



Legislation Text

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To: Mayor and City Council Members
City Administrator

From: Mikayla Schmidt, City Planner
David Bennett, Public Works Director/City Engineer
Mitzi Baker, Community Development Director

TEST MEETING - Consider a Conditional Use Permit request for up to a 1MW Solar Garden.

Action Requested:

The City Council consider approving the attached Resolution of a Conditional Use Permit for up to a 1MW Solar Garden.

Summary Report:

Hyacinth Solar, LLC is proposing up to a 1MW solar garden project located west of the Northfield Hospital and Benedictine Living Community in Dakota County. The parcel is owned by St. Olaf College, located within corporate limits, and the property is zoned A-S: Agricultural. The project is adjacent to, and south of, the existing solar garden lying north of North Avenue/330th St. and west of the intersection with Eaves Avenue.

Geronimo Energy, a renewable energy developer based in Edina, Minnesota, is developing the proposed Hyacinth project. Geronimo Energy will use inverters and a linear axis tracking system. The estimated start date for construction is spring of this year. The original project site was proposed to be linear to the existing 5MW site. The future Transportation Plan, from the Comprehensive Plan, shows Eaves Ave. will extend to the north through where the original project was proposed. As a result, staff recommended reconfiguring the solar field to avoid conflict with the future right of way and the applicant revised their proposal to comply. Hyacinth Solar will be updating their maps as part of the attached full narrative. A decommissioning agreement will come forward at a March 2020 city council meeting for review.

The Planning Commission met and held a public hearing on Thursday, January 16, 2020. Public comment was heard from two adjacent property owners (and a third who called in) with concerns on runoff from the existing 5MW solar garden. Based on the property owner's feedback and discussion by the commissioners and staff, these conditions were established:

1. Development of the property includes restoration of areas compacted during construction and native plantings on the site.
2. Stormwater discharge rates leaving the property shall not be greater than existing conditions and shall be evenly distribute.

3. These conditions will expire when the current use, as a solar garden, is no longer in operation.

At the February 18, 2020 City Council meeting, discussion and questions around stormwater runoff and enforcement were brought up as concerns. Geronimo Energy has provided a detailed stormwater management study, which explains the existing conditions, proposed conditions, Dakota County's requirements, local requirements, MPCA stormwater management requirements and construction stormwater management. Geronimo will be presenting to Council explaining this report.

The other component is enforcement of violations of the stormwater plan. Surface Water Management is regulated in Chapter 22 of the City Code, Article VI. The applicability of this chapter applies to the solar farm and they will need to submit a storm water management plan (SWMP). The SWMP needs to address 22-302 (a) water quality, 22-302 (b) runoff rate control, 22-302 (c) runoff volume and 22-302 (d) general performance standards.

The main focus area related to the solar farm is runoff rate control, 22-302 (b) states:

For the two-year, ten-year, and 100-year 24-hour SCS Type II storm events and the 100-year ten-day snowmelt event (Table 1), the proposed post development runoff rate must not exceed the existing conditions runoff rate at all points leaving the site.

The proposed CUP approval included these two additional items recommended from Planning Commission.

- a. The applicant shall prior to construction provide to the City Engineer for review and approval a plan for development of the above-referenced property, which includes restoration of all areas compacted during construction of the solar farm project as well as the inclusion of native plantings on the project site as described in Exhibit A;
- b. Stormwater discharge rates from the above-referenced property following construction of the solar farm project shall not be greater than existing conditions and shall be evenly distributed. The applicant shall prior to construction provide to the City Engineer for review and approval a stormwater plan meeting this condition on an ongoing basis throughout the life of the project; and

The second condition above aligns with the runoff rate control in City Code.

Existing project sites with a SWMP, need to meet 22-302 (b) runoff rate control. Sites believed to not be in compliance, would need to be proven as such and then enforcement could be pursued. Listed below is the enforcement language.

Sec. 22-308. - Enforcement by legal or administrative action.

- (a) Any action or inaction which violates the provisions of the ordinance, the requirements of an approved stormwater management plan, and/or the requirements of a development agreement shall be a misdemeanor, and each day during which any violation is committed, continued or permitted, shall constitute a separate offense.
- (b) Violation of any provisions of this division may be enforced by civil action including an action for injunctive relief and by any administrative penalties approved by the city.

Based on the project review and criteria (listed below), staff recommends approval of up to a 1MW solar garden subject to the conditions recommended by the Planning Commission.

Conditional Use Permit Analysis:

The proposed project site is currently located in the A-S Agricultural zoning district and is owned by St. Olaf College. A solar garden is allowed as a conditional use according to Table 2.7-1: Permitted Principal Uses. A conditional use permit (CUP) follows the Type 4 Review Procedure found in Section 5.4.7 of the LDC. When reviewing a CUP, the following criteria are to be considered:

a) The proposed use is allowed as a conditional use in the district for which it is proposed.

Yes, commercial solar farms are an allowed conditional use in the Agricultural (A-S) zoning district per Table 2.7-1.

b) The conditional use will be in accordance with the general objectives, or with any specific objective, of the city's comprehensive plan and this LDC.

The Existing Land Use map from the Comprehensive plan denotes the project location as a priority growth area.

The Comprehensive Plan Transportation Plan identifies a future major collector roadway that dissects this property. This project avoids creating an obstruction to the future planned roadway. This Plan element was overlooked on the existing solar garden and that project should have left the future roadway free and clear of obstructions as well. Exacerbating the obstruction with another project would be in conflict with the purpose of sound planning and orderly growth.

Environmental Resources Strategy 10 indicates the City will remain responsive to issues of climate change and will act to reduce Northfield's contribution to climate change. Specifically, ER 10.3 is to "promote the reduction of greenhouse gas emissions at residential, industrial and commercial scales".

The Climate Action Plan outlines, in Policy and Planning - 3 Renewable Energy, how the City can focus on generating electricity from ground-mount solar installations and to promote community solar garden subscriptions.

The proposal meets the Site Development Standards for the Agricultural Zone District as defined in Article 3 of the LDC and the Use Specific Standards found in Article 2.

c) The conditional use will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area.

The Hyacinth project will have an appearance similar to the existing solar garden and is adjacent to that project. This project will not alter the essential character of the area as most of the facility, including the solar field, will be low-profile and is a low-impact use. The solar arrays will be setback approximately 322 feet from North Avenue and will have a vegetated buffer around the south and east side of the facility.

d) The conditional use will not be hazardous or reasonably disturbing to existing or future uses.

Public Works/Engineering reviewed the proposal and noted the on-site storm water management needed to

be more linear to mimic runoff that currently exists without a concentrated discharge point. The applicant will submit a storm water management plan, have a maintenance agreement with the City for their private on-site storm water management and must apply for all applicable grading, sediment and erosion control permits.

The land is currently in agricultural land use. The project will have a positive impact on the land because it will be re-vegetated with low-growing species, providing better quality habitat and soil-building conditions. A reversion to the agricultural land use or a change to another land use can occur after the project is removed at the end of the project's useful life.

e) The conditional use will be served adequately by essential public facilities and services such as streets, police and fire protection, drainage structures, refuse disposal, water and sewer.

Minimal access is required for this use. The property is adequately served by public utilities and is connected to essential public services (police and fire protection) being it is adjacent to the Northfield Community Solar Garden which already has a roadway connection in place.

f) The benefits of the conditional use outweigh the potential negative effects of the surrounding community.

Clean energy from this garden will be a benefit to local residents. The City of Northfield will benefit from the facility in their commitment to the Green Step Cities Program and the Climate Action Plan.

g) The conditional use will not create excessive additional requirements at public cost for public facilities and services.

Limited essential public services (police and fire protection) will be necessary for construction and operation of the Project.

h) The conditional use will not involve uses, activities, processes, materials, equipment and conditions or operations that will be detrimental to any persons, property or the general welfare by reason of excessive traffic, noise, smoke, fumes, glare, or odors.

During construction, noise will be emitted by the construction vehicles and equipment. The amount of noise will vary based on what type of construction is occurring on a given day. These noise impacts will be temporary and during daylight hours. Once the Project is operational, it makes virtually no noise.

To limit reflection, solar PV panels are constructed of dark, light-absorbing materials and covered with an anti-reflective coating. Today's panels reflect as little as two percent of the incoming sunlight depending on the angle of the sun. According to the American Planning Association (APA), solar panels often have much lower reflectivity than that of other nearby materials such as glass, steel, or snow.

i) The conditional use will not result in the destruction, loss, or damage of natural, scenic, or historic features of major importance as may be established in the comprehensive plan or other city plans related to natural, scenic, or historic features

The Project is not expected to result in adverse impacts to natural, scenic or historic features of major importance.

j) The traffic and parking generated by the use will not lower the Levels of Services as described in the comprehensive plan for intersections within a quarter mile of the site.

Once constructed, traffic to the site will be limited to period inspection and maintenance. There will be little or no impact on the level of service for intersections within a quarter mile of the site. Traffic during construction is estimated to be 15-25 trucks daily. Traffic will include light pickup trucks/employee vehicles, semi-trailers for delivery of equipment, and other machinery. Once the Project is operational, site visits will be infrequent and would not be anticipated to be a burden to the existing roads.

k) In residential districts.

Not applicable to this site because the Project is not in a residential district.

l) In the Perimeter Transition Area (PTA).

Not applicable to this site, as the Project is not in the Perimeter Transition Area.

m) Impacts such as noise, hours of activity, and outdoor lighting have been addressed to mitigate negative impacts on nearby uses.

Temporary impacts to nearby uses from construction may occur during daylight hours, but few uses are within close proximity. The site will not be permanently lit once operational. During operations, lighting will be motion-activated and down lit for security and safety. During construction, it is anticipated to limit construction between the hours of 6 AM and 7 PM, Monday through Saturday, with the potential for limited low-noise activities on Sundays.

n) Parking is adequately provided for the proposed conditional use.

Parking is not required for community solar gardens, but parking will be provided during construction of the site as a temporary laydown location. Maintenance personnel would be on site infrequently and will be able to park within the fenced boundary.

Alternative Options:

If a proposed conditional use satisfies both the general and specific standards set forth in the zoning ordinance, the applicant is entitled to the conditional use permit. If the applicant meets the general and specific standards, there is typically no legal basis for denying the CUP.

If necessary to meet applicable criteria or mitigate for potential adverse impacts additional conditions may be placed on a Conditional Use Permit.

Financial Impacts:

NA

Timeline:

January 16, 2020 - CUP reviewed and approved by Planning Commission

February 18, 2020 - CUP reviewed by City Council