

CAMPUS MASTER PLAN AMENDMENT

Name of Project:

Campus Wide Solar Array Installation

Project Type:

New Construction

Location of Project:

UAF, Fairbanks Campus, Fairbanks

Project Number:

2013065 CWSAI

Date of Request:

May 2, 2013

Approval Required:

Full Board

Prior Approvals:

Campus Master Plan Approval

Engineering Building Amendment

June 3, 2010

September 23, 2011

A Campus Master Plan Amendment (CMPA) is required when the development of a Capital Project deviates from the existing Campus Master Plan. An amendment to accommodate a proposed specific capital project shall be considered and approved by the board prior to consideration of the proposed capital project. The board may not grant schematic approval for a capital project request unless it implements the adopted campus master plan.

Action Requested

"The Facilities and Land Management Committee recommends that the Board of Regents approve the University of Alaska Fairbanks Campus Master Plan Amendment for the Campus Wide Solar Array Installation as presented. This amendment will be incorporated in the existing 2010 Campus Master Plan. This motion is effective June 6, 2013."

Campus Master Plan Amendment Abstract

The UAF Campus Master Planning Committee recommended amending the 2010 Campus Master Plan (2010 CMP) to change the land use designation of the area located on the hill below the Butrovich Building, north of Tanana Loop and west of the new Nanook terrain park from "Ecosystem Research, Instruction, and Recreation" to a new land use designation "Renewable Resources". No other changes are requested or required for the solar array project to be in compliance with the 2010 CMP.

RATIONALE AND REASONING

Background

The Solar Array project was presented to the UAF Master Planning Committee in November 2012. At that time, the committee approved the concept of the project and the fact that the 2010 CMP would have to be amended to accommodate the solar array. On November 28, 2012, the Master Planning Committee sent a Master Plan amendment recommendation to the UAF Chancellor. On that date Chancellor Rogers signed the amendment recommendation.

Site Consideration

This site was chosen for three main reasons: 1) The array is large and needed an accessible piece of land that could physically accommodate it; 2) The site is ideal for its gentle unobstructed south facing slope. This works to decrease construction costs and provide for the highest power generation with the proposed fixed photovoltaic array; 3) This site is directly above a UAF utilidor. Power can feed directly into the utilidor without large infrastructure costs or line losses.

The site to the south of Tanana Loop, east of the Botanical Gardens was evaluated but deemed too small for the array size required.

Amendment Impact

This amendment impacts the existing 2010 CMP in potential future use of the land. The land was designated to be used for trails and ecosystem research as desired by professors. It had no concrete use or buildings designated for the area. The trails impacted by the construction of the solar array will be rerouted as part of the project. Potentially, the solar array could be used for research by engineering students and the community as a study in alternative energy production in a northern climate.

Policy Compliance

This amendment complies with Regents' Policy in that it provides a guideline for land use in a designated area.

- 1. Projected enrollment and other factors affecting the need for facilities and infrastructure: None, there is no impact on enrollment, this is an infrastructure project.
- 2. General areas for land acquisition and disposal:
 None, no land is being acquired or disposed of for this project.
- 3. The general location of new or upgraded infrastructure, including roads, parking, pedestrian circulation, transit circulation, and utilities:

 The proposed solar array would impact the ski trail that traverses the field. It is proposed that the ski trail be relocated parallel to the road and run to the south of the array.
- Demolition of buildings, structures, and facilities:
 No buildings or structures will need to be demolished to accomplish this project. The only impact to facilities will be the need to relocate the ski trail.
- 5. General location, size, and purpose of new buildings, structures, and facilities:
 The anticipated footprint of the array is shown in the attached sketch. There are no outbuildings or other structures required as a part of this project.
- 6. Guidelines for landscaping:

The array will be fenced to prevent unauthorized entry. The fence aesthetics will be coordinated with the campus architect. The owner of the array will be responsible for all maintenance of the landscaping and the fence.

- 7. General location and intent for open spaces, plazas, etc.:
 As this is not a building, there will be no open space incorporated.
- 8. Guidelines for signage, both freestanding and on buildings and structures:

 Any permanent signage will be constructed in accordance with exterior UAF sign requirements.
- 9. Architectural guidelines for all buildings, structures, and facilities:
 This project consists of a solar array, a similar photo of which is attached. Solar arrays have a visual impact in that they are panels mounted on short bases, all facing south. The fence to be built around the array will be designed to be aesthetically pleasing yet sturdy enough to accommodate the structures.
- 10. Environmental and cultural issues, ADA access, and energy conservation:

 This project will demonstrate UAF's commitment to sustainable energy production concurrent with planning for a replacement solid fuel CHP plant. The project also demonstrates UAF's commitment to a complete energy profile.

This is an infrastructure project with very limited access so ADA access will not be a requirement.

- 11. The relationship of the campus to its surroundings and coordination with local government land use plans and ordinances:

 No ordinances or land use issues need to be addressed with this project.
- 12. General priorities for capital projects:

 This project will not impact the campus capital 10-year plan or priorities. It is a Public Private Partnership; development costs will be covered by the private partner.

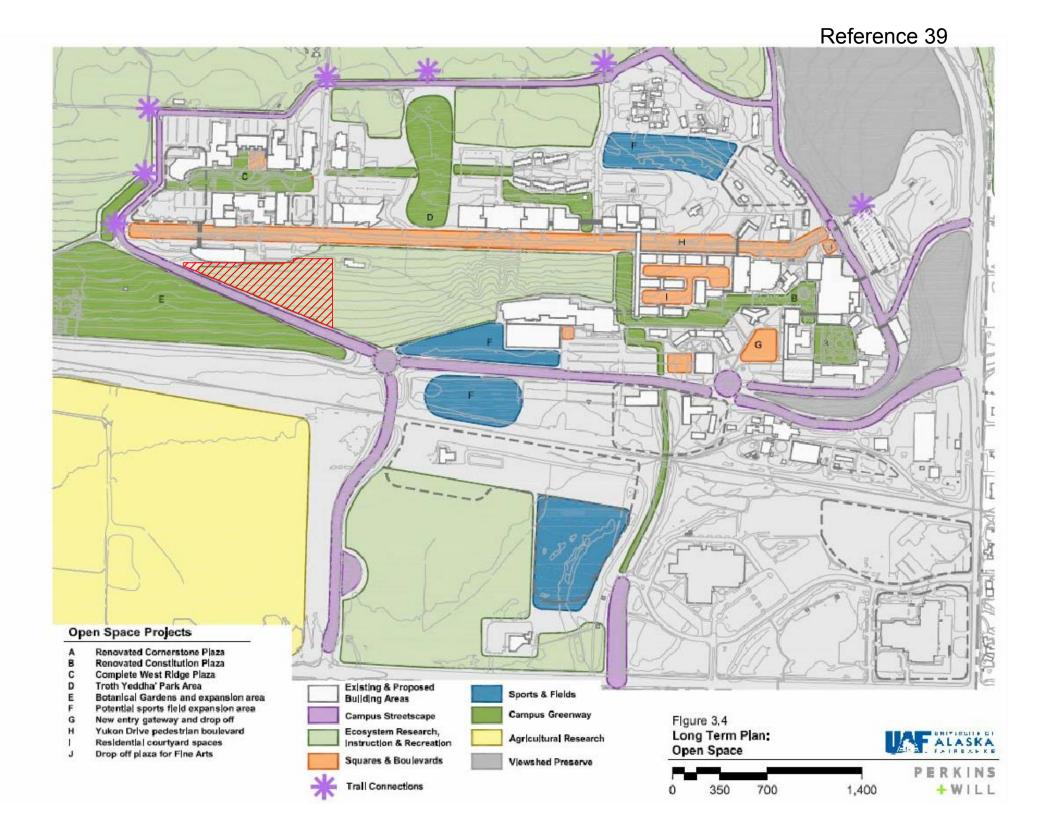
Supporting Documents

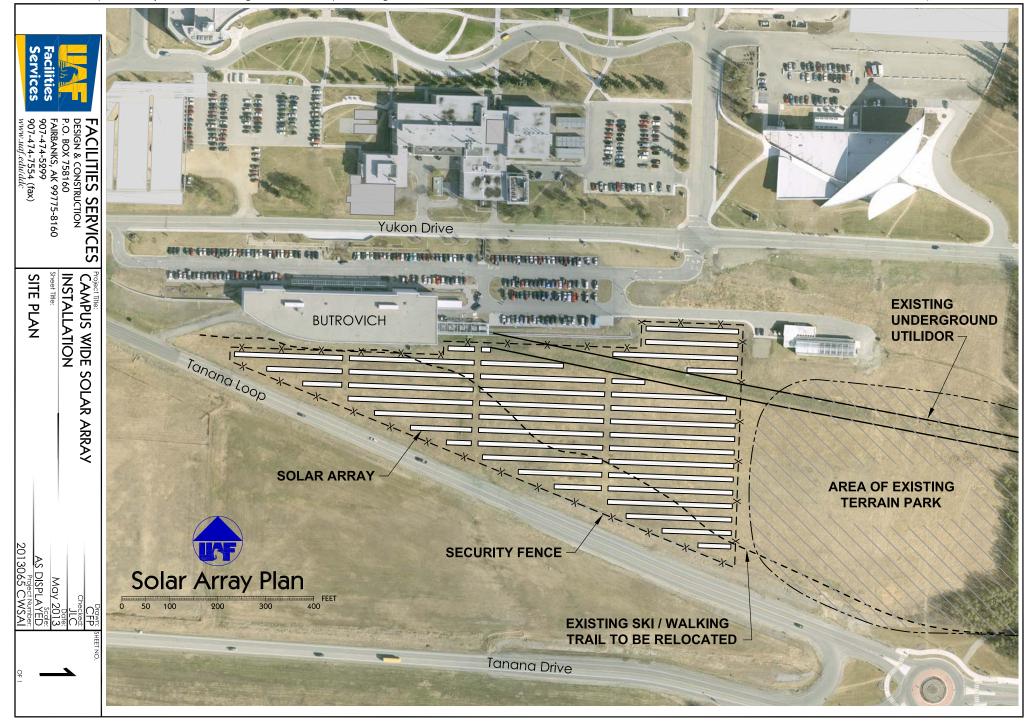
Site Plans

Master Planning Committee recommendation

Approvals

A CMPA requires approval by the Board of Regents.





Master Planning Committee of University of Alaska Fairbanks

Date:

November 28, 2012

To:

Brian Rogers, Chancellor

From: Josh Greenberg, Chair

Re:

MPC Recommendation 2012-07 - Master Plan Amendment - Change of land use designation for photovoltaic electrical generation array.

The Master Plan Committee amends the 2010 Master Plan to change the use designation of the area located on the hill below Butrovich Building, north of Tanana Loop and west of the proposed Nanook Terrain Park from 'Ecosystem Research, Instruction, and Recreation' to a new land use designation: 'Renewable Utilities.' The new designation is consistent with the placement of a photovoltaic electrical generation array being considered by the University.

The MPC recommends the following conditions on the placement of the photovoltaic electrical generation array:

- Responsibilities be defined and assigned for maintaining existing, or creating new, corridors to cross country ski trails, access to the Butrovich Building, and utilidors.
- Does not encroach on the proposed terrain park.
- Height and aesthetic choice of fencing be selected to lessen the effect to the viewshed.
- Landscaping be installed and maintained to no less than APPA Level-4 standards.
- Responsibility and cost for landscape maintenance be defined and assigned as part of any agreement on placement of the array.

The above mentioned conditions must be addressed in the final plan for the photovoltaic electrical aeneration array and reviewed and approved by Design and Construction, the Landscape Subcommittee, and the Master Plan Committee.

This amendment is effective upon a signed agreement between UAF and Siemens Inc. for a photovoltaic electrical generation array.

Motion made by Gary Newman, seconded by Doug Braddock.

Motion passed unanimously (6-0).

Thank you.