

Description of Proposal/Use

Install a one (1) megawatt (MW) utility scale solar facility owned by the Illinois Municipal Electric Agency (IMEA) at the Springbrook Water Reclamation Facility.

This project will require:

1. Annexation of city-owned property located at the Springbrook Water Reclamation Facility.
2. Rezone to R1.
3. Plat of Subdivision to consolidate three lots operating as the Springbrook Water Reclamation Facility.
4. Request for major changes to the existing conditional use for (1) a conditional use for the solar panels and (2) a variance to install a seven-foot-tall fence around the solar panels.

Project Information:

The city purchases its electric power for its publicly-owned municipal electric utility from the Illinois Municipal Electric Agency (IMEA), a not-for-profit joint action agency that works to provide power supply and other related utility services to 32 municipal electric utilities. On May 30, 2018, the city applied to be a host site at its Springbrook Water Reclamation Facility for the IMEA's one (1) megawatt solar array.

On May 7, 2019, the Naperville City Council adopted Resolution 19-399 approving a Generation Siting and Operating Agreement between the Illinois Municipal Electric Agency and the City of Naperville at the Springbrook Water Reclamation Facility, located at 3712 Plainfield-Naperville Road for a one (1) megawatt solar array.

The solar site would consist of more than 3,500 high-efficiency solar panels installed on steel, ground-mounted, fixed-tilt racks covering about six (6) acres. The new solar array, in partnership with IMEA, would provide opportunities to showcase a project that emphasizes the city's continued commitment to sustainability and renewable energy.

This project is expected to produce more than 1.6 million kilowatt hours of electricity per year, which is enough to power approximately 145 homes annually, and will be fed into the city's distribution system. In addition to the year-round environmental benefits of this project, the power generated by the solar panels peaks at the same time as the city's summer load. This will offset the peak cost of electricity for the IMEA and thus the city.

The IMEA is committed to investing in a clean energy future, so they are working diligently to diversify their portfolio by continuing to add renewable generation resources. The IMEA will commission the solar facility, which will be built and operated by Sol Systems. The capital expense of the project will be funded by Sol Systems, and they will sell the power to the IMEA under a 20-year power-purchase agreement. There is no direct cost incurred by the city for the cost of its operation and maintenance.



EXHIBIT 1: Standards for Granting or Amending a Conditional Use

1. Granting a conditional use for the existing Springbrook Water Reclamation Facility will not be detrimental to, or endanger the public health, safety and general welfare as the water reclamation facility is currently in operation and the solar array is a passive operating facility requiring little maintenance after construction, while producing no air, water or sound emissions. The solar array is proposed to be fenced inside of a seven-foot-tall chain link fence located within the secured Springbrook Water Reclamation Facility.
2. Granting a conditional use for the existing Springbrook Water Reclamation Facility will not be injurious to the use and enjoyment of other property in the immediate area for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood as the water reclamation facility is currently in operation.
3. The establishment of the conditional use will not impede the normal and orderly development and improvement of the adjacent property for uses permitted in the district as the water reclamation facility is currently in operation.
4. The establishment of the conditional use is not in conflict with the adopted comprehensive master plan. The proposal is consistent with the Future Land Use Map designation of “transportation/utilities” land use.

Exhibit 3:

No electors reside on the property.

Exhibit 4: Zoning annexed parcel 07-01-12-300-007-000 to Naperville zoning classification R1, is in harmony with and consistent with the existing Land Use Map and is in conformance with the underlying zoning of the Springbrook Water Reclamation Facility.

Rezoning:

Standard 2: The trend is consistent because the parcel is already associated with the existing water reclamation plant and will add on to existing functionality in providing a service to the general public.

Standard 3: The Subject Property is being annexed into the municipal boundary and is already associated with existing reclamation plant.

Standard 4: The Subject Property is currently unincorporated. The proposed use is consistent and a conditional use for the proposed zoning district.

Standard 5: The rezoning will not alter the essential character of the local neighborhood because there is an existing reclamation plant and is separated by more than 600 feet from the closest residential neighborhood with a thick stand of mature trees buffering the site.



EXHIBIT 5:

The Department of Public Utilities – Electric is requesting a zoning variance from the following ordinances;

6-2-5: - UTILITY FACILITY REGULATIONS:

All public and private utility facilities shall conform to the performance standards of Chapter 14 of this Title. They shall be screened with fences or landscaping of at least seventy-five percent (75%) opacity. Lighting of the facilities shall be directed away from surrounding properties.

6-2-12: 4.2 - FENCES: All fences other than those intended for decorative or screening purposes shall be buffered with berming or landscaping

1. The proposed seven-foot-tall black vinyl coated security fence is located interior to the secured and fenced Springbrook Water Reclamation Facility. The solar array itself is more than 600 feet away from the closest residential neighborhood with a thick stand of mature trees buffering the site.
2. Plainfield/Naperville Road is located more than 1,500 feet to the west of the closest solar array and is obscured from the R.O.W by existing berming, landscaping and buildings located on the Springbrook Water Reclamation Facility.
3. Providing landscaping of the fence poses practical maintenance issues related to landscape growth blocking the sun from shining on the solar array.
4. The solar array will not be lit with security lighting.
5. The variance, if granted, will not alter the essential character of the neighborhood and will not be a substantial detriment to adjacent property.



EXHIBIT 7: Section 6-3-6:2: Standards for Granting a Zoning Variance

The Department of Public Utilities – Electric is requesting a zoning variance from the following ordinances:

6-2-12:4.3 All fences shall not exceed a height of six (6) feet except for those for tennis courts shall not exceed a height of twelve (12) feet.

1. The requested variance is for a seven (7)-foot-tall black vinyl coated chain-link fence surrounding the location of the solar array that will be interior to the Springbrook Water Reclamation Facility. The site is zoned R1 with a conditional use for a private or public utility facility. The request is in harmony with the practical safeguarding of facilities, which are located in the adopted comprehensive master plan.
2. Standard utility practice is to fence electric utility production facilities with a seven (7)-foot-tall fence in accordance with the National Electric Safety Code.
3. Strict enforcement of this Title would result in practical difficulties or impose exceptional hardships due to special and unusual conditions which are not generally found on other properties in the same zoning district.
4. The proposed seven (7)-foot-tall fence is located interior to the secured and fenced Springbrook Water Reclamation Facility, the solar array is over 600 feet away from the closest residential neighborhood with a thick stand of mature trees buffering the site.
5. The variance, if granted, will not alter the essential character of the neighborhood and will not be a substantial detriment to adjacent property.



EXHIBIT 9: Standards for Granting or Amending a Conditional Use

1. Amending the conditional use at the existing Springbrook Water Reclamation Facility for the installation and operation of a one (1) MW solar array will not be detrimental to, or endanger the public health, safety and general welfare as the water reclamation facility is currently in operation and the solar array is a passive operating facility requiring little maintenance after construction, while producing no air, water or sound emissions. The solar array is proposed to be fenced inside of a seven-foot-high chain link fence located within the secured Springbrook Water Reclamation Facility.
2. Amending the conditional use at the existing Springbrook Water Reclamation Facility for the installation and operation of a one (1) MW solar array will not be injurious to the use and enjoyment of other property in the immediate area for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood, as the water reclamation facility is currently in operation and the solar array is a passive operating facility requiring little maintenance after construction while producing no air, water or sound emissions. Additionally, the solar array will be approximately 600 feet away from the nearest home to the north.
3. Amending the conditional use will not impede the normal and orderly development and improvement of the adjacent property for uses permitted in the district as the water reclamation facility is currently in operation; adding a utility scale solar array at an existing public utility facility is orderly land planning.
4. Amending the conditional use for a one (1) MW solar array is not in conflict with the adopted comprehensive master plan. The proposal is consistent with the Future Land Use Map designation of “transportation/utilities” land use.