



REQUEST FOR PROPOSALS

Solar Photovoltaic System

Power Purchase and Licensing Agreement for Parkland College

ISSUE DATE: August 2, 2017

DUE DATE: October 13, 2017

TIME: 12:00 p.m. (CST)

Proposals must be received by the due date and time to be considered

NON-MANDATORY PRE-PROPOSAL CONFERENCE:

12 p.m. (CST), September 13, 2017 at Parkland College

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Prevailing wage information- Parkland College requirements regarding prevailing wage employees are available at:

<https://www.illinois.gov/idol/Laws-Rules/CONMED/Documents/2016%20Rates/Champaign.pdf>

1. RFP Purpose and Background

1.1 ORGANIZATIONAL CONTEXT

Parkland College serves Illinois college District 505, the third-largest community college district in the state. First offering classes in 1967, Parkland has provided education to over 280,000 community members to date as a fully accredited vocational-technical and academic institution. Situated on 250 acres, Parkland is comprised of more than 85 classrooms, 60 specialized lab spaces, a 120,000-volume library, television and radio station, an agricultural land laboratory, art gallery, and recreational facilities. For additional information, visit www.parkland.edu.

This RFP is for the Parkland College campus at 2400 West Bradley Avenue, Champaign, Illinois 61821 (also referred to in this RFP as “Parkland” and the “College”).

1.2 BACKGROUND

In its pursuit of financial fitness and operating cost management, Parkland College is seeking to simultaneously reduce overall campus energy use intensity through a variety of energy conservation measures and access cost-stable forms of energy. A solar power purchase agreement might be a mechanism for reducing uncertainty in future energy costs.

Construction and operation of a utility-scale renewable energy system on campus can also serve as an educational tool for the College. Providing Parkland College students with the opportunity to study a large scale solar photovoltaic system will equip them with skills and experience that will give them a competitive edge in the job marketplaces of the near future.

Parkland College has a long and ongoing commitment to sustainability. The College is a signatory to the Presidents’ Climate Commitment; from this commitment, a goal of campus climate neutrality by 2060 was established. In addition, a goal of 10% of campus energy to be derived from clean (low carbon) sources by 2015 was established. Sustainability is part of Parkland’s *Strategic Plan for Excellence*, and the campus has engaged in a variety of energy efficiency and renewable energy activities to date. Examples include two previously installed photovoltaic arrays; LED exterior lighting, room occupancy sensors, a geothermal heating and cooling system, and two buildings designed to the LEED Silver certification level. Including a large-scale photovoltaic system in this mix of strategies will further diversify the College’s environmental portfolio.

1.3 RFP PURPOSE

Parkland College is requesting proposals from qualified developers (referred to within this document as “Proposer” or “Contractor”) to finance, design, install, operate, and maintain a solar photovoltaic system on ground mount locations on campus, and to sell the electricity output from said system to the College. The project delivery approach is commonly known as a “power purchase agreement” (PPA).

The agreement will be a use agreement to install and operate the photovoltaic array and its support system (racking equipment, etc.) on the grounds of Parkland College.

PPA pricing proposals must be included in dollars per kilowatt-hour (\$/kWh) of electricity delivered. Proposers are encouraged to structure terms to deliver the lowest price per kWh for the College, exploring a range of contract terms and pricing approaches. PPA pricing must be inclusive of all development, engineering, construction, operations, maintenance, and decommissioning costs associated with the project, with the expectation that no costs will accrue to the College beyond the purchase price of electricity generated from the system.

Proposers are encouraged to allow alternative PPA terms, including varying contract terms, full or partial pre-payment, or multiple escalation rate scenarios. Proposer must clearly label alternative pricing scenarios to enable ready identification of differences from the PPA base case.

2. Instructions to Proposers

2.1 PRE-PROPOSAL CONFERENCE

A non-mandatory Pre-Proposal Conference will be held at:

At 12 p.m. (CST), Wednesday, September 13, 2017 at Parkland College. Proposers shall meet in room X108.

The purpose of the Pre-Proposal Conference will be to clarify the contents of this RFP to ensure a thorough understanding of the institution's requirements. The pre-proposal conference will provide an opportunity for questions from participants and a forum by which interested parties will have equal access to relevant RFP information prior to proposal submission.

ATTENDING THE PRE-PROPOSAL CONFERENCE IS OPTIONAL, BUT STRONGLY ENCOURAGED.

Multiple representatives from each proposer team may attend the pre-proposal conference. Please RSVP to Jim Bustard via email at jbustard@parkland.edu with a copy to Gregory Walburg at gwalburg@parkland.edu no later than **12 p.m. (CST) on September 12, 2017.**

2.4 PROPOSAL RECEIPT

Proposals may be submitted via email, mail service, or hand-delivered. Hardcopy proposals are to be addressed and delivered as follows:

2 hardcopies to:

Jim Bustard
Director of the Physical Plant
2400 W. Bradley Ave
Champaign, IL
61821-1899

Phone 217 351-2211

Proposals shall be in a sealed envelope marked:

Name and Address of Proposer

RFP Title

Date and Time Proposal Due

Emailed proposals shall be sent to jbustard@parkland.edu and gwalburg@parkland.edu

Telephone or facsimile proposals, and proposals received after the deadline, will not be considered.
Parkland College is not responsible for delivery delays or errors by any type of delivery carrier.

2.5 PROPOSER QUESTIONS

Proposers are expected to exercise their best professional independent judgment in analyzing the requirements of this RFP to ascertain whether additional clarification is necessary or desirable before responding. If there are any discrepancies in, or omissions to the RFP, or if there are any questions as to

any information provided in the RFP or by any other source, a request must be submitted via email for clarification, interpretation or correction by the date listed in Section 2.3: Project Schedule. Such inquiries must be directed to the Parkland College Designee listed below.

Questions regarding this RFP must be submitted via email to Jim Bustard, jbustard@parkland.edu with a copy to Gregory Walburg, gwalburg@parkland.edu [on or before the deadline stated in Section 2.3, Project Schedule.](#)

Questions with answers will be posted on the Parkland website, <http://www.parkland.edu/solararray>

It is the responsibility of proposers to visit the website to retrieve questions and answers.

2.6 RESTRICTION ON COMMUNICATIONS

Except for the designated contact(s) listed above, Proposers are not permitted to communicate with Parkland College staff regarding this solicitation during the period between the Request for Proposal issue date and the announcement of awards, except during:

- The course of the non-mandatory Pre-Proposal Conference.
- The course of the non-mandatory Follow-Up Site Inspections.

Proposers are strongly encouraged to take advantage of the scheduled Follow-Up Site Inspections on September 13 to bring additional team members, note existing site conditions, etc. Any requests for additional site visits must be submitted via email to Jim Bustard, jbustard@parkland.edu with a copy to Gregory Walburg, gwalburg@parkland.edu. All site visits must be coordinated through Jim Bustard. Additional site visit requests outside of the September 13 opportunity may not be granted. No site visit requests will be considered after September 20.

If a proposer is found to be in violation of this provision, Parkland College reserves the right to reject the associated proposal.

2.7 PROPOSAL FORMAT AND REQUIRED SUBMITTALS

Proposers are to provide a written proposal addressing the full scope specified under this RFP.

Proposals shall be submitted in the following format. Proposals in any other format will be considered informal and will be rejected. Conditional proposals will not be considered. **An individual authorized to extend a formal proposal must sign all proposals.** If the proposer fails to provide any of the following information, Parkland College may, at its sole option, ask the proposer to provide the missing information or evaluate the proposal without the missing information. Proposals must include all of the elements listed, be clearly indexed and assembled (in accordance with the numbers and order listed below) and reference the corresponding RFP Sections and paragraphs.

1. Table of Contents - Proposals must include a table of contents with page numbers covering all parts including exhibits and addenda, with sufficient detail to facilitate easy reference to all requested information.
2. Company Introduction and Management Overview - This section should present an introduction and general description of the company's background, nature of business activities, and experience in providing the required products and related services. This section should also provide a statement of the Proposer's understanding of the major objectives of the solicitation and the Proposer's approach to fulfilling Parkland College requirements.
3. Technical Response as required by RFP Section 4, Technical and Narrative Response, inclusive of sections 4.1 through 4.11
4. Complete Proposal Submission Requirements, RFP Section 6
5. Completed Project Information Statement, RFP Section 9
6. Terms and Conditions Acceptance - Indicate acceptance/compliance with all items in RFP including Section 4, Paragraph 4.8 and Attachment 8, contract provisions
7. Supplementary Information and Additional Comments as desired

2.8 PROPOSAL MODIFICATIONS OR WITHDRAWAL

No modification of submitted proposals will be permitted in any form. Any proposal may be withdrawn prior to the time set for the receipt of proposals. No proposal shall be withdrawn for a period of one hundred and twenty (120) calendar days thereafter.

2.9 PROPOSER REPRESENTATION

Each proposer, by submitting a proposal, represents that he/she has:

- Read and completely understands the RFP and associated documents.
- Based the proposal upon the requirements described in the RFP.

2.10 SIMPLICITY OF PREPARATION

Proposals should be prepared simply and economically, providing a straightforward, concise description of the Proposer's capability to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content. Promotional materials are especially discouraged.

2.11 COMPLETE PROPOSALS

All proposals must be full and complete at the time of due date submission. Lack of compliance will be determined at Parkland College's sole discretion.

2.12 SPECIFICATIONS

Proposers are expected to meet or exceed the specifications in their entirety. Each proposal shall be in accordance with this specification. If products and/or services as proposed do not comply with specifications as written, Proposer shall attach to proposal a complete detailed itemization and explanation for each and every deviation or variation from these specifications. Absence of any such itemization and explanation shall be understood to mean that Proposer proposed to meet all details of these specifications. Successful proposers delivering products and/or services pursuant to these specifications shall guarantee that they meet specifications as set forth herein. If it is found that materials/equipment and/or services delivered do not meet requirements of this specification, the successful proposer shall be required to correct same at Proposer's own time and expense.

2.13 AMENDMENTS TO RFP BEFORE DUE DATE

No individual is authorized to amend any part of this RFP in any respect, by an oral statement, or to make any representation of interpretation in conflict with provision of this RFP prior to the proposal submission date. However, if necessary, supplemental information in addenda form will be published on the Parkland College website, <http://www.parkland.edu/solararray>

It is the responsibility of any potential proposer to visit this website to retrieve any addenda. Failure of any Proposer to receive such addenda shall not relieve the Proposer from any obligation under their proposal as submitted. All addenda so issued shall become part of this RFP.

2.14 FIRM PROPOSALS

All proposals shall be firm and fixed for 120 days following the deadline for RFP submissions, or until a contract is signed which establishes future pricing/discounts, whichever comes first. If Proposer offers a general price reduction that lowers the cost for any product or service below the cost provided in a resulting contract, the Proposer shall offer the appropriate cost reductions to Parkland College.

3 Scope and Specifications

The intent of these specifications is to describe Parkland College's contract requirements for the furnishing and delivering of photovoltaic systems under power purchase and licensing agreements between both parties.

3.1 SOLAR PROJECT

At Parkland College, a ground mounted solar photovoltaic system is being considered for installation within the space shown in Section 10, Attachment A. The proposer shall design the system to best use the available spaces to meet the requirements of the system.

- It is anticipated that a nominal 1.5-2MW DC (not-to-exceed capacity) ground-mounted PV system shall be configured for interconnection with the Ameren Illinois electrical grid.
- The point of connection (POC) shall be determined by the Proposer.
- Upon approval of Parkland College, the proposed system should fit within the limits shown on the image in Section 10, Appendix A

3.2 GENERAL SCOPE AND SPECIFICATIONS

3.2.1 Scope shall include a “turnkey” system that includes all engineering, design, materials, labor, equipment, electric panels, breakers, services, permits, approvals, taxes, financing, procurement, installation, construction, operation, maintenance, monitoring, billing, and incidentals necessary to install, operate and maintain a complete solar photovoltaic generation system as specified hereinafter, and including, but not limited to, the work included in this RFP. Any and all landscape or infrastructure modifications required for a code compliant installation and to protect the facility’s integrity are to be included within the “turnkey” system.

3.2.2 The Proposer will be responsible for the delivery of electricity to the College under a long term power purchase agreement.

3.2.3 At a minimum, the system shall consist of the supply and installation of a solar photovoltaic generation system, mounting structure, terminal and combiner box(es), quick-connect electrical connectors, conduit, DC wiring, DC disconnect, grid-connected inverter(s), AC disconnect, AC wiring, all metering equipment, a system monitoring and data retrieval system, and all balance of system materials and equipment necessary to interconnect with the institution’s electrical distribution system.

3.2.4 Each Proposer is responsible for ascertaining relevant site conditions and making their own findings as to site conditions and appropriate system size during the site visits.

3.2.5 The selected Proposer shall prepare and submit all of the required incentive paperwork and reporting in support of any potential incentives available from the Federal government and State of Illinois energy programs/initiatives. Unless otherwise noted, all incentives shall be received by the Proposer.

3.2.6 All current state and local building, electrical, and all other applicable codes shall apply. The system shall be designed to meet all applicable Local, State, and Federal seismic and wind-load requirements. Parkland College will review the design documents before authorizing construction documents, and review construction documents and specifications of the project and shall inspect the installation of the system for compliance and code issues.

3.2.7 The solar photovoltaic generation system or system installation activities shall not negate or invalidate any associated building or system warranties.

3.2.7.1 Should any existing associated building or system warranties be negated and / or invalidated by the solar photovoltaic generation system and / or the work done to install the photovoltaic generation system, the selected Proposer shall provide a new warranty for the affected system(s) at no cost to the College.

3.2.8 The selected Proposer shall ensure that the integrity of any associated building or infrastructure systems will remain intact. Any damages caused by the installation or use of the solar photovoltaic generation system to any Parkland College buildings or infrastructure shall be repaired or replaced at no cost to the College by the selected Proposer.

3.2.9 N/A

1. Stamped and sealed structural design calculations must be provided by an Illinois-licensed professional engineer. Said design calculations shall include load analyses of all system components (modules, racking/frame, supports, posts, etc). A minimum safety factor of 2.0 shall be required.
2. Uplift calculations for the system shall be based upon the latest approved edition of SEAOC PV2 “Wind loads on low profile solar photovoltaic systems on flat roofs”. The use of boundary layer wind tunnel testing to determine uplift resistance requirements shall only be acceptable provided the resultant uplift pressures are not less than 65% of the calculated pressures from SEAOC PV2. Minimum system setbacks from roof edges shall be determined in accordance with SEAOC PV2.
3. N/A
4. N/A
5. The system shall pass hail testing per the latest approved edition of ANSI FM 4473 “Test standard for impact resistance testing of rigid roofing materials by impacting with freezer ice balls”; Class 2, 3 or 4. Similar tests such as UL 1703, UL 2218, ASTM E 1038, and ASTM E 822 could be considered acceptable depending upon the results thereof. A minimum 1-1/2” diameter simulated hailstone is required.
6. Ground fault protective devices specifically designed for a roof-mounted PV array system shall be provided in accordance with the 2005 National Electric Code (NEC/NFPA 70); Article 690 – Solar Photovoltaic Systems. **Paragraph 690.5 Ground-Fault Protection; Sub-Paragraphs (A) Ground-Fault Detection and Interruption, (B) Isolating Faulted Circuits, and (C) Labels and Markings.**
7. PV array source circuit (string) wiring shall be custom lengths of RHW-2/Use-2 Cable for wiring solar panels (Modules) with junction box connectors; #10 AWG copper with 7-strands; black, 600V (UL listed) sunlight resistant insulation.
8. DC output circuit wiring and AC feeders shall comprise stranded copper conductors with UL dual-listed THWN-2/THHN insulation. Installed in raceways. All wiring shall be heat, moisture, gasoline and oil resistant. Black insulation for sizes AWG #2 and larger shall additionally be sunlight resistant.
9. Raceway expansion fittings shall be provided to allow for thermal expansion and contraction (due to extreme temperature fluctuations) in accordance with the 2008 or 2011 (latest adopted edition) of the National Electric Code (NEC/NFPA 70); Article 300 – Wiring Methods; Paragraph 300.7 Raceways Exposed To Different Temperatures; Sub-Paragraph (B) Expansion Fittings. Also Article 352 – Rigid Polyvinyl Chloride Conduit: Type PVC; Paragraph 352.44 Expansion Fittings.

3.3 SOLAR PHOTOVOLTAIC GENERATION SYSTEM DESIGN

3.3.1 The solar photovoltaic systems will be installed at the ground location identified in Appendix A.

3.3.2 The systems shall be interconnected to the Parkland College electricity distribution system. Proposers should include all equipment required for interconnection in the proposal. Proposer to suggest the most feasible connection option provided they meet all applicable design, metering and connectivity requirements. The project must include all equipment and modifications to the existing campus distribution systems to accommodate the photovoltaic systems.

3.3.3 While the distribution system is owned by the institution, the interconnection must comply with all metering and interconnection standards including public utility requirements. The proposed system must include all provisions to provide safe, reliable power that is fully integrated with the campus distribution system.

3.3.4 Any necessary upgrades or modifications to the existing main electrical panels or new panels as required for the proper operation of the solar photovoltaic system shall be included.

3.3.5 Major electrical components, including the inverter, transformer, and metering shall be installed in weather-protected enclosures.

3.3.6 A system monitoring and data retrieval system shall be furnished and installed.

3.3.7 Structural engineering analysis and documentation (stamped and signed by a Structural Engineer registered in the State of Illinois) shall be provided certifying that the solar photovoltaic system can support any loads resulting from local applicable seismic and wind-load activity.

3.3.8 The project design will be reviewed and approved by Parkland College Physical Plant and its consultants.

3.4 MATERIALS

3.4.1 General

3.4.1.1 All aspects of construction shall meet the more stringent of Federal, State, and Local building codes.

3.4.1.2 N/A

3.4.1.3 Materials shall be designed to withstand year-round conditions to which they are exposed (sunlight, heat, rain, cold, etc.).

3.4.1.4 All PV systems structural components shall be designed in a manner commensurate with attaining a minimum 30 year design life.

3.4.1.5 All required disconnect and over-current protection devices shall be included in the system and accessible for maintenance.

3.4.1.6 All systems shall include all equipment necessary to interconnect with the utility and meet all of the utility's requirements for protection equipment, etc.

3.4.2 Modules

3.4.2.1 N/A

3.4.2.2 System must comply with IEEE 1262 "Recommended Practice for Qualifications of Photovoltaic Modules."

3.4.2.3 N/A

3.4.2.4 The solar module manufacturer shall provide a warranty on the solar modules for the duration of this agreement rated with at least 80 percent power output guaranteed over 25 years.

3.4.2.5 The solar module manufacturer shall confirm that the warranty applies on an "as installed basis," i.e., it will confirm the panels were installed according to its requirements and specifications for installation.

3.4.3 Mounts

3.4.3.1 Photovoltaic mounts must meet all load and shear requirements specified for the array design, and optimized to minimize materials use and impact on site hydrology (e.g., alternative foundation/footing designs).

3.4.4 Electric Power Requirements:

3.4.4.1 Power generated by the photovoltaic system must be compatible with the onsite distribution system.

3.4.4. N/A

3.4.4.3 Systems must be designed and installed using UL or ETL listed components, including mounting systems

3.4.4.4 Modules must be certified to UL 1703 – “Flat-Plate Photovoltaic Modules and Panels”

3.4.4.5 Inverters must comply with the following requirements:

- IEEE 929– “Recommended Practice for Utility Interface of Photovoltaic Systems”
- UL 1741 – “Standard for Static Inverters and Charge Controllers for use in Photovoltaic Systems” listed on the CEC list of eligible inverters

3.4.4.6 All Balance of Systems (wiring, component, conduits, and connections) must be suited for conditions for which they are to be installed. Inverters shall be installed in all-weather enclosures (NEMA 4) suitable for exterior location. An interval data meter must be installed to measure the AC output of the inverter. This meter should be located in close proximity to the billing meter and in a location accessible to College facilities personnel.

3.4.4.7 Interconnection must be acceptable to the distribution utility and in compliance of relevant Illinois net metering statute and rules. Proposer will assist the College in preparing and submitting appropriate interconnection agreements with the local utility company the interconnection documents will be signed by Parkland College. This shall be done at no cost or liability to the College.

3.4.5 Structural Requirements

3.4.5.1 All structures, including array structures, shall be designed to resist dead load, live load, plus wind and seismic loads to the geographic area.

3.4.5.2 Solar photovoltaic systems must be able to withstand wind speeds of at least 95 mph.

3.4.5.3 Thermal loads caused by fluctuations of component and ambient temperatures must be combined with all the above load combinations.

3.4.5.4 All structural components, including array structures, shall be designed in a manner commensurate with attaining a minimum 30 year design life. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.

3.4.5.5 The structural design should provide for easy and cost effective repair or replacement of system components and supports.

3.4.6 Metering

3.4.6.1 Revenue grade Interval Data Recording (IDR) meters shall be provided complete with industry standard telemetry for communication with Ethernet, cellular or other common output capabilities.

3.4.6.2 Meters must provide minimum 1-minute intervals.

3.4.6.3 Meters shall conform to any Illinois net metering statute (220 ILCS 5/16-107.5) and rules (83 Illinois Administrative Code, sections 465.05 et seq.), programs, and all other applicable State and Federal incentive programs.

3.5 ENVIRONMENTAL PERMITTING

Proposers are responsible for any required environmental permitting process and should determine whether the project is subject to any Illinois Department of Natural Resources environmental impact assessment/report.

3.6 PROJECT MANAGEMENT

Proposers are expected to provide a dedicated project manager who will guide the implementation of the project from contract execution through to operation. Parkland College will expect regular, biweekly meetings and sufficient documentation during the project implementation to verify progress against a schedule and to effectively identify and resolve issues during the implementation process. The Proposer's

contractor must maintain qualified on-site project management/supervision whenever work is proceeding on site.

3.7 QUALITY ASSURANCE

3.7.1 All generating equipment shall be certified by Underwriter Laboratories (UL). The system shall be comprised of UL listed components or in cases where a UL listed component is not available; the component shall be listed by another OSHA recognized Nationally Recognized Testing Laboratory (NRTL).

3.7.2 All installations shall meet or exceed Illinois OSHA requirements for safety and equipment access.

3.7.3 The design, construction, and finalized installation shall be completed in accordance with the latest applicable version of the National Electrical Code (NEC), International Building Code (IBC), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), American National Standards Institute (ANSI), Underwriters Laboratory (UL), Institute of Electrical and Electronics Engineers (IEEE), American Concrete Institute (ACI), Illinois OSHA, all Federal, State, and Local construction and interconnections codes, and all applicable incentive and rebate programs.

3.7.4 Licensee shall submit to the college a copy of its quality assurance/quality control (QA/QC) plan for review not later than 45 days after contract execution for review and comment. The system shall be managed in accordance with the program. The QA/QC program shall include, but is not limited to, such procedures and systems as the following:

- All wire insulation testing—Megger testing or very low frequency testing
- Mechanical system— mounting structures
- Factory testing of inverters and transformers by the manufacturer
- PV source open-circuit measurements—VOC at combiner boxes
- Fuse tests
- Termination pull testing
- All visual inspections
- Grounding continuity testing
- Earth-ground resistivity testing
- PV module inspection and manufacturer documentation of factory test per the manufacturer's existing program
- Metering and instrumentation calibration testing

- Step-up transformer testing
- Inverter phase rotation and matching with utility if required
- Relay settings at the point of interconnection to institutions if required
- Other Contractor-prescribed procedures

All QA/QC testing procedures onsite shall be witnessed and documented by a qualified representative of Licensee. The College shall observe and witness QA/QC as necessary and at its discretion. A qualified engineer of Licensee or Designee shall date and sign documentation indicating completion and acceptance of each onsite QA/QC test procedure.

3.8 PROPOSER / INSTALLER CONTRACTOR EXPERIENCE

The selected Proposer and/or any installer shall be licensed as appropriate to perform all phases of system construction, and shall be approved by the equipment manufacturer to install each component and have no less than five (5) years of experience installing similar systems. Additionally, any subcontractors shall be licensed as appropriate to perform any and all ancillary work that may be required, including but not limited to concrete, trenching, etc.

3.9 INSTALLATION

1. The selected Proposer or designee shall meet and confer with Parkland College staff throughout the installation process (from design through final signoff) to ensure that the installed PV equipment and auxiliaries do not create problems for the operation and maintenance of Parkland College's existing infrastructure and buildings. At two points during the selected Proposer's design process, namely Preliminary Engineering and Detail Engineering, the selected Proposer shall submit design documents to the College with sufficient information to determine if the proposed design is compatible with campus operations. Parkland technical approvals will consist of PV equipment placement, interconnections with existing equipment and utilities, interface with existing conditions, verification that selected Proposer will obtain required approvals and inspections and permits, safe conditions and access to existing equipment are maintained, and that the proposal appears practical and feasible. The selected Proposer shall respond to all review comments made by the College. Installation shall not begin until the Detail Engineering documents are accepted by Parkland.
2. The selected Proposer shall provide a critical path time schedule of the PV project. The schedule will include no fewer than the following major project phases. (The selected Proposer's construction activities shall adhere to the Project Schedule set forth in Section I of this RFP.)

- a. Pre-construction:
 - (i) The selected Proposer shall obtain, at its expense, all permits and/or certificates required for installation and operation of the photovoltaic system(s); and
 - (ii) The selected Proposer shall obtain all approvals from Parkland and third parties necessary for installation and operation of the PV system;
 - b. Delivery of the PV system;
 - c. Installation of the PV system; and
 - d. Complete PV system testing and commissioning.
3. The selected Proposer will be solely responsible for all work, including but not limited to: (i) all professional fees, permits costs, and material and labor expenses related to the installation, commissioning, maintenance, operation and decommissioning of the PV system; and (ii) all auxiliary equipment required to provide a fully operational system that meets the requirements of this RFP.
4. The Contractor shall provide, for approval by the College, a Measurement and Verification (M&V) Plan showing all associated instrumentation and data collection.

3.9.1 General

3.9.1.1 The installation shall meet all safety, electric, building, and labor code requirements at the Federal, State, and Local levels.

3.9.1.2 The installation shall be completed per manufacturers' written installation manuals.

3.9.1.3 N/A

3.9.1.4 All cables, conduit, exposed conductors, and electrical boxes shall be secured and supported according to code requirements.

3.9.1.5 All applicable environmental, health and safety regulations shall be met.

3.9.1.6 The Contractor shall obtain all required approvals.

3.9.2 System Electrical

3.9.2.1 Electrical construction shall meet all Federal, State, and Local electric codes.

3.9.2.2 All outdoor panel enclosures shall be weatherproof and capable of surviving intact under the site environmental conditions.

3.9.2.3 All electrical/electronic equipment shall have surge and lightning protection. All electrical/electronic equipment and metal surfaces shall be properly grounded as required in the NEC and as required by the equipment manufacturer for protection of personnel and equipment due to fault.

3.9.2.4 Other technical codes that will apply include:

- IEC 62446 Grid Connected Photovoltaic Systems- Minimum Requirements for System Documentation, Commissioning Tests, and Inspections
- AMSE PTC 50 (solar PV performance)
- ANSI Z21.83 (solar PV performance and safety)
- NFPA 853 (solar PVs near buildings)
- NEPA 70 (electrical components)
- IEEE 1547 (interconnections)
- National Electrical Safety Code – ANSI C2
- All applicable State Building Codes and requirements

3.9.3 Installation Standards

3.9.3.1 The selected Proposer shall obtain appropriate certifications from a Professional Engineer for all electrical, structural, seismic, building code, fire code, FM Global, and wind-loading requirements for the specific application and provide them to the College as part of the post-installation package.

3.9.3.2 System installation shall conform to manufacturers' installation manuals and approved project drawings and specifications.

3.9.3.3 Mounting hardware shall be compatible with the site considerations and environment.

3.9.4 Meters, Monitoring, And Data Acquisition System

3.9.4.1 The Proposer shall develop and provide a remote monitoring program that will allow the College to track the performance of the solar photovoltaic generation system in historical and real-time for the life of the equipment.

3.9.4.2 N/A

3.9.5 System Start-Up

3.9.5.1 All start-up and testing activities shall be witnessed by the College's Project Manager, and/or other appropriate Designees.

3.9.5.2 The selected Proposer shall thoroughly inspect the installation to ensure compliance with all applicable safety regulations and requirements and obtain approval of College staff or Designee, prior to operation.

3.9.5.3 Start-up shall be conducted per all manufacturers' instructions.

3.9.5.4 The system shall be started and tested in accordance with any regulations of the local utility and State net metering programs.

3.9.5.5 Selected Proposer shall supply the College with all manuals and/or handbooks (in printable electronic format) that provide, either in a single manual or handbook or collectively, complete operating and maintenance instructions for each major piece of equipment and system, and a complete set of as-built drawings of the installation.

3.9.6 System Commissioning

Selected Proposer shall complete a system commissioning per the Specifications and equipment manufacturer's written instructions. System commissioning shall meet all requirements of applicable utility and state rebate programs. Selected Proposer shall provide the proposed commissioning and startup plan for the installation. Selected Proposer shall coordinate with the College to develop an acceptable commissioning plan that includes a checkout and startup procedure.

This work will assure that:

- Systems are activated in a manner that is safe for personnel as well as for the equipment;
- Work is complete and according to the contract documents;
- Systems perform as specified by the contract documents.

As the construction and installation of the systems nears completion, selected Proposer shall prepare punch lists and conduct system walk-downs, sub-system and system checkouts, startups, testing, and turnovers.

The final approved Acceptance Test and Commissioning Procedures shall, at minimum, include:

- Safety plan during startup and commissioning
- Review of all QA/QC testing on the DC and AC sides of inverters
- Detailed procedure for PV System startup, including switching sequencing
- Confirm testing and energizing inverters in conformance with manufacturer's recommended procedures; note operating voltages; and confirm inverter performance
- Under full sun conditions, and after at least 15 minutes of operation, taking and recording PV System operating data—such as but not limited to MWDC, MWAC, VDC, VAC, IDC, IAC, Solar Radiation, etc.
- Testing the system control and monitoring system to verify performance
- Testing the communication system for offsite monitoring
- Testing the installation of metering and protective relaying to verify they meet utility requirements
- Detailed procedure for interface and initialization with the grid
- Documentation of successful startup and commissioning procedure
- Written notification submitted to College confirming completion of Acceptance Testing and Commissioning

Upon successful completion of energizing and startup, the system will be considered operable.

The system will then move to the Interim Operating Period where selected Proposer shall make the installation ready for Capacity Testing.

3.9.7 Final Installation and Commissioning

Selected Proposer shall perform the following tasks without limitation prior to final acceptance by the College:

3.9.7.1 Identify punch-list items and provide timeline for completion. Complete items on the punch-list in accordance with the standards described herein, and as quickly as reasonably practical. Coordinate with the College regarding continued site access.

3.9.7.2 Conduct a final clean-up of the site.

3.9.7.3 Remove all construction and installation-related materials and equipment from the site (other than equipment, supplies, and materials necessary or useful to the operation or maintenance of the site, and equipment, supplies, and materials directed by College to remain at the site).

3.9.7.4 Dismantle and remove all construction and installation-related temporary structures on the site and restore such areas to a condition consistent with that of a newly constructed solar PV system.

3.9.7.5 Remove all waste, rubbish, and hazardous material from and around the site and properly recycle or dispose in accordance with State and Federal waste management regulations and College policy.

3.9.7.6 Provide College with copies of all O&M manuals and warranties for the installed systems.

3.9.7.7 Provide final as-built documents upon completion.

3.9.8 Interim Operating Period

Following successful completion of the startup and commissioning of the systems, the selected Proposer shall have a maximum 90 day “Interim Operating Period” to resolve any operating issues. Designated College representatives shall receive training regarding the systems during this period. After the successful execution of the Interim Operating Period, the selected Proposer shall perform a capacity test procedure to verify the rated output for the system.

3.10 FINAL ACCEPTANCE DATE

3.10.1 The College shall determine when the system is working and acceptable per the specifications, scope, terms and conditions as specified by this RFP document and the resultant agreement.

3.10.2 At least 30 days before the expected Final Acceptance Date, selected Proposer shall provide training to designated College representatives. It is expected that training will be provided for Physical Plant staff and other interested College personnel to promote understanding and monitoring of the system, as well as using the system as a student teaching tool. A portion of this training shall specifically include how to properly and safely isolate the PV system from existing and planned institutionally owned and operated equipment and systems.

3.11 MAINTENANCE REPAIRS

3.11.1 The selected Proposer shall be responsible for all maintenance and repairs of the system. The College will provide facility access, when needed, as soon as feasible but the selected Proposer should anticipate a minimum 24 hour notice to gain access for interior maintenance/repair work.

3.11.2 The selected Proposer shall supply the College with all manuals and/or handbooks (in printable electronic format) that provide, either in a single manual or handbook or collectively, complete system operating and maintenance instructions.

3.12 EMERGENCY SHUT-OFF TRAINING

Selected Proposer will train the Parkland College's Physical Plant staff on how to perform emergency shut-off procedures.

4 Technical & Narrative Response

4.1 TECHNICAL DESCRIPTION

Provide a technical description of the system. Information to be included in the description:

- Power capacity (DC kW) measured at the inverter(s) input.
- Power capacity (AC kW) measured at the electrical interconnection point.
- Total System efficiency.

- Annual expected minimum output AC kWh production with a description of the estimation methodology used. This must be consistent with values provided in the price proposal.
- Output demand and energy data by month and time of use period. This level of output data is considered optional for Proposers but will be helpful to the College in accurately assessing the value of the system.
- A description of the equipment deployed, including manufacturer, model number, efficiency, and warranty.
- A description of the interconnection with the campus electricity distribution system.
- A description of other balance of system components.
- A description of the mounting and structural support systems for the system.
- Note that the aesthetic character of the mounting structure and overall system installation will be considered. Thus, the proposal should include enough information to assess the solution's aesthetic characteristics, e.g.: photographs, photo simulations, material samples, and architectural elevations. Include all relevant details of the fencing system and/or components to be used to enclose and secure the PV system area.

4.2 PROJECT TEAM

Describe the proposed project team, including:

- Contact information for the lead of the proposal team, responsible for the response submittal. This person will be contacted with questions and communications regarding the RFP response.
- An organizational chart that includes all key project members. Members provided as part of the proposal shall be identified by name and title (and organization if required for clarity). The chart should include all components of the project including contract management, design, equipment sourcing, system integration, installation, financing, metering, and billing.
- A description of the roles and responsibilities for each team member.

4.3 PROJECT APPROACH

Give a detailed description of your approach to project delivery, including an overview of the project implementation process. This overview should describe specific implementation phases or steps that will be conducted to deliver the product.

4.4 PROJECT SCHEDULE

Provide a schedule for the project that includes major work streams and milestones. The format should be a list of project activities with start and end dates.

4.5 MONITORING AND DATA PRESENTATION

Provide a description of the monitoring system for the project including:

- Monitoring systems – what systems will be included in the proposed system to monitor, diagnose, and track the solar photovoltaic output of the system.
- Access to and presentation of data.

4.6 OPERATIONS AND MAINTENANCE

Provide a complete description of all system operations and maintenance activities that will be provided. Please:

- List and describe each maintenance activity
- Include the frequency at which each activity will be performed
- Identify any coordinating activity that is required of College personnel
- Describe training that is included in the proposal.
- Provide warranty periods for any parts of the system if applicable.

4.7 PAST PROJECT EXPERIENCE

Provide a list of projects completed by the proposed team that are similar in scope to that proposed. The description for each project/program should include:

- The project name
- Location
- Utility service territory
- Project size (total cost and project capacity in kW)
- Brief physical description of the project (equipment manufacturer, model, etc.)
- Project delivery type – e.g., direct purchase or power purchase agreement
- Year completed
- Name of client contact and contact information

4.8 TERMS AND CONDITIONS ACCEPTANCE AND EXCEPTIONS

Indicate any exceptions to the RFP documents, including all exhibits. Also, confirm acceptance of all remaining portions of the RFP including all exhibits, not identified as an exception.

- **Technical Exceptions:** The Proposer shall clearly describe any and all deviations in its Proposal from the functional requirements stated in this RFP and also describe any product enhancements that could be made by the Proposer to satisfy those requirements.
- **General Exceptions:** The Proposer shall also clearly state its objections, exceptions, or alternatives to the general (non-technical) requirements stated in this RFP. If the Proposer has no general exceptions to present, this fact should be stated in the Proposal.
- **Parkland College will not consider the submission of the Proposer's standard software license and maintenance agreements to be a presentation of exceptions. Every exception must be stated as such in the document mentioned above.**
- **Proposers are cautioned that if Parkland College is unwilling or unable to approve a request for exception to the RFP requirements and the Proposer does not withdraw the request, the proposal will be deemed to be non-responsive and ineligible for contract award.**

4.9 PRICE PROPOSAL

Proposers should make the following assumptions as part of their pricing:

- **Taxes on Solar Power Sales:** Proposers shall assume that the College will not pay property, city energy or utility user's tax on solar energy purchased or on Proposer's equipment.
- **Ownership of Environmental Attributes:** The College intends to maintain ownership of Renewable Energy Certificates (RECs), Green Tags, or similar credits representing environmental attributes of electricity generated by the proposed system.
- **Innovative Pricing Structures or Additional Pricing Information:** Proposers should clearly and concisely outline and explain their proposed pricing structure to the College. The College will consider contract terms that may include, but are not limited to, floor and ceiling prices, prices indexed to market or tariff rates, short and long term transactions, and other provisions that will optimize the financial benefits to the College and ensure project viability for the Proposers. In any case, the College asks that Proposers provide a reasonable representation of the pricing in their proposal.

4.10 BILLING

Provide a description of the billing process. Please include:

- Options for bill access (mail, email, online)
- A description of any true-up billing processes

4.11 FINANCING

1. The selected Proposer will be responsible for obtaining any federal, state and local tax credits and incentives available to it.
3. The selected Proposer will be paid an agreed-upon fee by the College on a monthly basis for electricity generated by the PV systems. The per-kilowatt-hour rate charged the College will be stated by the Proposer within the “Project Information Statement.”
4. The Proposer is encouraged to seek supplemental grant funding that will reduce the overall program cost to the institutions.

Parkland College makes no representations regarding the potential of any available grant funding. Nor is the College obligated to provide information regarding the availability of grant funding.

4.12 PROPOSAL SUBMITTALS

The following submittals shall be provided with the proposal:

- Solar photovoltaic system layout, design documents and ground plans
- System description including dimensions, type of installation, product data sheets, single line electrical diagram, structural engineer certification

- Description of the anchorage structures showing details of how the system will be anchored
- System calculated annual electricity output
- A summary of all anticipated approvals that will be required for the proposed project
- Schematic and preliminary designs
- Project implementation and completion schedule
- Product description information
- Equipment details, descriptions, and specifications
- Equipment/system decommissioning plan
- Payment schedule and terms

5. Evaluation of Proposals

Proposals will be evaluated by Parkland College using the following criteria:

5.1. EVALUATION OF PROPOSAL:

Twenty-five percent (25%) of the evaluation of submitted proposals will concern the strength of the financial commitment demonstrated by the proposal. Factors demonstrating the strength of the financial commitment include, but are not limited to:

- Examples of similar projects that include cost details, operating performance data and owner contract information;
- Experience, length of service providing similar projects
- Strength of funding commitment (funding commitment sources are to be identified);
- Project readiness (a shorter timeline for project implementation is preferred); and
- Schematic design, written project outline, and product information.

5.2 PRIOR EXPERIENCE

5.3. COST EFFECTIVENESS:

Seventy-five percent (75%) of the evaluation of submitted proposals will concern the cost-effectiveness of the project. Factors demonstrating cost-effectiveness include, but are not limited to:

- Minimum monthly kilowatt-hours of photovoltaic system-derived electricity to be provided to Parkland College each month for twelve consecutive months; and
- Generation cost per each kilowatt-hour of electricity.

PARKLAND RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSALS IRRESPECTIVE OF SCORE.

6. Proposal Submission Requirements

6.1 Each Proposer must provide the following information:

- Provide information on its company, including a minimum of three (3) client references and any relevant certifications for similar installations
- The name, title, telephone number, and e-mail address of the appropriate person to contact concerning the proposal
- The location of the office that will be serving Parkland College
- The number of years the proposing company has been in business under this name
- If the company is a subsidiary of another company, the name of the parent company
- Financial rating of the company, or other indicator of financial strength and stability
- Information on factory-approved installers (if system is not installed by Proposer).

NOTE: Missing or non-notarized affidavits may result in proposal rejection. Be sure that all affidavits are completed and notarized.

7. General Instructions to Proposers

7.1 GENERAL

- A. Hard copy RFP responses must include the Proposer's name and address and the RFP title and number, and must be received by the Parkland College Physical Plant office prior to the response deadline. Electronic submittals must be emailed (to the College contacts identified in Section 2.4 of this RFP) as a PDF file with the RFP title and number in the subject line. All email submittals must be received prior to the due date and time.
- B. For its proposal to be considered, the Proposer must answer all questions and supply all required materials.
- C. Because the College is exempt from the payment of state and federal excise, transportation, and sales taxes, such taxes must not be included in prices proposed.
- D. If the Proposer is a business entity, an authorized official of the entity must sign the proposal and the proposal must include the names, titles, addresses, telephone numbers and e-mail addresses of individuals with authority to negotiate and contractually bind the entity.
- E. General Conditions:
 - 1. Parkland College reserves the right to accept or reject any or all proposals submitted for consideration.
 - 2. Any contract awarded as a result of this RFP must be in full conformance with statutory requirements of the State of Illinois and the federal government.
 - 3. All proposals submitted in response to this RFP will become the property of Parkland College and subject to the provisions of 5 ICLS 140/ of the Illinois Compiled Statutes (the Illinois Freedom of Information Act).
 - 4. Any proposal must be valid for a period of 120 days from the due date.
 - 5. Parkland College reserves the right to amend or cancel this RFP prior to the due date and time, if it is in the best interests of Parkland College to do so.
 - 6. Parkland College reserves the right to reject the proposal of any proposer who or which is in default of any prior contract or for misrepresentation.
 - 7. Parkland College reserves the right to correct inaccurate awards resulting from its clerical errors.

8. Proposals are subject to rejection in whole or part if they limit or modify any of the terms and conditions and/or specifications of the RFP.
9. A Proposer, if requested to do so, must be prepared to present evidence of experience, ability, service facilities, and financial standing necessary to satisfactorily meet the requirements set forth or implied in its proposal.
10. No additions or changes to the original proposal will be allowed after submittal. While changes are not permitted, clarification at the request of the agency may be required at the Proposer's expense.
11. By responding, the Proposer implicitly states that the proposal is not made in connection with any competing proposer submitting a separate response to the RFP, and is in all respects fair and without collusion or fraud. It is further implied that the Proposer did not participate in the RFP development process, had no knowledge of the specific contents of the RFP prior to its issuance, and that no employee of Parkland College participated directly or indirectly in the preparation of the proposal.
12. The Proposer shall bear all costs associated with its response to this RFP, including the costs of any presentations and/or demonstrations.
13. Business Enterprise for Minorities, Females, and Persons with Disabilities: Consistent with the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575/0.01 et seq. (the "Act"), it is the policy of Parkland College to foster and encourage the continued economic development of minority owned businesses, female owned businesses, and businesses owned by a person with a disability. When Parkland college is required to competitively bid a contract, the bid documents shall additionally require all potential bidders to submit their name, the bid amount, a statement confirming whether the bidder is including in its bid work to be performed by entities certified as a minority owned business, a female owned business, or a business owned by a person with a disability.

8. Rights Reserved to Parkland College

Parkland College reserves the right to reject any and all proposals, and waive technical defects, irregularities and omissions if, in its judgment, the best interest of Parkland College is served. Parkland College reserves the right to negotiate with any proposer prior to awarding a contract and to negotiate with the proposer to which an award is made the terms of the contract to be entered into between that proposer and Parkland College.

Parkland College reserves the right to negotiate a buyout of the PV system at any time during the contract duration and/or to negotiate additional extension(s) of the contract duration.

9. Project Information Statement

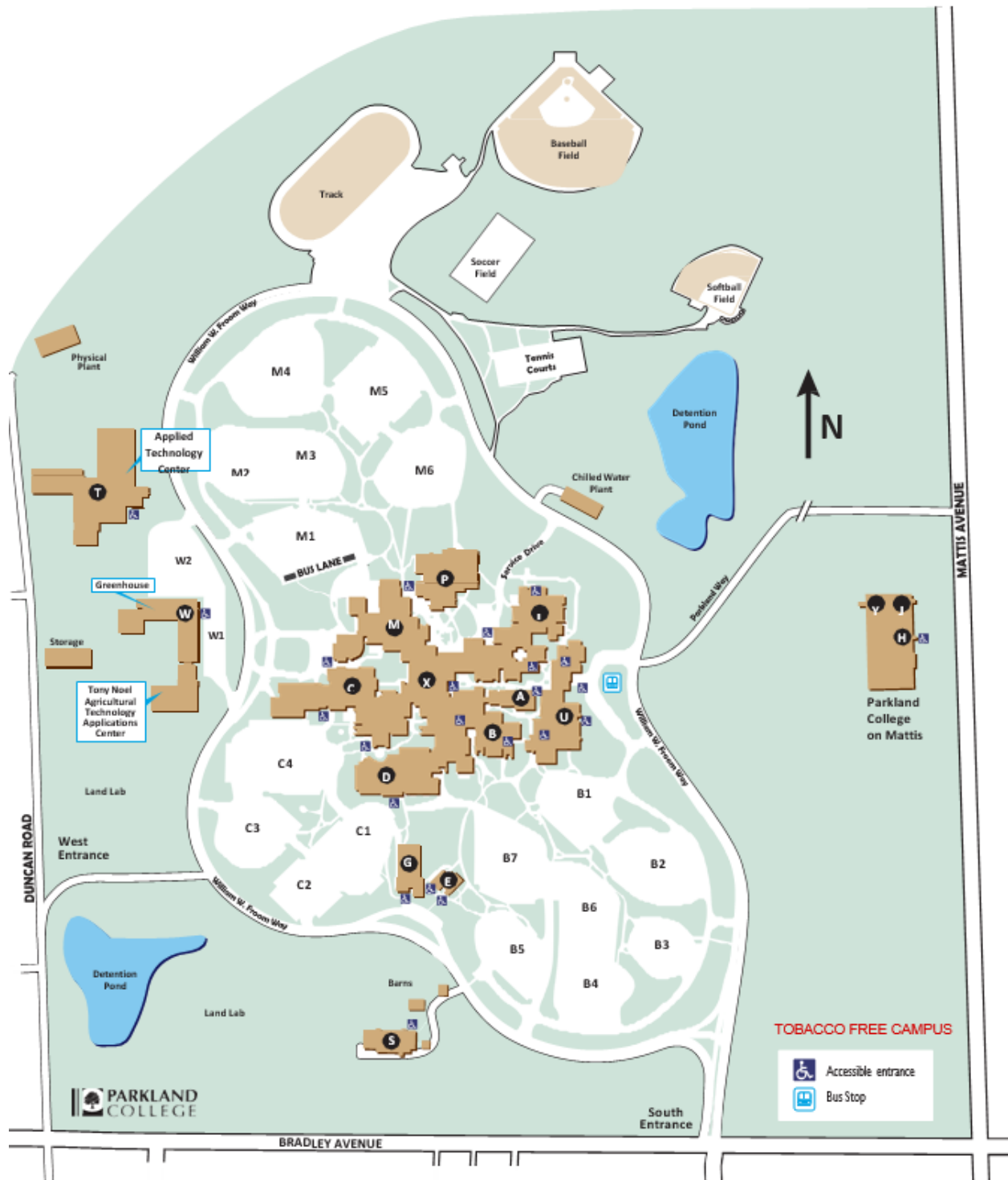
9.1 PROJECT INFORMATION STATEMENT FOR PARKLAND COLLEGE

1. Provide a brief description of the technology proposed to be used and value to Parkland College for that technology.
2. Discuss how and to what degree your proposal will technically benefit Parkland College.
3. Discuss how and to what degree your proposal will economically benefit Parkland College.
4. Describe maintenance needs and any projected down time required of the PV systems.

14. Annual cost to Parkland College:
 - a. The proposer shall issue a single monthly invoice to Parkland College for all useable electricity supplied to Parkland College from the PV system. No other payments will be made to the proposer.

15. Discuss the proposed system decommissioning process and how the proposer will restore the site to its original conditions including the complete removal of all of system equipment including ancillary system components.

APPENDIX: Map A shows the Parkland College land area and building arrangements



Map B shows the land areas of the campus that are excluded from consideration for PV installation, which are the areas bounded in red marked “No Solar”. The remaining land areas are open for consideration.

