LED6	2	100	907	LA	2	100	907	0		0	0	0	0	2X2 HIGH BAY: WITH 100 WATTS LED	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	65	1		LOCKER RM (JELLY JAR)	4,535	F3	1	23	104	LD2	1	9	41	63		0	0	0	0	23 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	66	1		SKILLS RM	2,500	LED6	6	100	1,500	LA	6	100	1,500	0		0	0	0	0	2X2 HIGH BAY: WITH 100 WATTS LED	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	67	1		SKILLS RM	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	68	1		REST	1,500	LED5	1	15	23	LA	1	15	23	0		0	0	0	0	DISC: WITH 15 WATTS LED	LEAVE ALONE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	69	1		SOUTH REF RM	1,500	I1RA	1	48	72	LT2.1	1	19	29	44		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	70	1		OFFICE (NA)	1,500	ST3RA	4	48	288	LT2	4	19	114	174	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	71	1		FIRST AID (NA)	1,500	ST3RA	2	48	144	LT2	2	19	57	87	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	72	2		STAIRWELL	8,760	W1RA	1	48	420	LT2.2	1	19	166	254		0	0	0	0	4' WRAP: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	73	2		LOBBY TO NORTH ARENA	4,535	T1RA	26	96	11,319	LT4	26	38	4,481	6,839	O2	5	3,175	3,136	1,344	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	74	2		LOBBY TO NORTH ARENA (NL)	8,760	T1RA	3	96	2,523	LT4	3	38	999	1,524		0	0	0	0	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	75	2		LOBBY TO NORTH ARENA	8,760	X4	1	2	18	X1	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	NEW REPLACEMENT LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	76	2		LOBBY TO NORTH ARENA	0	EM2	1	3	0	EM2	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	REPLACE EXISTING EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	77	2		LOBBY TO NORTH ARENA	0	EM2	2	3	0	LA	2	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
CHARLESMSCHULZHIGHLANDARENA	78	2		OFFICE	2,000	T1RA	2	96	384	LT4	2	38	152	232	O2	1	1,700	129	23	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	79	2		BREAK RM	3,000	T1RA	2	96	576	LT4	2	38	228	348	O1	1	1,800	137	91	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	80	2		HALLWAY	4,535	T1RA	1	96	435	LT4	1	38	172	263		0	0	0	0	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	81	2		CONCESSIONS	2,000	T1RA	2	96	384	LT4	2	38	152	232	O2	1	1,400	106	46	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	82	2		CUSTODIAL	500	T2RA	1	48	24	LT2.1	1	19	10	15		0	0	0	0	2X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	83	2		MEETING RM	3,000	T1RA	8	96	2,304	LT4	8	38	912	1,392	O2	1	1,800	547	365	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY
CHARLESMSCHULZHIGHLANDARENA	84	2		MISC (NA)	1,000	T2RA	2	48	96	LT2.1	2	19	38	58		0	0	0	0	2X4 RECESS TROFFER: WITH (2) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
CHARLESMSCHULZHIGHLANDARENA	85	2		M. REST	2,720	T1RA	3	96	783	LT4	3	38	310	473	EO	1	0	0	0	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	86	2		W. REST	2,720	T1RA	3	96	783	LT4	3	38	310	473	EO	1	0	0	0	2X4 RECESS TROFFER: WITH (4) 4' 25 & 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
CHARLESMSCHULZHIGHLANDARENA	87			EXTERIOR (WALL PACKS)	4,380	LED2	14	45	2,759	LA	14	45	2,759	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	1	1		LOBBY	3,100	ST3R	20	59	3,658	LT2	20	19	1,178	2,480	O3	2	2,170	825	353	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
GUSTAFSONPHALENARENA	2	1		LOBBY	8,760	X4	1	2	18	X1	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	NEW REPLACEMENT LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE	LEAVE ALONE
GUSTAFSONPHALENARENA	3	1		LOBBY	0	EM2	1	3	0	EM2	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	REPLACE EXISTING EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE
GUSTAFSONPHALENARENA	4	1		CONCESSION SEATING	3,100	W1R	6	59	1,097	LT2	6	19	353	744	O3	1	2,170	247	106	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
GUSTAFSONPHALENARENA	5	1		CONCESSION SEATING	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	6	1		STORAGE	500	W1R	2	59	59	LT2.1	2	19	19	40		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
GUSTAFSONPHALENARENA	7	1		CONCESSIONS	2,500	W1R	3	59	443	LT2	3	19	143	300	O2	1	1,750	100	43	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LOW VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, (1) POWER PACK, PASSIVE INFRA-RED TECHNOLOGY

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
GUSTAFSONPHALENARENA	8	1		CONCESSIONS STORAGE	500	W1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
GUSTAFSONPHALENARENA	9	1		W. REST	2,500	ST3R	3	59	443	LT2	3	19	143	300	O3	1	1,500	86	57	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
GUSTAFSONPHALENARENA	10	1		CLOSET	500	C3	1	75	38	LD2.1	1	9	5	33		0	0	0	0	75 WATT A19 INCANDESCENT LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
GUSTAFSONPHALENARENA	11	1		M. REST	2,500	ST3R	3	59	443	LT2	3	19	143	300	O3	1	1,500	86	57	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
GUSTAFSONPHALENARENA	12	1		OFFICE	2,000	ST3R	3	59	354	LT2	3	19	114	240	O1	1	1,700	97	17	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
GUSTAFSONPHALENARENA	13	1		HALLWAY	2,500	ST3R	2	59	295	LT2	2	19	95	200	O1	1	1,750	67	29	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
GUSTAFSONPHALENARENA	14	1		LOCKER RM	2,500	ST3R	2	59	295	LT2	2	19	95	200	O1	1	1,500	57	38	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
GUSTAFSONPHALENARENA	15	1		ZAMBONI GARAGE	3,100	I1R	6	59	1,097	LT2.2	6	19	353	744		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
GUSTAFSONPHALENARENA	16	1		SPRINKLER RM	500	I1LD	1	30	15	LA	1	30	15	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	17	1		SPRINKLER RM	500	LD4	1	15	8	LA	1	15	8	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	18	1		ELEC / MECH	1,000	I1LD	5	30	150	LA	5	30	150	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	18	1		ELEC / MECH	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	19			ICE RINK	3,100	HB8	46	296	42,210	LED1	46	174	24,812	17,397		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
GUSTAFSONPHALENARENA	20			ICE RINK	8,760	X5	5	2	88	LA	5	2	88	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	21			ICE RINK	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	22	1		LOCKER RM A	1,810	W4R	2	112	405	LT4	2	38	138	268	EO	1	0	0	0	4' WRAP: WITH (4) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	23	1		LOCKER RM B	1,810	W4R	2	112	405	LT4	2	38	138	268	EO	1	0	0	0	4' WRAP: WITH (4) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
GUSTAFSONPHALENARENA	24	1		OFFICIALS LOCKER	1,810	V1R	1	59	107	LT2.1	1	19	34	72	EO	1	0	0	0	4' VAPOR TIGHT: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	25	2		UPPER MECH	500	C5	2	150	150	LD4.1	2	16	16	134		0	0	0	0	150 WATT A23 INCANDESCENT LAMP	RETROFIT WITH (1) 16 WATT A19 LED LAMP	LEAVE ALONE
GUSTAFSONPHALENARENA	26	1		W. REST	1,810	W1R	2	59	214	LT2	2	19	69	145	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	27	1		M. REST	1,810	W1R	2	59	214	LT2	2	19	69	145	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	28	1		LOCKER RM C	1,810	W1R	4	59	427	LT2	4	19	138	290	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	29	1		LOCKER RM D	1,810	W1R	4	59	427	LT2	4	19	138	290	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
GUSTAFSONPHALENARENA	30	1		EXTERIOR (CANOPY)	4,380	LED1	2	30	263	LA	2	30	263	0		0	0	0	0	CANOPY: WITH 30 WATTS LED	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	31	1		EXTERIOR (WALL PACK)	4,380	LED2	10	45	1,971	LA	10	45	1,971	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
GUSTAFSONPHALENARENA	32	1		EXTERIOR (FLOOD)	4,380	LED3	2	30	263	LA	2	30	263	0		0	0	0	0	FLOOD: WITH 30 WATTS LED	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	1	1		LOBBY	2,000	ST3R	12	59	1,416	LT2	12	19	456	960	O5	2	1,400	319	137	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS
HARDINGARENA	2	1		LOBBY	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	3	1		W. REST	2,000	ST3R	3	59	354	LT2	3	19	114	240	O3	1	1,200	68	46	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
HARDINGARENA	4	1		CLOSET (NA)	500	C2	1	60	30	LD2	1	9	5	26		0	0	0	0	60 WATT A19 INCANDESCENT LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
HARDINGARENA	5	1		M. REST	2,000	ST3R	3	59	354	LT2	3	19	114	240	O3	1	1,200	68	46	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
HARDINGARENA	6	1		OFFICE	1,800	ST3R	3	59	319	LT2	3	19	103	216	O1	1	1,530	87	15	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
HARDINGARENA	7	1		HALLWAY	2,000	ST3R	2	59	236	LT2	2	19	76	160	O1	1	1,400	53	23	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
HARDINGARENA	8	1		LOCKER / OFFICE	1,800	ST3R	2	59	212	LT2	2	19	68	144	O1	1	1,080	41	27	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
HARDINGARENA	9	1		ZAMBONI GARAGE	2,000	I1R	6	59	708	LT2.2	6	19	228	480		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
HARDINGARENA	10	1		SPRINKLER RM	500	C4	2	100	100	LD4.1	2	16	16	84		0	0	0	0	100 WATT A21 INCANDESCENT LAMP	RETROFIT WITH (1) 16 WATT A19 LED LAMP	LEAVE ALONE
HARDINGARENA	11	1		ELEC / MECH	1,000	I1LD	5	30	150	LA	5	30	150	0	EO	1	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	
HARDINGARENA	12			ICE RINK	2,000	HB8	45	296	26,640	LED1	45	174	15,660	10,980		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
HARDINGARENA	13			ICE RINK	8,760	X5	4	2	70	LA	4	2	70	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	14			ICE RINK	8,760	X5	1	2	18	X2	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
HARDINGARENA	15			UNDER STAIRS (NA)	500	F2	1	18	9	LD2.1	1	9	5	5		0	0	0	0	18 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
HARDINGARENA	16	1		LOCKER RM 2	1,200	ST3R	4	59	283	LT2	4	19	91	192	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
HARDINGARENA	17	1		LOCKER RM 2	1,200	W1R	2	59	142	LT2	2	19	46	96	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
HARDINGARENA	18	1		LOCKER RM 0	1,200	W1R	2	59	142	LT2	2	19	46	96	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
HARDINGARENA	19	1		LOCKER RM 0	0		0		0	LENS2	2	0	0	0		0	0	0	0		REPLACE 4' WRAP LENS	LEAVE ALONE
HARDINGARENA	20	1		LOCKER RM 3	1,200	V1R	4	59	283	LT2.1	4	19	91	192	EO	1	0	0	0	4' VAPOR TIGHT: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
HARDINGARENA	21	1		LOCKER RM 3	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	22	1		LOCKER RM 4	1,200	V1R	4	59	283	LT2.1	4	19	91	192	EO	1	0	0	0	4' VAPOR TIGHT: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
HARDINGARENA	23	1		LOCKER RM 4	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	24	2		SHOOT & STICK HANDLING	1,800	HB6	8	222	3,197	LED4	8	132	1,901	1,296		0	0	0	0	2X4 HIGHBAY: WITH (6) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 132 WATT LED, WIRE GUARD	LEAVE ALONE
HARDINGARENA	25			EXTERIOR (CANOPY)	4,380	LED1	1	30	131	LA	1	30	131	0		0	0	0	0	CANOPY: WITH 30 WATTS LED	LEAVE ALONE	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
HARDINGARENA	26			EXTERIOR (WALL PACK)	4,380	LED2	1	45	197	LA	1	45	197	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
HARDINGARENA	27			EXTERIOR (FLOOD)	4,380	LED4	1	80	350	LA	1	80	350	0		0	0	0	0	FLOOD: WITH 80 WATTS LED	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	1			ICE RINK	2,000	HB8	45	296	26,640	LED1	45	174	15,660	10,980		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
KENYACKELWESTSIDEARENA	2	1		ICE RINK ENTRY	2,000	W1R	1	59	118	LT2	1	19	38	80		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	3			ICE RINK	8,760	X5	4	2	70	LA	4	2	70	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	4			ICE RINK	8,760	X5	1	2	18	X2	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
KENYACKELWESTSIDEARENA	5	1		TEAM RM 4	1,200	ST3R	4	59	283	LT2	4	19	91	192	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	6	1		TEAM RM 4	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
KENYACKELWESTSIDEARENA	7	1		EDGE STORAGE (NA)	500	W1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	8	2		UPPER STORAGE (NA)	500	I1R	2	59	59	LT2.1	2	19	19	40		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	9	1		REF LOCKER RM	1,000	ST3R	1	59	59	LT2.1	1	19	19	40		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	10	1		ZAMBONI GARAGE	1,800	I1R	7	59	743	LT2.2	7	19	239	504		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	11	1		STORAGE	500	LD4	2	15	15	LA	2	15	15	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	12	1		ELEC / MECH	1,000	I1R	2	59	118	LT2.2	2	19	38	80		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
KENYACKELWESTSIDEARENA	13	1		ELEC / MECH	1,000	I1LD	4	30	120	LA	4	30	120	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	14	1		LOCKER OFFICE	1,800	ST3R	2	59	212	LT2	2	19	68	144	O1	1	1,530	58	10	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
KENYACKELWESTSIDEARENA	15	1		LOCKER OFFICE	1,800	ST3R	4	59	425	LT2	4	19	137	288	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
KENYACKELWESTSIDEARENA	16	1		LOBBY	2,000	ST3R	12	59	1,416	LT2	12	19	456	960	O5	2	1,400	319	137	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS
KENYACKELWESTSIDEARENA	17	1		LOBBY	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
KENYACKELWESTSIDEARENA	18	1		LOBBY	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	19	1		W. REST	1,200	ST3R	3	59	212	LT2	3	19	68	144	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	20	1		M. REST	1,200	ST3R	3	59	212	LT2	3	19	68	144	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	21	1		TEAM RM 3	1,200	ST3R	4	59	283	LT2	4	19	91	192	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	22	1		TEAM RM 1 ENTRY	1,200	ST3R	2	59	142	LT2	2	19	46	96	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	22	1		TEAM RM 1	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	23	1		TEAM RM 1	1,200	ST3R	6	59	425	LT2	6	19	137	288	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	24	1		TEAM RM 1	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
KENYACKELWESTSIDEARENA	25	1		TEAM RM 2	1,200	ST3R	6	59	425	LT2	6	19	137	288	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
KENYACKELWESTSIDEARENA	26	2		UPPER STORAGE	500	LD4	1	15	8	LA	1	15	8	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	27			EXTERIOR (WALL PACK)	4,380	LED2	9	45	1,774	LA	9	45	1,774	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
KENYACKELWESTSIDEARENA	28			EXTERIOR (FLOOD)	4,380	LED4	3	80	1,051	LA	3	80	1,051	0		0	0	0	0	FLOOD: WITH 80 WATTS LED	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	1	1		ENTRY	2,000	ST3R	1	59	118	LT2	1	19	38	80		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
OSCARJOHNSONARENA	2	1		ENTRY	2,000	ST3RE	1	59	118	LT2E	1	19	38	80		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST, (1) EMERGENCY BATTERY BACKUP BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST, (1) EMERGENCY BATTERY BACKUP DRIVER	LEAVE ALONE
OSCARJOHNSONARENA	3	2		UPPER STORAGE	500	LD4	1	15	8	LA	1	15	8	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
OSCARJOHNSONARENA	4			ICE RINK	2,000	HB8	29	296	17,168	LED1	29	174	10,092	7,076		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
OSCARJOHNSONARENA	5	1		ICE RINK	8,760	X5	4	2	70	LA	4	2	70	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	6	1		ICE RINK	8,760	X5	1	2	18	X2	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
OSCARJOHNSONARENA	7	1		STORAGE (NA)	500	W1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
OSCARJOHNSONARENA	8	1		TEAM RM 4	1,200	ST3R	6	59	425	LT2	6	19	137	288	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	9	1		TEAM RM 4	0		0		0	LENS1	1	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
OSCARJOHNSONARENA	10	1		TEAM RM 3	1,200	ST3R	6	59	425	LT2	6	19	137	288	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	11	1		LOBBY	1,400	ST3R	11	59	909	LT2	11	19	293	616	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	12	1		LOBBY	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	13	1		LOBBY	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	14	1		LOCKER / STORAGE	500	ST3R	1	59	30	LT2	1	19	10	20	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	15	1		TEAM RM 1	1,200	ST3R	4	59	283	LT2	4	19	91	192	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	16	1		TEAM RM 2	1,200	ST3R	4	59	283	LT2	4	19	91	192	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	17	1		OFFICE	1,700	ST3R	2	59	201	LT2	2	19	65	136	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	18	1		W. REST	1,200	ST3R	2	59	142	LT2	2	19	46	96	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	19	1		M. REST	1,200	ST3R	2	59	142	LT2	2	19	46	96	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
OSCARJOHNSONARENA	20	1		MECHANICAL	500	S2R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' STRIP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
OSCARJOHNSONARENA	21	1		MISC (NA)	500	I1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
OSCARJOHNSONARENA	22	1		ZAMBONI GARAGE	1,900	I1LD	5	30	285	LA	5	30	285	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	23	1		ELEC / MECH	1,000	S5R	2	112	224	LT4.1	2	38	76	148		0	0	0	0	8' STRIP: WITH (4) 4' 32 WATT T8 LAMPS, (1) MAGNETIC BALLAST	RETROFIT WITH (3) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
OSCARJOHNSONARENA	24	1		ELEC / MECH TASK	500	I1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
OSCARJOHNSONARENA	25	1		ELEC / MECH	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	26			EXTERIOR (CANOPY)	4,380	LED1	2	30	263	LA	2	30	263	0		0	0	0	0	CANOPY: WITH 30 WATTS LED	LEAVE ALONE	LEAVE ALONE
OSCARJOHNSONARENA	27			EXTERIOR (WALL PACK)	4,380	H10	1	295	1,292	LED10	1	80	350	942		0	0	0	0	WALL PACK: WITH (1) 250 WATT HIGH PRESSURE SODIUM LAMP, (1) MAGNETIC BALLAST	NEW REPLACEMENT WALL PACK WITH 80 WATT LED, PHOTOCELL	LEAVE ALONE
PLEASANTARENA	1	1		OFFICE	2,000	ST3R	4	59	472	LT2	4	19	152	320	O1	1	1,700	129	23	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
PLEASANTARENA	2	1		HALLWAY	2,500	ST3R	2	59	295	LT2	2	19	95	200	O1	1	1,750	67	29	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
PLEASANTARENA	3	1		HALLWAY	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
PLEASANTARENA	4	1		LOCKER RM	2,250	ST3R	1	59	133	LT2	1	19	43	90	O1	1	1,350	26	17	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
PLEASANTARENA	5	1		LOCKER RM	0		0		0	LENS1	1	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
PLEASANTARENA	6	1		ZAMBONI GARAGE	2,765	I1LD	6	30	498	LA	6	30	498	0	EO	1	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	
PLEASANTARENA	7	1		SPRINKLER RM	500	F2	2	18	18	LD2	2	9	9	9		0	0	0	0	18 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
PLEASANTARENA	8	1		ELEC / MECH	1,000	I1LD	6	30	180	LA	6	30	180	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
PLEASANTARENA	9	1		ELEC / MECH	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
PLEASANTARENA	10	1		LOBBY	3,950	ST3R	8	59	1,864	LT2	8	19	600	1,264	O5	2	2,765	420	180	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
PLEASANTARENA	11	1		LOBBY	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
PLEASANTARENA	12	1		M. REST	3,950	ST3R	3	59	699	LT2	3	19	225	474	O3	1	2,370	135	90	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
PLEASANTARENA	13	1		W. REST	3,950	ST3R	3	59	699	LT2	3	19	225	474	O3	1	2,370	135	90	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
PLEASANTARENA	14	1		DANCE RM	3,950	ST3R	12	59	2,797	LT2	12	19	901	1,896	O5	2	2,765	630	270	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS
PLEASANTARENA	15			ICE RINK	3,950	HB8	45	296	52,614	LED1	45	174	30,929	21,686		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
PLEASANTARENA	16			ICE RINK	8,760	X5	2	2	35	LA	2	2	35	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
PLEASANTARENA	17	2		UPPER STORAGE (NA)	500	C3	2	75	75	LD2.1	2	9	9	66		0	0	0	0	75 WATT A19 INCANDESCENT LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
PLEASANTARENA	18	1		SPFSC CONF / STUDY RM	1,700	W1R	2	59	201	LT2	2	19	65	136	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
PLEASANTARENA	19	1		SPFSC CONF / STUDY RM	0		0		0	LENS2	1	0	0	0		0	0	0	0		REPLACE 4' WRAP LENS	LEAVE ALONE
PLEASANTARENA	20	1		SPFSC CLOSET	500	W1R	1	59	30	LT2.1	1	19	10	20	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
PLEASANTARENA	21	1		SPFSC COACHES OF	1,700	W1R	2	59	201	LT2	2	19	65	136	EO	1	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
PLEASANTARENA	22	1		SPFSC COACHES OF	0		0		0	LENS2	2	0	0	0		0	0	0	0		REPLACE 4' WRAP LENS	LEAVE ALONE
PLEASANTARENA	23	1		LOCKER RM 2	2,370	ST3R	6	59	839	LT2	6	19	270	569	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
PLEASANTARENA	24	1		LOCKER RM 1	2,370	ST3R	6	59	839	LT2	6	19	270	569	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
PLEASANTARENA	25			EXTERIOR (FLOOD)	4,380	LED4	2	80	701	LA	2	80	701	0		0	0	0	0	FLOOD: WITH 80 WATTS LED	LEAVE ALONE	LEAVE ALONE
PLEASANTARENA	26			EXTERIOR (WALL PACK)	4,380	LED2	4	45	788	LA	4	45	788	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	1	1		LOBBY	2,100	ST3R	11	59	1,363	LT2	11	19	439	924	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
SHOREVIEWARENA	2	1		LOBBY	0	EM2	1	3	0	LA	1	3	0	0		0	0	0	0	EMERGENCY BATTERY BACK-UP BUGEYE FLOOD	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	3	1		LOBBY	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	4	1		LOCKER / STORAGE	500	ST3R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
SHOREVIEWARENA	5	1		OFFICE	1,700	ST3R	2	59	201	LT2	2	19	65	136	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	6	1		TEAM RM 2	1,860	ST3R	4	59	439	LT2	4	19	141	298	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	7	1		TEAM RM 1	1,860	ST3R	4	59	439	LT2	4	19	141	298	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	8	1		MECHANICAL	500	S2R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' STRIP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
SHOREVIEWARENA	9	1		M. REST	1,860	ST3R	1	59	110	LT2.1	1	19	35	74	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	10	1		W. REST	1,860	ST3R	1	59	110	LT2.1	1	19	35	74	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	11	1		STORAGE (NA)	500	ST3R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
SHOREVIEWARENA	12	1		TEAM RM 3	1,860	ST3R	6	59	658	LT2	6	19	212	446	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	13	1		TEAM RM 4	1,860	ST3R	6	59	658	LT2	6	19	212	446	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
SHOREVIEWARENA	14	1		ELEC / MECH	1,000	S5LD	1	60	60	LA	1	60	60	0		0	0	0	0	8' STRIP: WITH (4) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	15	1		ELEC / MECH	1,000	S2LD	3	30	90	LA	3	30	90	0		0	0	0	0	4' STRIP: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	16	1		ZAMBONI GARAGE	3,000	I1R	5	59	885	LT2.1	5	19	285	600		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
SHOREVIEWARENA	17	2		UPPER STORAGE	500	F4	1	26	13	LD4.1	1	16	8	5		0	0	0	0	26 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 16 WATT A19 LED LAMP	LEAVE ALONE
SHOREVIEWARENA	17	2		MEZZANINE	3,100	F4	4	26	322	LD4.1	4	16	198	124		0	0	0	0	26 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 16 WATT A19 LED LAMP	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
SHOREVIEWARENA	18	1		ENTRY	3,100	ST3R	1	59	183	LT2	1	19	59	124		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
SHOREVIEWARENA	19	1		ENTRY	3,100	ST3RE	1	59	183	LT2E	1	19	59	124		0	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST, (1) EMERGENCY BATTERY BACKUP BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST, (1) EMERGENCY BATTERY BACKUP DRIVER	LEAVE ALONE
SHOREVIEWARENA	20			ICE RINK	3,100	HB8	53	296	48,633	LED1	53	174	28,588	20,045		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
SHOREVIEWARENA	21	1		ICE RINK	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	22	1		ICE RINK	8,760	X4	1	2	18	X1	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	NEW REPLACEMENT LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE	LEAVE ALONE
SHOREVIEWARENA	23	1		ICE RINK	8,760	X5	2	2	35	X2	2	2	35	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
SHOREVIEWARENA	24	1		ICE RINK	8,760	X5	1	2	18	X2	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	NEW REPLACEMENT COMBO LED EXIT SIGN WITH 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE
SHOREVIEWARENA	25	1		EXTERIOR (WALL PACK)	4,380	H10	2	295	2,584	LED11	2	45	394	2,190		0	0	0	0	WALL PACK: WITH (1) 250 WATT HIGH PRESSURE SODIUM LAMP, (1) MAGNETIC BALLAST	NEW REPLACEMENT WALL PACK WITH 45 WATT LED, PHOTOCELL	LEAVE ALONE
SHOREVIEWARENA	26	1		EXTERIOR (JELLY JAR)	4,380	F3	1	23	101	LD2.1	1	9	39	61		0	0	0	0	23 WATT COMPACT FLUORESCENT SCREW-IN LAMP	RETROFIT WITH (1) 9 WATT A19 LED LAMP	LEAVE ALONE
SHOREVIEWARENA	27	1		EXTERIOR (WALL PACK)	4,380	LED2	2	45	394	LA	2	45	394	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	28	1		EXTERIOR (FLOOD)	4,380	LED4	5	80	1,752	LA	5	80	1,752	0		0	0	0	0	FLOOD: WITH 80 WATTS LED	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	29	1		EXTERIOR (CANOPY)	4,380	LED1	2	30	263	LA	2	30	263	0		0	0	0	0	CANOPY: WITH 30 WATTS LED	LEAVE ALONE	LEAVE ALONE
SHOREVIEWARENA	30	1		EXTERIOR	4,380	LD9	2	15	131	LA	2	15	131	0		0	0	0	0	15 WATT PAR30 LED LAMP	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	1	1		ZAMBONI GARAGE	2,400	I1LD	6	30	432	LA	6	30	432	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	2	1		ELEC / MECH	1,000	I1LD	6	30	180	LA	6	30	180	0		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 15 WATT T8 LED LAMPS	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	3	1		STORAGE	500	LD4	1	15	8	LA	1	15	8	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	4	1		LOCKER RM	2,500	ST3R	1	59	148	LT2.1	1	19	48	100	O1	1	1,500	29	19	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Existing Fixture*				*Proposed Fixture*					*Occupancy Sensors*					*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
						Type	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*			
WHITEBEARARENA	5	1		HALLWAY	2,500	ST3R	2	59	295	LT2	2	19	95	200	O1	1	1,750	67	29	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
WHITEBEARARENA	6	1		OFFICE	2,000	ST3R	4	59	472	LT2	4	19	152	320	O1	1	1,700	129	23	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE WALL MOUNTED SENSOR WITH 180 DEGREE LENS,SINGLE POLE SWITCH, PASSIVE INFRA-RED TECHNOLOGY
WHITEBEARARENA	7	1		LOBBY	1,620	ST3R	16	59	1,529	LT2	16	19	492	1,037	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	7	1		LOBBY	8,760	X5	1	2	18	LA	1	2	18	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	8	1		W. REST	2,500	ST3R	3	59	443	LT2	3	19	143	300	O3	1	1,500	86	57	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
WHITEBEARARENA	9	1		M. REST	2,500	ST3R	3	59	443	LT2	3	19	143	300	O3	1	1,500	86	57	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	OCCUPANCY SENSOR: (1) LINE VOLTAGE CEILING MOUNTED SENSOR WITH 360 DEGREE LENS, DUAL TECHNOLOGY
WHITEBEARARENA	10	1		LOCKER RM HALLWAY	1,620	ST3R	1	59	96	LT2	1	19	31	65	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	11	1		LOCKER RM HALLWAY	1,620	ST3RE	1	59	96	LT2E	1	19	31	65	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST, (1) EMERGENCY BATTERY BACKUP BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST, (1) EMERGENCY BATTERY BACKUP DRIVER	
WHITEBEARARENA	12	1		LOCKER RM HALLWAY	8,760	X4	1	2	18	LA	1	2	18	0		0	0	0	0	EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	13	1		LOCKER RM 1	1,620	ST3R	6	59	573	LT2	6	19	185	389	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	14	1		LOCKER RM 2	1,620	ST3R	6	59	573	LT2	6	19	185	389	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	15	1		LOCKER RM 2	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
WHITEBEARARENA	16	1		LOCKER RM 3	1,620	ST3R	4	59	382	LT2	4	19	123	259	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	16	1		LOCKER RM 3	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
WHITEBEARARENA	17	1		LOCKER RM 4	1,620	ST3R	3	59	287	LT2	3	19	92	194	EO	1	0	0	0	1X4 RECESS TROFFER: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	
WHITEBEARARENA	18	1		LOCKER RM 4	0		0		0	LENS1	2	0	0	0		0	0	0	0		REPLACE 1X4 ACRYLIC TROFFER LENS	LEAVE ALONE
WHITEBEARARENA	19	2		UPPER STORAGE	500	LD4	1	15	8	LA	1	15	8	0		0	0	0	0	15 WATT A21 LED LAMP	LEAVE ALONE	LEAVE ALONE

EXHIBIT A1
LIGHTING ROOM-BY-ROOM REPORT

Project Room by Room Report

Area Information						*Lighting*												*Description*		
						Existing Fixture				*Proposed Fixture*					*Occupancy Sensors*							
Bld	*Map*	*Flr*	*Rm #*	*Description*	*Burn*	*Type*	*Qty*	*Watts*	*KWH Use*	*Type*	*Qty*	*Watts*	*KWH Use*	*KWH Savings*	*Type*	*Qty*	*Burn*	*KWH Use*	*KWH Savings*	*Existing Fixture*	*Proposed Fixture*	*Proposed Sensor*
WHITEBEARARENA	20	2		UPPER STORAGE (NA)	500	I1R	2	59	59	LT2.1	2	19	19	40		0	0	0	0	4' INDUSTRIAL: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
WHITEBEARARENA	21	1		STORAGE (NA)	500	W1R	1	59	30	LT2.1	1	19	10	20		0	0	0	0	4' WRAP: WITH (2) 4' 32 WATT T8 LAMPS, (1) ELECTRONIC BALLAST	RETROFIT WITH (2) 4' 12 WATT T8 LED LAMPS, BY-PASS AND REMOVE BALLAST	LEAVE ALONE
WHITEBEARARENA	22			ICE RINK	2,700	HB8	45	296	35,964	LED1	45	174	21,141	14,823		0	0	0	0	2X4 HIGHBAY: WITH (8) 4' 32 WATT 8 LAMPS, (2) HIGH PWR ELECTRONIC BALLASTS	NEW REPLACEMENT HIGH BAY WITH 174 WATT LED, WIRE GUARD	LEAVE ALONE
WHITEBEARARENA	23			ICE RINK	8,760	X5	5	2	88	LA	5	2	88	0		0	0	0	0	COMBO EXIT SIGN WITH (1) 2 WATT LED LIGHT ENGINE, EMERGENCY FLOOD HEADS	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	24			EXTERIOR (WALL PACK)	4,380	LED2	7	45	1,380	LA	7	45	1,380	0		0	0	0	0	FORWARD THROW WALL PACK: WITH 45 WATTS LED	LEAVE ALONE	LEAVE ALONE
WHITEBEARARENA	25			EXTERIOR (FLOOD)	4,380	LED4	4	80	1,402	LA	4	80	1,402	0		0	0	0	0	FLOOD: WITH 80 WATTS LED	LEAVE ALONE	LEAVE ALONE

Exhibit J-1 & J-2

Baseline Operating Parameters & Guarantee Period Operating Parameters

bulding	space	unit	scheudule	Occupied		Unoccupied	
				HTG SP	CLG SP	HTG SP	CLG SP
Parks and Rec Office	Workshop	RTU	7-day: 5:30am - 2:30pm	66	71	55	85
	Inventory office	Furnace	M-F: 6am - 3pm	70	75	66	75
	misc offices 1	Furnace	M-F: 6:30am - 5pm	73	73	66	82
	misc offices 2	Furnace	M-F: 6:30am - 5pm	70	74	66	76
			S-S: 6:30am - 5pm	68	74	68	76
	misc offices 3	Furnace	M-F: 7am - 5pm	66	74	64	78
			S-S: 6am - 10pm	68	78	68	82
	misc offices 4	Furnace	M-F: 7am - 10pm	70	70	67	67
	misc offices 5	Furnace	M-F: 6am - 10pm	69	78	62	82
	misc offices 6	Furnace	M-F: 7am - 5pm	71	73	68	78
			S-S: 7am - 5pm	68	74	68	78
	Garage	IR heaters	24/7	62-67		62-67	
	Garage offices	elec UHs	24/7	71		71	
West Side Arena	Locker Rooms	Furnace	M-F: 1:45pm - 10:30pm	72	85	68	85
			S-S: 1:45pm - 10:30pm	70	85	68	85
	Offices	Furnace	M-F: 1:30pm - 11pm	70		65	
			S-S: 6:30am - 4pm	70		65	
	Chiller zamboni areas	IR heaters	24/7	65		65	
Oscar Johnson Arena	Locker Rooms	Furnace	M-F: 2:30pm - 10:30pm	74		55	
			S-S: 6:30am - 10:30pm	74		55	
	Offices	Furnace	M-F: 2:30pm - 10:30pm	74		57	
			S-S: 6:30am - 10:30pm	74		55	
	Chiller zamboni areas	IR heaters	24/7	65		65	
Shoreview Arena	Locker Rooms	Furnace	M-F: 2:30pm - 10:30pm	70		55	
			S-S: 6:30am - 10:30pm	71		55	
	Offices	Furnace	M-F: 2:30pm - 10:30pm	70		65	76
			S-S: 6:30am - 10:30pm	71		65	76
	Chiller zamboni areas	IR heaters	24/7	65		65	
White Bear Arena	Locker Rooms	Furnace	7-day: 6am - 10pm	70		64	
	Offices	Furnace	7-day: 6am - 10pm	70		64	
	Chiller zamboni areas	IR heaters	24/7	65		65	

Exhibit J-3

Baseline Conditions, Utility Use, Utility Unit Costs

			UTILITIES						UTILITIES			
			ELECTRIC						Natural Gas			
	B U I L D I N G	GROSS AREA	CHARGES	CONSUMED	Winter	Summer	RATE		CHARGES	CONSUMED	RATE	
No.	BUILDING NAME	(Sq.Ft.)	($)	(KWH)	(kW)	(kW)	($ / KWh)	(KBTU/Sq.Ft.)	($)	therms	$ /therms	(KBTU/Sq.Ft.)
1	Ramsey County Parks and Recreation Offices	64,000	$22,707	148,120	592	296	$0.1533	8	$14,497	14,971	$0.9684	23
2	Aldrich Arena	41,396	$86,425	726,021	2,904	1,452	$0.1190	60	$29,862	31,935	$0.9351	77
3	TCO Sports Garden	163,700	$337,298	2,906,208	11,625	5,812	$0.1161	61	$54,171	67,979	$0.7969	42
4	Ken Yackel-West Side Arena	25,920	$21,925	139,280	557	279	$0.1574	18	$13,300	13,197	$1.0078	51
5	Oscar Johnson Arena	26,400	$29,223	184,240	737	368	$0.1586	24	$12,045	12,085	$0.9967	46
6	Shoreview Ice Arena	26,400	$35,875	246,680	987	493	$0.1454	32	$12,477	13,437	$0.9285	51
7	White Bear Lake Arena	25,920	$31,825	204,560	818	409	$0.1556	27	$12,150	13,443	$0.9038	52
8	Charles M. Schulz-Highland Arena	57,120	$147,338	1,180,985	4,724	2,362	$0.1248	71	$35,434	39,201	$0.9039	69
9	Gustafson-Phalen Arena	28,560	$34,384	231,840	927	464	$0.1483	28	$15,681	16,298	$0.9621	57
10	Harding Arena	28,560	$27,307	164,000	656	328	$0.1665	20	$13,302	12,011	$1.1075	42
11	Pleasant Arena	29,520	$90,810	711,440	2,846	1,423	$0.1276	82	$37,217	42,347	$0.8789	143

Notes:

1. Utility Base Year is January 2023 to December 2023.
2. Annual Utility Escalation Rate = 4.0%.

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Lighting Upgrades – Savings Calculations

Savings Calculation

kWh Savings = Existing kWh - Proposed kWh

Peak kW Savings = (Existing Watts - Proposed Watts) * (1 kW/1000 W)

Annual kW Savings = Peak kW Savings x (Winter Diversity x # of months + Summer Diversity x # of months)

See lighting survey sheets for details.

	Demand Diversity	Number of Months
Winter	1	8
Summer	1	4

Lighting Retrofit 9780 Safety Factor 100% **1779.4138**

	Facility	Existing Watts	Existing kWh	Proposed Watts	Proposed kWh	Peak kW Savings	Annual kW Savings	kWh Savings	Cost Savings	Guaranteed Savings: Annual kW Savings	Guaranteed Savings: kWh Savings	Guaranteed Savings: Cost Savings
1	Ramsey County Parks ar	0	0	0	0	0	0	0	$0	0	0	$0
2	Aldrich Arena	0	0	0	0	0	0	0	$0	0	0	$0
3	TCO Sports Garden	0	0	0	0	0	0	0	$0	0	0	$0
4	Ken Yackel-West Side A	17680	34,893	7900	16,633	9.78	117	18,260	$3,356	117.36	18,260	$3,356
5	Oscar Johnson Arena	11940	22,554	6280	12,224	5.66	68	10,330	$1,915	67.92	10,330	$1,915
6	Shoreview Ice Arena	19830	59,766	8770	26,836	11.06	133	32,930	$4,675	132.72	32,930	$4,675
7	White Bear Lake Arena	17490	44,919	7990	21,315	9.5	114	23,604	$3,707	114	23,604	$3,707
8	Charles M. Schulz-Highl	44880	176,104	23280	93,710	21.6	259	82,394	$10,104	259.2	82,394	$10,104
9	Gustafson-Phalen Arena	19000	55,601	8270	25,003	10.73	129	30,598	$4,629	128.76	30,598	$4,629
10	Harding Arena	18470	35,642	8260	16,264	10.21	123	19,378	$3,575	122.52	19,378	$3,575
11	Pleasant Arena	17160	64,012	7630	28,638	9.53	114	35,374	$4,693	114.36	35,374	$4,693
	Total	**166,450**	**493,491**	**78,380**	**240,623**	**88.07**	**1057**	**252,868**	**$36,655**	**1056.84**	**252,868**	**$36,655**

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Lighting Upgrades Heating/Cooling Impact

Savings Calculation

Increased Heating = (Heating Hours) / (8760 Hrs/yr) x (Lighting kWh Savings) x (% Heat to HVAC) / (0.003413 MMBtu/kWh)
Increased Fuel = (Increased Heating) / (Boiler Efficiency)
Reduced Cooling = (Cooling Hours) / (8760 Hrs/yr) x (Lighting kWh Savings) x (% Heat to HVAC) / (3413 Btu/kWh) / (12,000 Btu/ton-hr)
Reduced Energy (kWh) = (Reduced Cooling) x (Cooling kW/ton)

Lighting Retrofit

Facility	Heating Enable Temp	Heating Hours	Boiler Effic-iency	% Heat to HVAC	Increased Heating (MMBtu)	Increased Fuel Use (MMBtu)	Increased Heating Cost	Cooling Enable Temp	Cooling Hours	Cooling Efficiency (kW/ton)	Reduced Cooling (ton-hr)	Reduced Cooling (kWh)	Reduced Cooling Cost	Net Cost Saving
Ramsey County Pa	55	5116.89	80%	85%	0.0	0.0	$0	65	2805.07	1.20	0.0	0.0	$0	$0
Aldrich Arena	55	5116.89	80%	85%	0.0	0.0	$0	65	2805.07	1.20	0.0	0.0	$0	$0
TCO Sports Garde	55	5116.89	80%	85%	0.0	0.0	$0	65	2805.07	1.20	0.0	0.0	$0	$0
Ken Yackel-West S	55	5116.89	80%	85%	30.9	38.7	$372	65	2805.07	1.20	1413.6	1696.3	$165	$3,149
Oscar Johnson Are	55	5116.89	80%	85%	17.5	21.9	$207	65	2805.07	1.20	799.7	959.6	$93	$1,801
Shoreview Ice Are	55	5116.89	80%	85%	55.8	69.7	$617	65	2805.07	1.20	2549.2	3059.0	$269	$4,328
White Bear Lake A	55	5116.89	80%	85%	40.0	50.0	$430	65	2805.07	1.20	1827.3	2192.7	$202	$3,480
Charles M. Schulz-	55	5116.89	80%	85%	139.6	174.5	$1,551	65	2805.07	1.20	6378.4	7654.0	$675	$9,228
Gustafson-Phalen A	55	5116.89	80%	85%	51.8	64.8	$600	65	2805.07	1.20	2368.7	2842.4	$269	$4,298
Harding Arena	55	5116.89	80%	85%	32.8	41.0	$434	65	2805.07	1.20	1500.1	1800.1	$179	$3,320
Pleasant Arena	55	5116.89	80%	85%	59.9	74.9	$648	65	2805.07	1.20	2738.4	3286.1	$293	$4,339
Total					**428.4**	**535.5**	**$4,858**				**19575.24**	**23490.29**	**$2,146**	**$33,943**

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Building Envelope Upgrades – Savings Calculations Summary

Safety Factor:	96%					Guaranteed Savings				
Facility	**Hole Area (SF)**	**Boiler Efficiency:**	**Fuel Savings (MMBtu)**	**Rate (Natural Gas or None)**	**Cost Savings**	**Fuel Savings (MMBtu)**	**Cost Savings**	**Natural Gas (Y=1/N=0)**	**Hole Area (SF)**	**Fuel Savings (MMBtu)**
Ramsey County Parks and Recreat	6.82	80%	227.3	Natural Gas	$2,202	218.2	$2,114	1	6.8	227.3
Aldrich Arena	0.00	80%	0.0	Natural Gas	$0	0.0	$0	1	0.0	0.0
TCO Sports Garden	0.00	80%	0.0	Natural Gas	$0	0.0	$0	1	0.0	0.0
Ken Yackel-West Side Arena	2.14	80%	71.3	Natural Gas	$687	68.5	$659	1	2.1	71.3
Oscar Johnson Arena	0.71	80%	23.7	Natural Gas	$224	22.7	$215	1	0.7	23.7
Shoreview Ice Arena	0.71	80%	23.7	Natural Gas	$209	22.7	$201	1	0.7	23.7
White Bear Lake Arena	2.35	80%	78.3	Natural Gas	$673	75.2	$646	1	2.4	78.3
Charles M. Schulz-Highland Arena	6.15	80%	205.0	Natural Gas	$1,822	196.8	$1,749	1	6.2	205.0
Gustafson-Phalen Arena	2.81	80%	93.7	Natural Gas	$867	89.9	$832	1	2.8	93.7
Harding Arena	2.54	80%	84.7	Natural Gas	$895	81.3	$860	1	2.5	84.7
Pleasant Arena	2.24	80%	74.7	Natural Gas	$646	71.7	$620	1	2.2	74.7
Grand Total	**26.47**	**80%**	**882.2**		**$8,224**	**846.9**	**$7,895**		**26.5**	**882.2**
	Natural Gas		882.2		$8,224	846.9	$7,895			
	Firm Gas		0		$0	0.0	$0			
	None									

Safety Factor:	96%					Guaranteed Savings			
Facility	**Hole Area (SF)**	**% of Space Cooled**	**Default Cooling Efficiency (kW/ton)**	**Electric Cooling Savings (kWh)**	**Cost Savings**	**Electric Cooling Savings (kWh)**	**Cost Savings**	**Hole Area (SF)**	**Electric Cooling Savings (kWh)**
Ramsey County Parks and Recreat	6.82	31%	1.20	314.3	$29	301.7	$28	6.8	1005.7
Aldrich Arena	0.00	0%	1.20	0.0	$0	0.0	$0	0.0	0.0
TCO Sports Garden	0.00	0%	1.20	0.0	$0	0.0	$0	0.0	0.0
Ken Yackel-West Side Arena	2.14	0%	1.20	0.0	$0	0.0	$0	2.1	315.6
Oscar Johnson Arena	0.71	0%	1.20	0.0	$0	0.0	$0	0.7	104.7
Shoreview Ice Arena	0.71	0%	1.20	0.0	$0	0.0	$0	0.7	104.7
White Bear Lake Arena	2.35	0%	1.20	0.0	$0	0.0	$0	2.4	346.6
Charles M. Schulz-Highland Arena	6.15	0%	1.20	0.0	$0	0.0	$0	6.2	906.9
Gustafson-Phalen Arena	2.81	0%	1.20	0.0	$0	0.0	$0	2.8	414.4
Harding Arena	2.54	0%	1.20	0.0	$0	0.0	$0	2.5	374.6
Pleasant Arena	2.24	0%	1.20	0.0	$0	0.0	$0	2.2	330.3
Grand Total	**26.47**		**1.20**	**314.3**	**$29**	**301.7**	**$28**	**26.5**	**3903.5**

Facility	**Description**	**Area (ft^2)**	**Airflow (CFM)**	**Fuel Savings (MMBtu)**	**Electric Cooling Savings (kWh)**	**Area (ft^2)**	**Airflow (CFM)**	**Fuel Savings (MMBtu)**	**Electric Cooling Savings (kWh)**
Ramsey County Parks and Recreat	Doors: weatherstrip all sides	6.82	883.9	227.3	314.3	6.82	883.9	227.3	1,005.7
Charles M. Schulz-Highland Arena	Doors: weatherstrip all sides	6.15	797.1	205.0	0.0	6.15	797.1	205.0	906.9
Gustafson-Phalen Arena	Doors: weatherstrip all sides	2.81	364.2	93.7	0.0	2.81	364.2	93.7	414.4
Harding Arena	Doors: weatherstrip all sides	2.54	329.2	84.7	0.0	2.54	329.2	84.7	374.6
Ken Yackel-West Side Arena	Doors: weatherstrip all sides	2.14	277.4	71.3	0.0	2.14	277.4	71.3	315.6
Oscar Johnson Arena	Doors: weatherstrip all sides	0.71	92.0	23.7	0.0	0.71	92.0	23.7	104.7
Pleasant Arena	Doors: weatherstrip all sides	2.24	290.3	74.7	0.0	2.24	290.3	74.7	330.3
Shoreview Ice Arena	Doors: weatherstrip all sides	0.71	92.0	23.7	0.0	0.71	92.0	23.7	104.7
White Bear Lake Arena	Doors: weatherstrip all sides	2.35	304.6	78.3	0.0	2.35	304.6	78.3	346.6
Total/Average		**26.47**	**3,430.8**	**882.2**	**314.3**	**26.47**	**3,430.8**	**882.2**	**3,903.5**

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Control Upgrades – Savings Calculations

			5640	Hours		Park & Rec		9790	Supply CF	1270	OSA CFM	13%	
KMSP						1.2	kw/ton	66.3	Heating SP	55	Cooling SP		
Mid-pts	DB (F)	Hrs						Ton-Hrs	kWh				
91	90 to 92	5						34	41.15				
89	88 to 90	6						39	46.63				
87	86 to 88	17						104	124.36				
85	84 to 86	37						211	253.75				
83	82 to 84	59						315	377.65				
81	80 to 82	65						322	386.33				
79	78 to 80	77						352	422.45				
77	76 to 78	61						256	306.78	6,271.41	kWh		
75	74 to 76	113						431	516.64				
73	72 to 74	148						507	608.99				
71	70 to 72	184						561	673.00				
69	68 to 70	267						712	854.51				
67	66 to 68	206		MMBTU	440.70	MMBTU		471	565.10				
65	64 to 66	187						356	427.48				
63	62 to 64	172						262	314.55				
61	60 to 62	153						175	209.85				
59	58 to 60	94						72	85.95				
57	56 to 58	123						47	56.24				
55	54 to 56	143		6.90				-					
53	52 to 54	132		6.26									
51	50 to 52	198		6.54									
49	48 to 50	150		6.80		Control ECM to close existing OSA dampers to furnaceses when unoccupied.							
47	46 to 48	159		6.75		Currently open when furnace / AC Supply fan runs							
45	44 to 46	154		4.58									
43	42 to 44	180		6.55									
41	40 to 42	81		8.27									
39	38 to 40	149		8.24									
37	36 to 38	153		13.26									
35	34 to 36	151		10.73									
33	32 to 34	290		12.10									
31	30 to 32	166		12.43									
29	28 to 30	159		15.35									
27	26 to 28	160		7.28									
25	24 to 26	166		14.07									
23	22 to 24	76		15.14									
21	20 to 22	122		15.64									
19	18 to 20	156		31.36									
17	16 to 18	105		18.71									
15	14 to 16	150		18.65									
13	12 to 14	68		19.50									
11	10 to 12	39		20.99									
9	8 to 10	42		9.96									
7	6 to 8	44		16.54									
5	4 to 6	21		21.86									
3	2 to 4	20		15.19									
1	0 to 2	18		22.39									
-1	-2 to 0	38		10.46									
-3	-4 to -2	55		6.18									
-5	-6 to -4	23		6.85									
-7	-8 to -6	27		7.37									
-9	-10 to -8	29		3.61									
-11	-12 to -10	9		3.53									
-13	-14 to -12	6		3.26									
-15	-16 to -14	15		7.06									
-17	-18 to -16	8		10.47									
-19	-20 to -18	2		4.48									
-21	-22 to -20	2		5.39									

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Mechanical Upgrades – Savings Calculatio

Furnace & AC Replacement

Replace existing furnace Units with high efficiency units	Zone 3	Zone 1	1145	312	
Replace existing AC Units with high efficiency units	1046	Zone 2	1020	565	
	567	Zone 3	1046	567	

	Zone 1	Zone 2	Zone 3
Equivalent Full Load Heating Hours (EFLHHEAT) by MN Climate Zone (Ref. 3)	1145	1020	1046
Effective Full Load Cooling Hours (EFLHCOOL) by MN Climate Zone (Ref. 3)	312	565	567

EFLH Table

Facility Type	Heating EFLHh	Cooling EFLHc
Assembly	0	0
Auto repair	0	0
Dormitory	0	0
Hospital	2054	1,298
Light industrial	0	0
Lodging – Hotel	0	0
Lodging – Motel	0	0
Office – large	1793	651
Office – small	1610	446
Other	0	0
Religious worship	0	0
Restaurant – fast food	0	0
Restaurant – full service	0	0
Retail – big box	0	0
Retail – Grocery	0	0
Retail – small	0	0
Retail – large	0	0
School – Community college	1616	785
School – postsecondary	0	0
School – primary	1961	408
School – secondary	2098	563
Warehouse	0	0

	Minnesota Heating EFLHh			Minnesota Cooling EFLCh		
	Zone 1	Zone 2	Zone 3	Zone 1 (Northern MN)	Zone 2 (Central MN)	Zone 3 (Southern MN)
Convenience Store	1887	1699	1546	647	825	986
Education Community College/Li	1972	1776	1616	682	782	785
Education Primary	2394	2156	1961	289	338	408
Education Secondary	2561	2306	2098	484	473	563
Health/Medical Clinic	2234	2012	1830	558	738	865
Health/Medical Hospital	2508	2258	2054	663	1,089	1,298
Lodging	2361	2126	1934	401	606	754
Manufacturing	1397	1258	1144	347	472	589
Multifamily	2324	2092	1904			
Office-Low Rise	1966	1770	1610	257	359	446
Office-Mid Rise	2189	1971	1793	373	529	651
Office-High Rise	2149	1935	1760	669	1,061	1,263
Restaurant	1868	1681	1530	347	535	652
Retail Large Department Store	1763	1587	1444	462	588	686
Retail Strip Mall	1701	1531	1393	307	441	574
Warehouse	1872	1685	1533	164	343	409
Other/Miscellaneous	2123	1911	1739	443	612	729

Table 5. Equivalent Full-Load Hours for Cooling

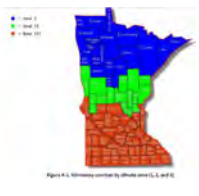
Building Type	Zone 1 (Northern MN)	Zone 2 (Central MN)	Zone 3 (Southern MN)
Convenience Store	647	825	986
Education - Community College/University	682	782	785
Education - Primary	289	338	408
Education - Secondary	484	473	563
Health/Medical - Clinic	558	738	865
Health/Medical - Hospital	663	1,089	1,298
Lodging	401	606	754
Manufacturing	347	472	589
Office - Low Rise	257	359	446
Office - Mid Rise	373	529	651
Office - High Rise	669	1,061	1,263
Restaurant	347	535	652
Retail - Large Department Store	462	588	686
Retail - Strip Mall	307	441	574
Warehouse	164	343	409
Other/Miscellaneous	443	612	729

Table 4. Equivalent Full-Load Hours for Heating

Building Type	Zone 1	Zone 2	Zone 3
Convenience Store	1,887	1,699	1,546
Education - Community College/University	1,972	1,776	1,616
Education - Primary	2,394	2,156	1,961
Education - Secondary	2,561	2,306	2,098
Health/Medical - Clinic	2,234	2,012	1,830
Health/Medical - Hospital	2,508	2,258	2,054
Lodging	2,361	2,126	1,934
Manufacturing	1,397	1,258	1,144
Multifamily	2,324	2,092	1,904
Office - Low Rise	1,966	1,770	1,610
Office - Mid Rise	2,189	1,971	1,793
Office - High Rise	2,149	1,935	1,760
Restaurant	1,868	1,681	1,530
Retail - Large Department Store	1,763	1,587	1,444
Retail - Strip Mall	1,701	1,531	1,393
Warehouse	1,872	1,685	1,533
Other/Miscellaneous	2,123	1,911	1,739

Table 1. Heating Degrees Days (HDD) and Heating Design Temperature per zone in Minnesota

	Zone 1 (Northern MN)	Zone 2 (Central MN)	Zone 3 (Southern MN/Twin Cities)
HDD55 (Ref 5)	6,956	5,888	5,233
HDD45	4,429	3,864	3,317
T_design (Ref. 6)	-22 °F	-16.5 °F	-14.5 °F



Safety Factor (Thermal) = Leave at 100 input on ECM Summary Worksheet **100%**

FAU DT Savings per Year = Btuh_in x EFLHHEAT x Eff_High x (1/Eff_Base - 1/Eff_high) / Conversion_Factor - Heating Savings x 0.003412 / Eff_High
= 60,000 x 1046 x 0.97 x (1 / 0.80 – 1 / 0.97) / 1,000,000 - 418 kWh x 0.003412 / 0.97 = 11.9 Dth

FAU Peak kW Demand Savings = Cooling Watts Savings x CF/1000 (for furnaces incorporating a Blower ECM motor)
= 0 for furnaces not incorporating a Blower ECM motor
Cooling Watts Savings for ECM motor = 73 (Ref. 6)
CF = Coincidence factor = 0.75 for cooling equipment with standard singlespeed compressor
CF= 0.9 for cooling equipment with variable-speed compressor
= 73 x 0.75 / 1000 = 0.056 **0.0657** kW

FAU kWh Savings per Year = Heating Savings + Cooling Savings + Shoulder Season Savings (for replaced working furnaces incorporating a Blower ECM motor)
= 0 for boilers, furnaces not incorporating a Blower ECM motor
Heating Savings = Blower ECM motor savings during heating season = 418 kWh (Ref 6.)
Cooling Savings = Blower ECM motor savings during cooling season. If central AC = 263 kWh. If no central AC = 175 kWh. If unknown = 251 kWh (Ref 7.)
Shoulder Seasons Savings = Blower ECM motor savings during shoulder season = 51 kWh (Ref 6.)
FAU kWh Savings per Year = 418 + 251 + 51 = 720 **732** kWh

AC Condensing Unit kWh Savings per Year = (Tons) x EFLHCOOL x (12 / SEER Existing - 12 / SEER Proposed)

AC Condensing Unit Peak kW Savings = (Tons) x CF x (12/EER Existing - 12/EER Proposed)
CF = Coincidence factor = 0.75 for standard single-speed compressor equipment, 0.9 for variable-speed compressor equipment
0.90

Building	Label	Thermal Fuel	Area Serving
Park & Rec	S-7	Natural Gas	Upstairs Offices
Park & Rec	S-6	Natural Gas	? 2nd floor
Park & Rec	S-5	Natural Gas	East of Lobby
Park & Rec	S-4	Natural Gas	West of Lobby
Park & Rec	S-3	Natural Gas	Lunch Rm Supervisors
Park & Rec	S-2	Natural Gas	Carpenter Shop
Park & Rec	S-1	Natural Gas	Training Rm
Park & Rec	0	Natural Gas	Roof Top
Park & Rec	0	Natural Gas	Roof Top MAU
Park & Rec	0	Natural Gas	Roof Top MAU-1
Shoreview	F1	Natural Gas	Mech Rm
Shoreview	F2	Natural Gas	Mech Rm
White Bear	F1	Natural Gas	Mech Rm
White Bear	F2	Natural Gas	Mech Rm
OJ	F1	Natural Gas	Mech Rm
OJ	F2	Natural Gas	Deck
Westside	F1	Natural Gas	Mech Rm
Westside	F2	Natural Gas	Mech Rm
-	-	0	0
-	-	0	0
-	-	-	-
-	-	-	-
-	-	-	-

Building	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Shoreview	Shoreview	White Bear	White Bear	OJ	OJ	Westside	Westside	-
Equipment Label	S-7	S-6	S-5	S-4	S-3	S-2	S-1	0	0	0	0	F1	F2	F1	F2	F1	F2	F1	F2	-
Qty	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Location	Upstairs Offices	? 2nd floor	East of Lobby	West of Lobby	Lunch Rm Supervisors	Carpenter Shop	Training Rm	Roof Top	Roof Top MAU	Roof Top MAU-1	Mech Rm	Mech Rm	Mech Rm	Mech Rm	Mech Rm	Mech Rm	Deck	Mech Rm	Mech Rm	
Replace Code	9	9	9	9	9	9	9	9	0	0	0	0	0	1	1	0	0	1	1	
DCV (Y/N)	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	
MBH	140	120	120	120	140	90	80	115	62.5-125	64.166-1668.48	80	120	140	140	120	80	140	140		
Thermal Fuel	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	
Replacement Thermal Fuel	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	
																				-
Tonnage	5	5	2.5	3	4	4	2.5	6	0		0	0	0	0	0	0	0	0	0	-
Supply CFM	1800	1350	1040	1145	1735	1600	1120	0	1029-1852	15,800?	0	0	0	0	0	0	0	0	0	
Fresh Air CFM	150	150	240	250	150	230	100	0	0	0	0	0	0	0	0	0	0	0	0	
Existing SEER	13	16	13	13	13	13	13	0	0	14	0	0	0	0	0	0	0	0	0	
Existing Thermal Efficiency	80%	80%	80%	80%	80%	80%	80%	80%	80%	0%	80%	80%	80%	80%	80%	80%	80%	80%	80%	
Proposed Thermal Efficiency	99%	99%	99%	99%	99%	99%	99%	80%	0%	0%	0%	0%	99%	99%	0%	0%	99%	99%		
Proposed SEER	26	26	26	26	26	26	16	0	0	0	0	0	0	0	0	0	0	0	-	

CALCULATIONS

See "State Minnesota Technical Reference Manual for Energy Conservation Improvement Programs" V4.1 1/31/2024 for Algorithms and Definitions

	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Park & Rec	Shoreview	Shoreview	White Bear	White Bear	OJ	OJ	Westside	Westside
Label	S-7	S-6	S-5	S-4	S-3	S-2	S-1	-	-	-	F1	F2	F1	F2	F1	F2	F1	F2
Fuel Switch	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Existing Thermal Fuel	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
Proposed Thermal Fuel	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
Area Serving	Upstairs Offices	? 2nd floor	East of Lobby	West of Lobby	Lunch Rm Supervisors	Carpenter Shop	Training Rm	Roof Top	Roof Top MAU	Roof Top MAU-1	Mech Rm	Mech Rm	Mech Rm	Mech Rm	Mech Rm	Deck	Mech Rm	Mech Rm
Quantity	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RTU Tonnage	5.0	5.0	2.5	3.0	4.0	4.0	2.5	6.0	-	-	-	-	-	-	-	-	-	-
RTU Supply Air CFM	1,800	1,350	1,040	1,145	1,735	1,600	1,120	-	1029-1852	15,800?	-	-	-	-	-	-	-	-
RTU Fresh Air CFM	150	150	240	250	150	230	100	-	-	-	-	-	-	-	-	-	-	-
RTU Return Air CFM	1,650	1,200	800	895	1,585	1,370	1,020	-	#VALUE!	#VALUE!	-	-	-	-	-	-	-	-
Current Thermal Efficiency	80%	80%	80%	80%	80%	80%	80%	80%	80%	0%	80%	80%	80%	80%	80%	80%	80%	80%
Proposed Thermal Efficiency	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	80.0%	0.0%	0.0%	0.0%	0.0%	98.5%	98.5%	0.0%	0.0%	98.5%	98.5%
Current SEER	13.0	16.0	13.0	13.0	13.0	13.0	13.0	13.0	-	-	14.0	-	-	-	-	-	-	-
Proposed SEER	26.0	26.0	26.0	26.0	26.0	26.0	26.0	16.0	-	-	-	-	-	-	-	-	-	-
Existing Occupied Heating Setpoint	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**	**68**
Existing Unoccupied Heating Setpoint	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
Existing Occupied Cooling Setpoint	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**	**74**
Existing Unoccupied Cooling Setpoint	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**	**80**
Furnace Input MBH	140.0	120.0	120.0	120.0	140.0	90.0	80.0	115.0	62.5-125	64.166-1668.48	80.0	120.0	140.0	140.0	120.0	80.0	140.0	140.0
Current FAU Thermal Consumption MMBTU	146	126	126	126	146	94	84	120	#VALUE!	#VALUE!	84	126	146	146	126	84	146	146
Percent of Electric Baseline Consumption	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Percent of Thermal Baseline Consumption	**0.0%**	**100.0%**	**200.0%**	**300.0%**	**400.0%**	**500.0%**	**600.0%**	**700.0%**	**800.0%**	**900.0%**	**1000.0%**	**1100.0%**	**1200.0%**	**1300.0%**	**1400.0%**	**1500.0%**	**1600.0%**	**1700.0%**
Proposed RTU kWh Consumption	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Proposed RTU Thermal Consumption MMBTU	111	95	95	95	111	71	63	119	#VALUE!	#VALUE!	84	126	111	111	126	84	111	111
Safety Factor	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
FAU Electrical Savings kWh	732	732	732	732	732	732	732	732	732	732	-	-	732	732	-	-	732	732
FAU Thermal Savings MMBTU	34	29	29	29	34	22	19	-	-	-	-	-	34	34	-	-	34	34
FAU EC Motor Thermal Penalty MMBTU	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	-	-	-	-	(1)	(1)	-	-	(1)	(1)
FAU Demand Saving kW	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Fuel Oil #2 Savings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel Oil #4 Savings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel Oil #6 Savings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propane Savings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EER Existing	11.18	12.80	11.18	11.18	11.18	11.18	11.18	11.18	-	-	11.76	0	-	-	-	-	-	-
EER Proposed	15.60	15.60	15.60	15.60	15.60	15.60	15.60	12.80	-	-	-	-	-	-	-	-	-	-
Cond. Energy Savings (kWh/Yr)	1,308	818	654	785	1,047	1,047	654	589	-	-	-	-	-	-	-	-	-	-
Cond. Demand Saving kW	1.37	0.76	0.68	0.82	1.09	1.09	0.68	0.73	-	-	-	-	-	-	-	-	-	-
Total Energy Savings (MMBTU/Yr)	32	28	28	28	32	20	18	(2)	-	-	-	-	32	32	-	-	32	32
Total Energy Savings (kWh/Yr)	2,040	1,550	1,386	1,517	1,779	1,779	1,386	1,321	732	732	-	-	732	732	-	-	732	732
Total Energy Savings (kW/Yr)	1.43	0.82	0.75	0.89	1.16	1.16	0.75	0.80	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

184
14,222
8

65
1,464
0.13

65
1,464
0.13

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Mechanical Upgrades – Savings Calculatio

Compressor	Vilter Model 328
Cooling Capacity @ 10sst / 90sct	50.1 Tons
Motor Horsepower	75HP
RPM	1785
Brake Horsepower at 10sst / 90sct	69.3
Total Heat of Rejection	785.8 BTUs / Hr.
Discharge Temperature	147.6°F
COP Cooling	3.45
COP Heating	4.45

PSI	F	
195	100.47	195.0
120	69.92	120.0

Compressor	Vilter Model 454
Cooling Capacity @ 10sst / 90sct	45.1 Tons
Motor Horsepower	75HP
RPM	1185
Brake Horsepower at 10sst / 90sct	61.1
Total Heat of Rejection	697,100 BTUs / Hr.
Discharge Temperature	147.6°F
COP Cooling	3.48
COP Heating	4.48

R22

45.1	tons		
3.48	cop cooling		
4.48	cop heating		
61.1	Hp		
2593	BTU/min	10	90
155,585	BTU/Hr		48,999
0.294	lb/cf	0.8877	3.3693
100.5	btu/lb	105.493	111.616
29.55	btu/cf	93.65	376.06
	btu/lb		0.163
352,791	btu/hr	844,197	893,196
3,510	lb/hr	8,002	8,002
541200	btu/hr	3.478 COPc	844,197
697100	btu/hr	4.481 COPh	291,527
42.44 155,585	btu/hr		552,670
	btu/hr		552,670
	tons		46.1
		COPc	3.552

			Temperature (°F)	Pressure (psia)	Liquid Density (lb/ft^3)	Vapor Volume (ft^3/lb)	Enthalpy (Btu/lb) Liquid	Enthalpy (Btu/lb) Vapor
RE (Tbl 6-7)		64.997						
Com Ratio		3.853	10	47.538	82.54	1.1265	13.342	105.493
Vol Eff (fig 6E)		75.5%	90	183.17	72.51	0.2968	36.43	111.616
SV								
18.5 Average Glycol Supply		195	95	196.57	71.79	0.2756	37.977	111.859
20.5 Existing Chiller Approach		209.7	99.65	209.70	71.10	0.2574	39.429	112.0654
	100		100	210.69	71.05	0.256	39.538	112.081
			65	126	75.93	0.4355	28.909	110.103
	68		68	132.11	75.53	0.4158	29.796	110.306
		120	70	136.19	75.27	0.4026	30.387	110.441
Existing Suction Pressure		134.7	69.27	134.7	75.37	0.4074	30.171	110.392
	22.5 psi		-5	34.821	84.18	1.5142	9.276	104.013
Existing Discharge Pressure	37.2 psia		-1.95	37.20	83.85	1.4258	10.097	104.319
Current Operating Range			0	38.726	83.64	1.3691	10.624	104.515
Existing Discharge Pressure	195 psi		95	196.57	71.79	0.2756	37.977	111.859
0.7 5.64	209.7 psia		99.65	209.70	71.10	0.257	39.429	112.065
Proposed Discharge Pressure	210 psi		100	210.69	71.05	0.256	39.538	112.081
Proposed Discharge Pressure	224.7 psia		104.72	224.70	70.33	0.239	41.031	112.267
0.69 6.04			105	225.53	70.29	0.2379	41.119	112.278
0.768 3.23	120 psi		130	311.61	66.17	0.1657	49.319	112.825
0.76 3.62	134.7 psia		85.26	134.70	74.22	0.269	33.990	112.816
0.775 2.83			135	331.38	65.27	0.1542	51.032	112.826
	180 psi		90	183.17	72.51	0.2968	36.43	111.616
0.74 4.67	194.7 psia		94.30	194.70	71.89	0.28	37.76	111.83
			95	196.57	71.79	0.2756	37.977	111.859
	205 psi		100	210.69	71.05	0.256	39.538	112.081
0.715 5.27	219.7 psia		103.04	219.70	70.59	0.25	40.50	112.20
			105	225.53	70.29	0.2379	41.119	112.278
	27 psi		0	38.726	83.64	1.3691	10.624	104.515
	41.7 psia		3.51	41.70	83.25	1.28	11.58	104.86
			5	42.96	83.09	1.2406	11.979	105.009
0.747 4.41	32.9 psi		10	47.538	82.54	1.1265	13.342	105.493
0.737 4.72	47.6 psia		10.06	47.60	82.53	1.13	13.36	105.50
			15	52.48	81.98	1.025	14.712	105.968
	220 psi		105	225.53	70.29	0.2379	41.119	112.278
	234.7 psia		107.94	234.70	69.83	0.23	42.06	112.38
			110	241.14	69.51	0.2212	42.717	112.448

W/SH
Tbl 6-6 at 210psia 114.3365
Tbl 6-8 19.008 25.18
1 Hp = 42.44 BTU/Min
72.63688173

SV Existing Operation Range				SV Proposed Operation	WB Existing		Proposed
	195	psi	210	120	195	210	120
ΔHcomp =	7.747	btu/lb	7.948	8.497	6.566	6.768	7.317
	1.426	CF/lb	1.426	1.426	1.1252	1.1252	1.1252
	139.3	CF/M	137.31	151.24	148.653	146.663	154.225
	5862	lb/hr	5778	6364	7927	7820	8224
	45410	btu/hr	45926	54080			
	8358	CF/Hr	8238.6	9074.4			
	5862	lb/hr	5778	6364			
ΔHevap =	64.890	btu/lb	63.288	70.328	66.070	64.468	71.503
	71.10	lb/CF	70.33	74.22			
	380,384	btu/hr	365,693	447,600			
						1.07	12.6%
Ns =	0.175		0.179	0.192			
COP =	2.44		2.35	2.88	3.37	3.24	3.78
kW/Ton =	1.44	1.47	1.50	16.7% 1.22	1.04	1.09	0.93

WS Existing Operating Range				WS Proposed Operation	Oj		
	205	psi	180	120	210	220	120
	7.34	btu/lb	6.96	7.954	6.57	6.68	7.12
	1.28	CF/lb	1.28	1.28	1.08	1.08	1.08
	142.285	CF/M	147.26	152.832	148.255	146.663	155.22
	6676	lb/hr	6909	7170	8220	8132	8607
ΔHevap =	67.101	btu/lb	64.36	70.87	64.67	63.64	71.71
COP =	2.88		2.86	3.27	3.42	3.33	3.97
kW/Ton =	1.22	1.226	1.23	12.2% 1.08	1.03	1.06	0.89
						1.04	15.0%

0.745	4.52	35 psi		10	47.538	82.54	1.1265	13.342	105.493				
0.737	4.72	49.7 psia		12.19	49.70	82.30	1.08	13.94	105.70				
0.78	2.71			15	52.48	81.98	1.025	14.712	105.968				
		hours		Total kWh	lighting kWh	Misc kWh	Pumps	Ref	tons	Proposed kWh	kWh Save		
Ken Yackel-West Side Arena		2,880	48.36	139,280	34,893	1393	5989	97,005	79,121	85,195	11,810	12.2%	1.08
Oscar Johnson Arena		3,624	50.84	184,240	22,554	1842	5989	153,855	##########	130,748	23,107	15.0%	0.89
Shoreview Ice Arena		3,624	68.07	246,680	59,766	2467	5989	178,458	121,613	148,673	29,785	16.7%	1.22
White Bear Lake Arena		3,816	53.61	204,560	44,919	2046	5989	151,606	142,342	132,460	19,146	12.6%	0.93
													1.03

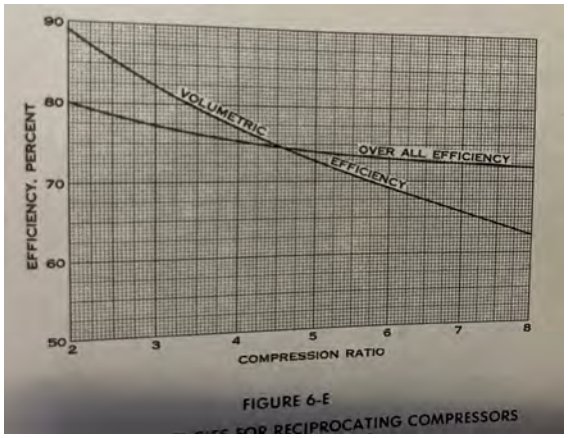


FIGURE 6-E

General Dimensions

ITEM		452XL	454XL
Number of Cylinders		2	4
Maximum RPM		1200	1200
Bore & Stroke - In. (mm)		4½x4½ (114x114)	4½x4½ (114x114)
CFM @ Maximum RPM (m³/hr)		99.4(169)	199(338
Tons(Kcal/hr x 10³) Refrigeration @ 95°F Condensing	R-717 (10°F)	24(73)	49(148)
	R-22 (20°F)	29(88)	59(178)
	R-290 (0°F)	16(48)	31(94)
Suction Connection - Inches (mm)		2½(64)	3(76)
Discharge Connection - Inches (mm)		2(51)	2½(64)
Unit Weight Less Motor - Lbs. (Kg.)		1900(862)	2700(1225)
Oil Charge - Gallons (Liters)		5(19)	7(27)
Standard Steps of Unloading (%)		0	50
Option 1 Steps of Unloading (%)		50	25/50/75
Option 2 Steps of Unloading (%)		100	50/100
Maximum Discharge Temp. - °F (°C)		300(149)	300(149)
Crankcase Oil Temp. Range - °F (°C)		110-130 (43-54)	110-130 (43-54)

The expansion valve will be set to provide approximately 8f superheat regardless of pressure
electronic expansion valve (EEV), which would allow us to float the discharge pressure further down during cold weather
VFD on the condenser fan motors, provide the ability to operate at lower condensing temperatures in cooler weather
discharge pressure to 120 psi with R-22 which is a condensing temperature of about 68 SCT versus 100 SCT at 195 psi.
float the discharge pressure further down during cold weather
A closer approach temperature and greater chiller efficiency can be obtained with the EEV
automation to prevent the second compressor from running

120 psi

		36 psi	13.4 F	16.8 F	3.4 F	WB
		29.8 psi	5 F	20 F	15 F	
			32.9			2.5F
195 psi	210psi					

average suction pressure on compressor #1 is 36 psi which translates into a saturated suction temperature of 13.4°F. The average glycol supply temperature during this period is 16.8°F for an approach temperature of 3.4°F. T
#2 compressor has an average suction pressure of 28.9 psi which equates to a saturated suction temperature of 5°F. The average glycol supply temperature is 20°F which equates to a 15°F approach temperature
The 2.5°F Delta T across the chillers appears to be normal.
The condenser has an on-board fan control and ranges from 195 psi to 210 psi.

		22.5 psi	-2 F			SV
				18.5 F	20.5 F	
195 psi	210psi					

average suction pressure is 22.5 psi which translates into a saturated suction temperature of -2°F.
The average glycol supply temperature is 18.5°F for an approach temperature of 20.5°F.
condenser has on board fan control and ranges from 195 psi to 210 psi.

	210 psi	220 psi				OJ
		35 psi	12 F			
				20 F	8 F	
						2 F

Alco Model TRAE 40 HCA-6A The condensing pressure was operating around 220 psi (107 SCT) in October and 210 psi (104 SCT) in January
average suction pressure is 35psi or 12sst. 30 psi pic
The corresponding temperature of the glycol leaving the chiller is 20°F or an 8-degree approach
2°F Delta T across the chillers appears to be normal

		27 psi	2.2 F			WS
				15.5 F	13 F	
						7 F
180 psi	205 psi					

average suction pressure is 27 psi which translates into a saturated suction temperature of 2.2°F
average glycol supply temperature is 15.5°F for an approach temperature of 13°F.
The TX valves might be set conservatively at a higher superheat to prevent liquid flood back which would result in a high TD.
Delta T across the chillers of approximately 7°F
could be instrument error or due to a high superheat or low glycol flow
condenser has on board fan control and has ranged from 180 psi to 205 psi.

Compressor input power is proportional to the pressure differential between suction and discharge (lift)

Increasing suction temperature by 1oF will reduce input power by approximately 2%

Decreasing condensing temperature by 1oF will reduce input power by approximately 1.5% to 2%

The isentropic energy efficiency of the compressor is calculated as the ratio of the product of actual mass-flow-rate and the change in isentropic enthalpy in the compressor to the input power on the shaft of the compressor

$$\eta_{IS} = \frac{\dot{m} \cdot \Delta h_C}{P} \quad (6)$$

Where P is the input power on the shaft of the compressor.

The actual coefficient of performance is calculated as the ratio of the capacity of the compressor and the change in enthalpy in the evaporator to the input power on the shaft of the compressor

$$COP = \frac{Q}{P} = \frac{\dot{m} \cdot \Delta h_E}{P} \quad (7)$$

Since the change in the enthalpy in the evaporator is given by operating conditions, the COP is a measure of the effectiveness of the compressor to transport gas.

The model also calculates the theoretical COP as

$$COP_{TH} = \frac{\dot{m}_{TH} \cdot \Delta h_E}{P} \quad (9)$$

Exhibit J-4 Engineered Cost Avoidance Calculations

Ramsey County MN - Ramsey County MN

Mechanical Upgrades – Savings Calculatio

5640 Hours | Park & Rec S 6&7 | 3150 Supply CF | 300 OSA CFM

KMSP | 1.2 kw/ton | 66.3 Heating SP | 77.4 Cooling SP

Mid-pts	DB (F)	All Hrs	Un Occ Hrs	Occ Hrs		Ton-Hrs	kWh
99	98 to 100	3		3			
97	96 to 98	4		4			
95	94 to 96	4		4			
93	92 to 94	13		13			
91	90 to 92	15	5	10			
89	88 to 90	32	6	26			
87	86 to 88	78	17	61			
85	84 to 86	76	37	39			
83	82 to 84	120	59	61			
81	80 to 82	146	65	81			
79	78 to 80	172	77	95			
77	76 to 78	105	61	44	466	558.84	12,244 kWh
75	74 to 76	223	113	110	1,164	1,397.09	
73	72 to 74	260	148	112	1,185	1,422.49	
71	70 to 72	273	184	89	942	1,130.37	
69	68 to 70	412	267	145	1,535	1,841.62	
67	66 to 68	298	206	92	974	1,168.47	
65	64 to 66	273	187	86	910	1,092.27	
63	62 to 64	241	172	69	730	876.36	
61	60 to 62	213	153	60	635	762.05	
59	58 to 60	121	94	27	286	342.92	
57	56 to 58	181	123	58	614	736.65	
55	54 to 56	215	143	72	762	914.46	
53	52 to 54	221	132	89			
51	50 to 52	327	198	129			
49	48 to 50	221	150	71			
47	46 to 48	221	159	62			
45	44 to 46	207	154				
43	42 to 44	266	180				
41	40 to 42	119	81				
39	38 to 40	217	149				
37	36 to 38	215	153				
35	34 to 36	222	151				
33	32 to 34	456	290				
31	30 to 32	269	166				
29	28 to 30	241	159				
27	26 to 28	236	160				
25	24 to 26	241	166				
23	22 to 24	114	76				
21	20 to 22	192	122				
19	18 to 20	226	156				
17	16 to 18	179	105				
15	14 to 16	211	150				
13	12 to 14	91	68				
11	10 to 12	71	39				
9	8 to 10	70	42				
7	6 to 8	62	44				
5	4 to 6	29	21				
3	2 to 4	41	20				
1	0 to 2	40	18				
-1	-2 to 0	45	38				
-3	-4 to -2	78	55				
-5	-6 to -4	37	23				
-7	-8 to -6	31	27				
-9	-10 to -8	36	29				
-11	-12 to -10	12	9				
-13	-14 to -12	6	6				
-15	-16 to -14	16	15				
-17	-18 to -16	8	8				
-19	-20 to -18	3	2				
-21	-22 to -20	3	2				
-23	-24 to -22	2					

Fresh Air Ecconomizer S6 &S7

Exhibit J-4 Engineered Cost Avoidance Calculations
Ramsey County MN - Ramsey County MN
Solar Photovoltaic – Savings Calculation

FACILITY: TCO Sports Garden
The table below shows your annual electricity costs based on the most current utility rates and your previous 12 months of electrical usage, which you provided to us.
RATE SCHEDULE: XCEL-MN - GS - A23

	TimePeriods	EnergyUse(k	MaxDem	Charges											
	BillRanges&Seasons	Total	NC/Max	Other	Energy	Demand	Total								
242005	1/2/2024-2/2/2024W	225,809	444	$ 69	$ 16,413	$ 6,057	$ 22,539	1/2/2024-2/2/2024W	224,511	444	$ 69	$ 16,337	$ 6,057	$ 22,463	
265230	2/2/2023-3/2/2023W	233,162	504	$ 69	$ 17,278	$ 6,875	$ 24,223	2/2/2023-3/2/2023W	206,159	504	$ 69	$ 15,701	$ 6,875	$ 22,646	
216674	3/2/2023-4/2/2023W	235,332	481	$ 69	$ 17,238	$ 6,562	$ 23,869	3/2/2023-4/2/2023W	150,323	481	$ 69	$ 11,509	$ 6,562	$ 18,140	
225573	4/2/2023-5/2/2023W	233,106	487	$ 69	$ 17,151	$ 6,644	$ 23,864	4/2/2023-5/2/2023W	102,102	484	$ 69	$ 7,817	$ 6,603	$ 14,489	
263604	5/2/2023-6/2/2023W/S	255,187	536	$ 69	$ 18,982	$ 7,377	$ 26,428	5/2/2023-6/2/2023W/S	109,650	503	$ 69	$ 8,395	$ 6,933	$ 15,397	
272981	6/2/2023-7/2/2023S	269,544	581	$ 69	$ 19,962	$ 10,914	$ 30,946	6/2/2023-7/2/2023S	109,102	519	$ 69	$ 8,353	$ 9,749	$ 18,172	
266600	7/2/2023-8/2/2023S	284,407	574	$ 69	$ 20,779	$ 10,783	$ 31,631	7/2/2023-8/2/2023S	111,053	506	$ 69	$ 8,502	$ 9,505	$ 18,077	
232483	8/2/2023-9/2/2023S	247,611	511	$ 69	$ 18,173	$ 9,599	$ 27,841	8/2/2023-9/2/2023S	100,994	494	$ 69	$ 7,732	$ 9,280	$ 17,081	
243207	9/2/2023-10/2/2023S/W	227,410	490	$ 69	$ 16,657	$ 8,267	$ 24,994	9/2/2023-10/2/2023S/W	115,309	456	$ 69	$ 8,828	$ 8,197	$ 17,095	
215749	10/2/2023-11/2/2023W	231,560	475	$ 69	$ 16,974	$ 6,480	$ 23,523	10/2/2023-11/2/2023W	160,282	447	$ 69	$ 12,271	$ 6,098	$ 18,439	
244976	11/2/2023-12/2/2023W	221,803	439	$ 69	$ 16,143	$ 5,989	$ 22,201	11/2/2023-12/2/2023W	186,681	439	$ 69	$ 14,091	$ 5,989	$ 20,149	
217126	12/2/2023-1/2/2024W	220,328	459	$ 69	$ 16,202	$ 6,262	$ 22,533	12/2/2023-1/2/2024W	219,384	459	$ 69	$ 16,147	$ 6,262	$ 22,478	
2,906,208	Total	2,885,259	5981	$833	$ 211,952	$ 91,808	$ 304,592		1,795,550	5736	$ 833	$ 135,684	$ 88,109	$ 224,626	
		99.279%													
								73.5%	1,089,709	245				$ 79,966	
									984,750						
									1,482,760						
									1,158,861						

FACILITY: Aldrich Arena
The table below shows your annual electricity costs based on the most current utility rates and your previous 12 months of electrical usage, which you provided to us.
RATE SCHEDULE: XCEL-MN - GS - A23

	Time Periods					Charges								
	Bill Ranges & Seasons	Energy Use (	Max Den	Other	Energy	Demand	Total							
121,660	1/2/2024 - 2/2/2024 W	129,448	219	$69	$9,151	$2,988	$12,208	1/2/2024 - 2/2/2024 W	127,476	219	$69	$9,036	$2,988	$12,093
67,967	2/2/2023 - 3/2/2023 W	105,976	214	$69	$7,744	$2,919	$10,732	2/2/2023 - 3/2/2023 W	92,146	214	$69	$6,936	$2,919	$9,925
13,277	3/2/2023 - 4/2/2023 W	39,487	203	$69	$3,023	$2,769	$5,862	3/2/2023 - 4/2/2023 W	2,954	203	$69	$226	$2,769	$3,065
13,554	4/2/2023 - 5/2/2023 W	13,066	51	$69	$1,000	$696	$1,765	4/2/2023 - 5/2/2023 W	-38,765	51	$69	$2,634	$696	$1,869
17,877	5/2/2023 - 6/2/2023 W / S	14,691	67	$69	$1,125	$903	$2,097	5/2/2023 - 6/2/2023 W / S	-44,797	67	$69	$3,113	$902	$2,141
18,141	6/2/2023 - 7/2/2023 S	19,574	52	$69	$1,499	$977	$2,545	6/2/2023 - 7/2/2023 S	-42,267	52	$69	$2,846	$977	$1,800
18,590	7/2/2023 - 8/2/2023 S	18,134	75	$69	$1,388	$1,409	$2,867	7/2/2023 - 8/2/2023 S	-47,497	75	$69	$3,319	$1,409	$1,840
19,109	8/2/2023 - 9/2/2023 S	20,881	49	$69	$1,575	$920	$2,565	8/2/2023 - 9/2/2023 S	-34,964	49	$69	$2,398	$920	$1,408
50,726	9/2/2023 - 10/2/2023 S / W	15,538	62	$69	$1,190	$1,150	$2,409	9/2/2023 - 10/2/2023 S / W	-31,814	62	$69	$2,327	$1,150	$1,107
110,380	10/2/2023 - 11/2/2023 W	100,460	210	$69	$7,392	$2,865	$10,327	10/2/2023 - 11/2/2023 W	68,751	196	$69	$5,264	$2,674	$8,007
134,263	11/2/2023 - 12/2/2023 W	116,671	204	$69	$8,296	$2,783	$11,148	11/2/2023 - 12/2/2023 W	99,591	204	$69	$7,298	$2,783	$10,150
140,477	12/2/2023 - 1/2/2024 W	128,829	218	$69	$9,107	$2,974	$12,151	12/2/2023 - 1/2/2024 W	127,340	218	$69	$9,021	$2,974	$12,064
726,021	Total	722,755	1624	$833	$52,490	$23,353	$76,676	Total	278,154	1610	$833	$21,144	$23,161	$45,137
		99.550%												
								83.1%	444,601	14				$ 31,539
									379,488					
									535,096		1,534,310			
									1,364,238	0.889154				
							1,569,690	1,558,050	1,246,440					
							1,538,349		1,534,310					
							1,364,238		2,017,856	0.676083				

Exhibit J-5

M&V Options by Building & ECM

Location	Lighting Upgrades	Building Envelope Upgrades	Controls Upgrades	Mechanical Upgrades	Solar PV Project
Ramsey County Parks and Recreation Offices		A	A	A	
Aldrich Arena					A
Oscar Johnson Arena	A	A		A	
Shoreview Ice Arena	A	A		A	
White Bear Lake Arena	A	A		A	
TCO Sports Garden					A
Charles M. Schulz-Highland Arena	A	A			
Gustafson-Phalen Arena	A	A			
Harding Arena	A	A			
Ken Yackel-West Side Arena	A	A		A	
Pleasant Arena	A	A			

Exhibit J-6

M&V Plan Summary

MN Ramsey County
Exhibit J-6
M&V Plan Summary

ECM #	ECM	IPMVP Option	Buildings included in install scope	ECM Intent	Stipulated Values	Measurement Sample Size for Groups w/ Similar Characteristics	Potential-to-Save INSTALL PERIOD		PERFORMANCE PERIOD			
							Key Parameters Measured, Measuring Point & Boundary for Determination of Savings	Post-Install Measurement Responsibility & Frequency	Annual Measured Variables, Measuring Point	Measurement Procedure	Annual Performance Monitoring Activities	Annual M&V Activities
1.0	Lighting Upgrades	A - Electric	Oscar Johnson Arena, Shoreview Ice Arena, White Bear Lake Arena, Charles M Schultz-Highland Arena, Gustafson-Phalen Arena, Harding Arena, Ken Yackel-West Side Arena, Pleasant Arena	Wattage reduction by upgrading existing lighting fixtures to LED lighting	Run hours	80% confidence / 20% precision / 0.5 coefficient of variation	Option A - Electric - kW by power meter	One-time pre & post kW by power meter	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 electricity savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Electricity Savings
2.0	Building Envelope Upgrades	A - Fuel	Ramsey County Parks and Recreation Offices, Oscar Johnson Arena, Shoreview Ice Arena, White Bear Lake Arena, Charles M Schultz-Highland Arena, Gustafson-Phalen Arena, Harding Arena, Ken Yackel-West Side Arena, Pleasant Arena	Savings from reducing gravity airflow through gaps and cracks in a building's envelope using weather stripping and air sealing.	All parameters as published in the proposed energy savings calculations	# of weather stripping, Roof Wall intersection, (LF), and Caulking (LF) per scope of work	Linear feet per unit of materials installed	One time post installation verification and photo verification of sample set of weather stripping and air sealing	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 Natural Gas savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Natural Gas Savings
3.0	Controls Upgrades	A - Electric	Ramsey County Parks and Recreation Offices	Reduce cost of conditioning outside air by use of economizer during occupied periods.	Hours of occupancy, average weather parameters.	100%	Verify cooling mode enable and OA damper position.	One time post installation verification of functionality.	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 electric savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Electricity Savings
4.1	Replace 80% Gas Furnaces	A - Electric, A - Fuel	Ramsey County Parks and Recreation Offices, White Bear Lake Arena, Ken Yackel West Side Arena	Upgrade efficiency of heating/cooling equipment	Hours of occupancy, average weather parameters.	100%	Installation verification of equipment operation and start-up documentation.	One time post installation verification and photo verification of equipment operation.	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 Natural Gas and Electricity savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Natural Gas and Electricity Savings
4.2.1 4.2.2	Refrigerant System Upgrades Condenser VFDs Electronic Expansion Valves	A - Electric	Oscar Johnson Arena, Shoreview Ice Arena, White Bear Lake Arena, Ken Yackel-West Side Arena, Pleasant Arena	Utilize VFD's on compressor/condenser pumps/fans to improve operational efficiency	Hours of utilization, average weather parameters.	100%	Key Parameters Measured, Measuring Point & Boundary for Determination of Savings	One time post installation verification of operational performance. Trends of Key Parameters.	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 Electricity savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Electricity Savings
5.0	Solar PV Project	A - Electric	Aldrich Arena, TCO Sports Garden	Install PV solar panels to offset electricity building baseload and reduce metered utility consumption and demand charges. Sell excess capacity as available.	Monthly Solar Radiation (kWh/m^2/day) and estimated building baseload (kWh).	100%	Installed equipment type and quantity by bill of material. Start up measurements and output per manufacturer's rating. Measurement of kWh production.	One time post installation verification and trend data analytics.	No Annual Measurements	Option A - Apply post-install values and applicable contract utility rates to engineering calculations to determine Yr1 Electricity savings one time.	Annual Site Inspection	Option A - Apply one time post-install measured values and contractual utility rates to engineering calculations to generate Electricity Savings

Exhibit J-7

OPERATIONS COST AVOIDANCE METHODOLOGY

OSD #1: LIGHTING UPGRADES – O&M COST AVOIDANCE

1. Description and Connection to Scope of Work**:** Exhibit B, ECM 1 describes Honeywell's scope of work for implementing a comprehensive lighting retrofit in buildings throughout the County (agreed to be $4,000/year).

The O&M cost reduction of this measures was agreed to be **$4,000**/year (3% annual escalation).

OSD #2: SOLAR PRODUCTION CREDIT – O&M COST AVOIDANCE

2. Description and Connection to Scope of Work**:** Exhibit B, ECM 5 describes Honeywell's scope of work for implementing a Solar PV Project at two locations in the County.

Hourly PV Performance Data for each site was used to calculate potential utility incentives for each month and estimate future credits.

The O&M cost reduction of this measure was agreed to be **$58,491**/year (3% annual escalation).

Therefore, the combined cost reduction of these measures is agreed to be **$62,491**/Year 1 (3% annual escalation).