

TO: MAYOR, CITY COUNCIL AND CITY MANAGER  
FROM: MARK MALONEY, PUBLIC WORKS DIRECTOR  
DATE: JUNE 15, 2020  
SUBJ: PUBLIC WORKS MONTHLY REPORT

### **ROOF-TOP SOLAR AT MAINTENANCE FACILITY**



**Solar Array at Shoreview Maintenance Facility**

*Submitted by Environmental Quality Committee student member, Sruthi Subramanian*

Nonrenewable sources of energy, such as oil, coal, and natural gas, make up 85% of worldwide energy usage. These resources are finite and will eventually get depleted as human consumption exceeds what is available. However, renewable sources of energy, such as solar power, are in no danger of being consumed in excess of their long term availability, making them more efficient alternatives to

nonrenewable sources. Solar electricity generation represents a clean alternative to energy from fossil fuels as there is no air or water pollution, no risk of electricity prices spiking, and no threats to public health. Moreover, the US Department of Energy estimates that roughly 18 days of sunshine on Earth contains the same amount of energy as is stored in all of the planet's coal, oil, and natural gas reserves, demonstrating the vastness of the solar resource.

In recent years, cities across the U.S. have begun to make the shift to renewable energy sources, illustrating just one of the many ways cities are becoming increasingly environmentally-conscious. In late 2019, the city of Shoreview entered into a purchase power agreement with a local solar developer for a 106-kW solar array that was installed on the city's maintenance building roof. The solar array was installed at no cost to the city and expects a 10% savings in electricity during the first 15 years. After the 15-year period, Shoreview will assume ownership of the array and receive all the energy produced at no cost.

Annually, the solar array provides nearly half of the annual energy consumption of the public works maintenance building. Since the installation of the solar array, city staff found that over 54 megawatt-hours of energy had been produced. This is equivalent to over 630 trees planted or approximately the mitigation of 84,000 pounds of CO<sub>2</sub> emissions. This serves to demonstrate how actions taken even at a local level can have a significant impact on the environment.

## **ENVIRONMENTAL SERVICES**

### **Environmental Quality Committee (EQC)**

The EQC decided to cancel their scheduled May meeting due to a light agenda, the Memorial Day conflict, and news of the cancellation of the Slice of Shoreview. They are anticipating continuing with the June meeting as scheduled, though likely using remote technology. The May speaker series event was cancelled, but recordings are being compiled by the two speakers. Staff has already received the recording from All Energy Solar on reasons to install residential solar systems and available resources, and is currently waiting on the presentation from the city engineer who will speak on the city's solar installation. That will conclude the 2020 speaker series. In addition to the May speakers, the EQC's student member, Sruthi Subramanian, has written an article on the city's solar installation that will run in this fall's ShoreViews newsletter. That edition of ShoreViews will highlight the city's recent energy work including solar and electric vehicle advancements.

The EQC is also still soliciting applicants for the Green Community Awards program this year. Two applications have been received, and staff has sent out letters to potential applicants soliciting their applications. The application process has moved entirely online this year, and interested applicants can submit their information via the city website. The EQC is hopeful that this change will streamline the process and make it easier for more residents, businesses, and others to apply for the award.

### **Forestry**

The city's emerald ash borer treatment program is in full swing. The interns have finished contacting everyone who treated two years ago, reminding them that they could treat again, and have completed over 130 quotes for residents so far. They started treatment in early June and have completed all training for pesticide applicator licensing, tree inspector certification, and injection equipment usage. Staff is anticipating another year of record participation in the program. The city purchased a new injection system and equipment at the end of last year after researching and testing the new system and finding it simpler and more user friendly than the previously used system. Staff anticipates that the new injection equipment will greatly speed up the city's treatment program, allowing interns to treat more trees than the previous system. This will help alleviate concerns that were present the past two summers where staff had to turn away some interested residents because the program was at capacity.

The natural resources coordinator has been receiving a lot of calls for private and public tree inspections this season. This includes requests for support from residents who are noticing issues with their trees, are having boundary issues with neighboring trees, or are looking for recommendations for planting or pruning. Due to the Covid-19 pandemic, more people are home and they appear to be taking the time to look at their trees more closely. This is great news for the urban forest and our staff have been trying to answer as many questions as possible. In addition to the resident requests for inspections, staff has also been conducting surveys for diseased and hazardous trees. It's a bit too early in the season for oak wilt to be showing symptoms, but there are many ash trees in the city that are succumbing to the emerald ash borer and are declining. The city does require removal of

EAB infested trees after they become unsightly and potentially dangerous. Ash trees are brittle and tend to snap or crack when in decline, making their removal more urgent.

### **Water**

The city continued to receive applications for and take calls about the smart irrigation controller rebate program this month. The rebate is paid for mostly through grant dollars. The grant was awarded to the city by the Metropolitan Council and runs through this year. The city has awarded 20 rebates so far for a total of about \$2,000 worth of cost savings to residents, and it provides additional water savings for Shoreview! With the recent uptick in applications, staff is hopeful that the city will be able to issue grants to residents for the full awarded amount.

### **Recycling**

The city still plans to host a 2020 fall cleanup day event. It is possible that event may be extended to make up for the needed cancellation of spring cleanup day. Currently fall cleanup day is scheduled for Saturday, October 10<sup>th</sup> and will take place at McCullough Park along County Road I. The event will be restricted to Shoreview residents only. Staff is working with Eureka to determine how this event will work and if any precautions need to be taken for COVID-19 at that time.

### **MAINTENANCE ACTIVITIES**

All maintenance crews including parks department crews are cleaning, maintaining and sanitizing the maintenance facility on a regular schedule. Everyone is doing their part to keep the facility clean in the absence of the DOC crew. All public works maintenance crews had a demonstration and were trained on the new Vacon vacuum/jetting truck and equipment.

The utility division work program for the last month included:

- Each day utility personnel inspected all the wells, lift stations, water towers, the booster station and the water treatment plant. Regular/routine scheduled maintenance was performed and any necessary repairs were completed as needed.
- Utility crews continue to respond to location requests by marking underground City utilities in proposed excavation areas. Project demands continue to increase and require a number of utility crew personnel to meet the demand for utility locates. As owners of buried infrastructure, the City is required by law to locate these facilities within a certain time period of a Gopher State One-Call request. This has the effect of redirecting a significant amount of resources away from other elements of the Department's work program.
- Drinking water samples were collected and analyzed as required by the Minnesota Department of Health.
- All of the City's approximately 10,000 water meters are read every month. It takes one person approximately one week to drive the streets to collect all the water meter reads through radio transmission. That data is use for water billing statement as well as the WaterSmart customer portal.
- The new sewer jetter/vacuum truck and equipment has arrived.

- Crews are still learning this new piece of equipment while continuing with the annual jetting/cleaning of segments of the sanitary sewer system.
- They have been inspecting and repairing curb boxes (water shut offs) as needed.
- They continue with annual routine maintenance and exercising of the gate valves.
  - They have been repairing valves as they come across ones in need of attention.

The street division work program for the last month consisted of:

- Crews helped with receiving and delivering trees from the city tree program
- Mowing maintenance strips along trails has begun for the growing season.
- Crews have been working with the DNR on mosquito control by inserting briquettes into storm water catch basins and sumps
- Storm sewer inspection and maintenance continues to ramp up for the season.
  - They have been running the pump at Suzanne pond as levels increase.
  - All storm sewer lift stations are inspected 7 days a week.
- Street crews are patching pot holes with hot mix asphalt.
  - They have also patched streets and trails where water main breaks were repaired and are patching areas where gate valves are being repaired.
  - Crews were also out repairing curbs and sidewalks as necessary.
- Street sweepers are out sweeping streets as weather conditions and time permits.
- Sign maintenance is ongoing
  - Pavement markings including cross walks and turn arrows are being painted on the streets as the weather allows.
  - Crews continue putting the new logos on vehicles and street name signs.

The Department of Corrections crew has been suspended throughout the response to COVID-19. This continues to create a backlog of important but not safety-sensitive or essential work.

## **PROJECT UPDATES**

**Wabasso Neighborhood Reconstruction – Project 19-01** – The contractor is working on the final restoration of the disturbed areas and addressing punch list items. All work for the project is expected to be complete by mid-June. It is expected a request for final payment will be submitted to the council for consideration in July.

**County Road E Trail and Water Main Extension – Projects 19-03 & 19-05** – The contractor is currently working on punch list items. All work for the project is expected to be complete by mid-June. It is expected a request for final payment will be submitted to the council for consideration in July.

**Schutta Road Sewer Improvements – Project 19-06** – All work for the project is complete and it is expected a request for final payment will be submitted to the council for consideration in July.

**North Owasso Blvd Reconstruction – Project 19-07** – The contractor has completed the installation of the underground utilities and granular base of the roadway, on Arbogast

Street and North Owasso Boulevard, between Victoria Street and Chandler Road. They are planning to install the concrete curb and gutter the week of June 8. Paving of the first layer of the roadway and restoration of disturbed areas is expected to be completed by late-June/early-July. The contractor has started the installation of the underground utilities on North Owasso Boulevard between Chandler Road and the Lake Owasso boat launch, which will continue until the end of June.

**2019 Street Light Replacement – Project 19-08** – There are seven areas included in the project that are located throughout the north half of Shoreview. The contractor has completed the installation of the street lights in the Hamline/Bucher/Woodcrest area and will be completing final restoration in the area the week of June 8. It is expected the street lights in the Tomlyn/Churchill, Churchill/Amble, and Bridge/Lion areas will be installed by the end of June. Installation of the street lights in the Virginia, Wendy, Lilac, and Oxford areas is expected to be complete by the end of July.

**Suzanne/Gramsie Stormwater Improvements – Project 20-01** – A preconstruction conference for the project was held and the contractor is in the process of ordering materials. Work is expected to start in June.

**Edgetown Acres Reconstruction – Project 20-02** – The contractor moved on site and completed the removal of street pavement on the northern portion of Fairview Avenue and Oakwood Drive. All of the trees were also removed for the entire project area. The contractor plans to start the installation of underground utilities on the north portion of Fairview and on Oakwood Drive the week of June 15 and it expected the work will continue until mid-July.

**Turtle Lake Road Rehabilitation – Project 20-04** – The council awarded the contract to Northwest Asphalt at the June 1 meeting and a preconstruction conference is scheduled. Work is expected to start in late-June/early-July.

More detailed information on the projects, including maps of the project areas and weekly updates are available on the city's project webpage:  
<https://www.shoreviewmn.gov/services/street-projects>

REGULAR COUNCIL MEETING  
JUNE 15, 2020

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