

CONSERVATION ADVISORY COMMISSION
MINUTES

April 12, 2022

MEETING CONVENED: 7:01 p.m. Council Chambers/Teams Meeting Hybrid

MEMBERS PRESENT: Chair Sheila Smith, Co-chair Helga Huntley, Beth Chajes, Andrew O'Donnell, John Mateyko, Mikayla Rypkema

STAFF: Jeff Martindale, Chief Purchasing & Personnel Officer
Joe Spadafino, Parks and Recreation Director
Bhadresh Patel, Electric Director
Nichol Scheld, Deputy City Secretary

Ms. Smith called the meeting to order at 7:01 p.m.

1. APPROVAL OF MINUTES FROM MARCH 8, 2022:

MOTION BY DR. HUNTLEY, SECONDED BY MR. MATEYKO: TO APPROVE THE MARCH 8, 2022 MINUTES.

MOTION PASSED. VOTE 6 TO 0.

AYE: HUNTLEY, CHAJES, O'DONNELL, SMITH, MATEYKO, RYPKEMA.
NAY: 0.

2. PUBLIC COMMENT:

None.

3. REQUEST FOR FUNDING – JOE SPADAFINO

Mr. Spadafino reported that the Spring Tree Giveaway had been a great success with the distribution of 155 trees to 95 City residents. Many residents took advantage of the two-tree limit per household during the first wave, and it took roughly two weeks for residents to pick up the remaining 20 pignut hickory trees. He noted that staff wanted to hold another event in the fall and assumed that there would be additional expenditures for the purchase of bags for the City's mulch pile; the mulch would be provided to residents for use with the plantings. He revealed that of the \$10,000, staff spent \$8,845 so he requested an additional \$4,000 in funding and the permission to use the remaining \$1,155 for the fall event. The funds would be used to purchase 75 trees/shrubs and the event would be restricted to a one tree or shrub per household to expand to more residents. He explained that some people experienced difficulty with the registrations system and there were other issues with the registration notification. Staff would remedy the issues for the fall event and would advertise similarly to other Department-sponsored events and include it in the falls newsletter. He shared that by the time some residents learned about the

program, the most popular trees were claimed. He admitted that not everyone would get the trees they wanted but he wanted to make the event as equal as possible. He shared that the pick-up for the spring event would be on Saturday, April 30th, and staff would issue an email the Thursday before regarding the schedule. He noted that Ms. Smith had offered to participate and share information about tree care. Staff would offer proper planting tips and encourage participants to post pictures of the planting process and the growth. He shared that he received a pine tree whip during a tree giveaway 20 years ago and it was now the largest tree in his yard. He thought that successful plantings would be a point of pride for the residents. He repeated his request for the Fall Giveaway.

Ms. Smith asked that staff request that participants bring their own containers for mulch in the fall. Mr. Spadafino agreed and informed that there would be four time slots of 45 minutes for pick-up. He spoke to other communities that had held similar events and discovered that when there were no assigned slots, all participants showed up at once.

Dr. Huntley asked if staff would issue communication in the fall for resident updates and Mr. Spadafino confirmed. Dr. Huntley asked if staff would take the preferred trees from the spring event into consideration for the fall purchases or if participants would be allowed to order their trees. Mr. Spadafino said that the process would be the same with a variety of six or seven trees. He noted that the flowering trees were chosen first. Dr. Huntley asked if staff was planning on purchasing trees based on the popularity of the last event. Mr. Spadafino acknowledged that staff was considering other native trees to expand the variety of the tree canopy but would still purchase a small number of the popular trees.

Ms. Smith asked which species of dogwood was part of the event because she was concerned with disease. Mr. Spadafino assured Ms. Smith that Tom Zaleski, the City's Arborist, was involved in the selection process. Ms. Smith confessed that she did not find the City's activity registration process to be user-friendly. Mr. Spadafino agreed it could be a bit cumbersome, but it was the City's best avenue because it included all of the pertinent information and allowed for a first-come, first-served process. He confirmed that staff would streamline the application before the next event but asked that anyone who had difficulty registering reach out the Parks and Recreation Office. He revealed that many residents provided positive feedback online and had encouraged others to participate.

Ms. Rypkema asked for the date of the fall event and Mr. Spadafino explained that it was necessary to submit the order by June or July and host the pick-up by the end of September because the newsletter went out before Labor Day weekend so that residents had a few weeks to register.

Mr. Mateyko thought the program was extremely valuable and asked that the emphasis be kept on native species that were thought to be better able to cope with a warming climate through maturation. Mr. Spadafino explained that staff had gone so far as to choose trees with various drainage tolerance.

Mr. O'Donnell fully supported the program and fit with the Commission's charter and mission in terms of providing shade, fighting climate change, and absorbing carbon. He thought the Commission should continue to support the event, but he wanted to scale up. He asked why the fall event was less expensive. Mr. Spadafino reiterated that 155 trees and shrubs were purchased for the fall event where households were permitted two plantings, but the fall event would only allow registration for one planting, so staff chose to decrease the count to 75. He wanted to be cognizant of the Commission's other ventures and confessed that he would not be surprised if he returned in the spring to request more funding.

Ms. Smith asked if staff had the trees in-hand and Mr. Spadafino informed that the plantings would arrive on the Monday or Tuesday before the pick-up.

Mr. O'Donnell supported scaling-up as the event became more popular.

Ms. Smith noted that part of the cost was the size of the trees and asked if staff purchased 5-gallon plantings. Mr. Spadafino revealed the plantings were between 3- and 5-gallon and explained that he found that whips were usually destroyed by lawnmowers and people would be more engaged with larger trees. Ms. Smith understood the appeal of larger trees but found that it was of no advantage for the tree and smaller plantings tended to fare better because the root system would grow faster to greater success. Mr. Mateyko agreed. Ms. Smith asked if staff would choose a different nursery and Mr. Spadafino explained that the event was at the mercy of availability, but he was satisfied with the quality and cost of the recent purchases.

Dr. Huntley asked if preference at the fall event would be given to those who had not received trees at the spring event. Mr. Spadafino confirmed that if a household received trees in the spring, it would be ineligible for the fall giveaway.

Ms. Chajes had no questions but was enthusiastic and supportive about the program.

MOTION BY DR. HUNTLEY, SECONDED BY MR. O'DONNELL: THAT CAC DESIGNATE \$4,000 OF ITS UNENCUMBERED BUDGET TO A FALL TREE GIVEAWAY AS REQUESTED BY JOE SPADAFINO FOR THE DEPARTMENT OF PARKS AND RECREATION AS WELL AS TO ALLOW PARKS AND REC TO UTILIZE LEFTOVER FUNDS FROM THE PREVIOUS ALLOTMENT AT THE SPRING GIVEAWAY FOR THE FALL GIVEAWAY.

MOTION PASSED. VOTE: 6 to 0.

Aye – Smith, Huntley, Chajes, Rypkema, Mateyko, O'Donnell.

Nay – 0.

4. CITY DEPARTMENT/SUSTAINABILITY NEWARK UPDATE – JOE SPADAFINO

Mr. Spadafino noted that one sustainability goal was to address the City's tree canopy and shared that reforestation efforts were scheduled through the spring of 2022. The City was a recipient of the Delmarva Power Sustainability Communities Grant for \$10,000 and staff would use the funding to reforest parks and open spaces throughout the City. Staff would install 421 plantings on Earth Day, Saturday, April 23rd. He pointed that the Department was still looking for volunteers and staff was trying to pre-dig holes to expedite the event. He revealed that staff also installed a number of 8-foot deer protection fencing to give the plantings a chance to survive and that 445 whips would be planted as part of UD's research at Old Paper Mill Park along the wooded area of White Clay Creek. He shared that hackberries and a number of deer resistant trees and shrubs would be planted around white oaks to offer a better chance of survival. UD would provide the City with the research data on the survival rates. He believed the Earth Day Plantings would be one-gallon pots because staff found there was a better success rate with the bigger plant material. Between the Earth Day event and UD's research planting, the City would have 866 new plantings in addition to the 155 trees and shrubs as part of the Spring Giveaway for a total of 1021 plants. He hoped for more initiatives throughout the remainder of the year and informed that he visited Redd Park earlier in the day and reported that the previous reforestation efforts were coming in nicely.

Dr. Huntley asked where the Earth Day plantings would be installed. Mr. Spadafino listed the locations:

- Folk Park along the lefthand side of the park line as well as by Villa Bellmont
- Church Road along the Christina Creek
- The top of the reservoir into Redd Park from the low point of the trail to the wood line
- The backend of Karpinski Park towards the dam which backed up to the White Clay Creek

Dr. Huntley asked if staff had an estimate of how many trees needed to be cut down over the last year. Mr. Spadafino said that he would reach out to the contractor for a number but shared that the majority were ash trees along the Christina Valley stream into Rittenhouse Park – 15 to 20 had already been removed that year and another 15 to 20 scheduled. He noted that some oaks were lost to bacterial leaf scorch but emphasized that the Emerald Ash Borer had taken its toll on the City. Dr. Huntley asked if there were plans to address the clear-cut area. Mr. Spadafino explained that staff was trying to find ways to get to the dead trees, but some were so big and so far back that other trees would have to be cut down to get to them. He revealed that staff met with UD's Tara Trammell and Vince D'Amico and found that there were so many invasives near the area that needed to be removed first before reforestation efforts could take place. Ms. Trammell and Mr. D'Amico were investigating how to involve UD clubs to assist.

Ms. Rypkema interjected that UD was planning an invasive species removal event in the fall; she did not have details but shared that the Climate Action Group was interested.

Ms. Smith asked if staff would leave some of the trees as standing deadfall. Mr. Spadafino confirmed and explained that staff generally removed dead limbs trees from 25 feet of either side of the centerline of the trails. Ms. Smith noted that there were many UD clubs that the City could partner with to handle invasive removal. Mr. Spadafino shared that staff also planned to remove City trees that were near residents homes and backyards that could fail and cause damage. He explained the numbers were large given that the City had 700 acres of parkland.

Ms. Rypkema shared that UD environmental clubs were forming their own sustainability leadership group so that there was one group meeting, and she would reach out to her contact to determine any interest in expanding.

Dr. Huntley asked if staff kept track of the tree canopy outside of the City. Mr. Spadafino informed that the Delaware Forestry Service performed surveys every five years or so and last estimated the City had 33% coverage. He clarified that the number was for the entire City, not just parkland, and agreed with Dr. Huntley that it had been nearly a decade since the last tree count on City streets, parklands, and open space, that would provide staff with some idea of what tree species were in Newark and what the tree canopies looked like so plantings could be done accordingly. Dr. Huntley wondered how the tree giveaways counteracted deforestation and was pleased that the data would be forthcoming.

Ms. Smith reminded that the City was to participate in the annual Arbor Day Celebration in accordance with the Tree City designation and asked how staff would proceed. Mr. Spadafino informed that there would be tree planting at West Park Elementary where students would participate and learn about the value of trees and the environment. Ms. Smith asked where the tree would be planted, and Mr. Spadafino indicated that the decision was up to the school's administration and staff. He shared that he had been part of the school's Arbor Day planting for 26 years and he was pleased with how much the

trees had grown over time. Ms. Smith thought it might be appropriate to plant more than one tree at the school. Mr. Spadafino explained that the City would reach out to vendors to donate a tree for the event.

Ms. Smith referred to previous conversations about improving habitat at the existing parks and efforts were currently underway at Phillips Park. She recalled discussions about reducing the mowing in certain areas. Mr. Spadafino was reminded that he needed to order signs and asked Ms. Smith to review the verbiage. Ms. Smith explained to the Commission that the intent of the signs was to head off complaints that the City was not taking care of its parklands. Mr. Spadafino agreed that the signs provided a good teaching moment to explain why staff did not mow certain areas. Dr. Huntley asked for clarification and Ms. Smith explained that Phillips Park was an almost old-growth forest that was over 100 years. She continued that the City had once been entirely orchards and farmlands, and the woods at Phillips, the patch at West Park, and the patch at the Unitarian Fellowship were all standing in 1939. She shared that efforts were underway to stop the creep of invasives into the old-growth patches. Through her walks through the City, she found an area of native wildflowers that staff had agreed to stop mowing in order to preserve the plants and to decrease air and noise pollution. The unforested protected area was around a portion of the playground that was in the shade and would have less mowing with invasive species removal as well as reforestation around the edge. Mr. Spadafino explained that the signs were to indicate to staff that the area was protected and to educate the public. Ms. Smith considered the venture as an experiment to learn how well the restoration performed and the public's perception. She reminded that Newark was a wildlife habitat city and there was a habitat sign at Phillips. Mr. Spadafino confirmed that the City was included in Tree City USA for the 26th or 26th year in a row. Ms. Smith was excited about efforts at Phillips and shared that NCCL adopted the park as its trash pickup area. She shared that a Delaware Master Naturalist wanted to install a pollinator garden at the park and received a sizeable donation that would be used for the parkland. She was excited to see the results and offered a tour to interested parties.

Dr. Huntley asked if the program would be expanded to other parks if it proved successful. Mr. Spadafino confirmed that staff had turned an area in Handloff Park into meadows that was only mowed once a year and staff selectively pruned trees. He shared that staff did not mow at Curtis Mill Park on the backside of the parking lot and were looking to expand the efforts.

Ms. Smith asked about electric mowers and Mr. Spadafino said that City had none yet. Ms. Smith offered to forward information on grant funds for open space acquisition and parkland development. She asked if dogs should be on leashes while in the parks. Mr. Spadafino confirmed and noted there were signs. He reported that before Hillside Park opened, the City purchased 42,000 mutt mitts per year and would likely order 50,000 with Hillside. He shared that mutt mitts were added at Folk, Hillside, and Stafford Parks as well as Pomeroy Trail. Mr. O'Donnell asked if the mitts were compostable, and Mr. Spadafino would investigate. Ms. Smith shared that she witnessed an incident where a woman let her dog run unleashed at the park and Mr. Spadafino confirmed that there were incidents and some owners refused to put their dog on a leash or pick up after them. Dr. Huntley informed that dog leashing on public property was a requirement across the City. Mr. Spadafino shared that if there was a blatant ignorance regarding the rule, Police would send out Animal Control to monitor.

Dr. Huntley asked that Mr. Spadafino keep the Commission updated for any volunteer requests and he confirmed. Ms. Smith asked that the sides of any holes created by an auger and intended for tree planting be roughed up to encourage root spread. Mr. Spadafino confirmed.

5. CITY DEPARTMENT/SUSTAINABILITY NEWARK UPDATE – BHADRESH PATEL

Ms. Smith asked if the Commission had specific questions for Mr. Patel and Dr. Huntley suggested that he present an update first. Mr. Patel explained that the Electric Department was currently engaged in the solar installation project and had completed installation at City Hall, Facility Yard, and the expansion at McKee's Solar Park. He reported that the three sites were 100% completed and online and the last piece of the project was the reservoir; all of the primary work on the utility side was complete and the contractor is finishing up the panel installation and the final connection to the City's grid. He estimated that work at McKee's would be completed in a month or so.

Dr. Huntley asked what the total capacity of the solar installation would be upon completion. Mr. Patel stated that staff added another 200 kW at the Yard, but he would need to investigate the amount installed at City Hall; he estimated another 650 kW. Ms. Smith asked if the City was at the beginning percentage of what was typically provide on the demand. Mr. Patel explained that the goal was to have at least 30% renewable by 2025 and the City would easily meet the target. Ms. Smith asked if any other City buildings were candidates for solar installation. Mr. Patel noted that staff was considering installation at the George Wilson Center and there was a project in the Capital Improvement Plan to expand the warehouse which could be a potential place for additional panels. Ms. Smith recalled discussions with John Burns about collaborating with the University on covering buildings and conducting research; she asked if there had been any progress. Mr. Patel was not aware of the discussion but shared that he had gotten requests from UD to add solar to Project X, off of Delaware Avenue, where UD was redoing a building with the intent to add solar. He revealed that UD was also looking to install some fast-charging stations and would install solar and the charging station at the same time. He admitted that the City had some concerns and had to investigate its system capacity and run analysis to determine how the portion would work because when staff preferred to install solar with the load; staff felt that the charging station and solar by itself, there would not be a constant load because the charging station would not be used on a continual basis. Staff felt that the solar installation might not be suitable for that particular application, but the option was still being explored. Ms. Smith asked if there was a particular percentage of the budget that was considered annually for solar applications or if it was handled project by project and Mr. Patel confirmed it was project by project.

Mr. Patel reminded that the rate study had been put on hold due to the pandemic but he, Finance Director David Del Grande, and City Manager Tom Coleman discussed completion now that things were returning to normal. Dr. Huntley asked for the rate study's goal and Mr. Patel explained that per an agreement, the City had to perform a rate study every five years to ensure that its rates were meeting the requirements. Another portion of the rate study was the that since there was an increase in electric vehicle (EV) and solar installations, staff wanted to explore different rates such as off-peak, time of use, and separate EV rates to promote EV owners to charge vehicles off peak hours so the City would not have to pay hefty energy costs during peak hours.

Dr. Huntley asked for the current status of the success for the 100% Renewable Energy opt-in program. Mr. Patel did not have number available because it was monitored by Mr. Del Grande. Dr. Huntley asked if Mr. Patel had an idea of the percentage of the City's energy sales came from renewable energy; he did not have the number available.

Ms. Smith asked if the City had a goal for the number of EV station installations per year in order to reach zero emissions and if it would be based on demand or budget. Mr. Patel shared that the City installed public EV charging stations in two locations, many developers were looking into EV charger

installations on their projects and UD was also investigating installation options. He wanted to consider the City's overall number of EV installations and its ability to handle them. He informed that the City recently completed its system capacity study which indicated there was still capacity left before another study was needed; staff was currently involved in research to determine how many customers had EVs at their homes, types of chargers, and how much the City could install on its own before needing an infrastructure upgrade.

Mr. O'Donnell asked how staff was collecting the EV research. Mr. Patel explained that staff was currently exploring various ideas to collect data. One idea was to offer \$200 or \$300 to any person purchasing an EV vehicle with a level 2 charger which would promote a person to register their EV with the City. Staff was also working with the vendor of the AMI (advanced metering infrastructure) system to determine if there was an algorithm available to run system-wide to identify an EV charging pattern. He was unsure if the Department of Motor Vehicles (DMV) would give the City any information on individual EV customers. Ms. Smith asked for more information on AMI and Mr. Patel explained that AMI were the City's meters that staff could read remotely in 15-minute intervals and study the patterns to determine usage. Staff could then create an algorithm in the City's system to determine potential EV customers that staff could approach individually.

Dr. Huntley asked if the data was necessary for infrastructure planning and Mr. Patel confirmed. He continued that staff did not currently have any information on how many EVs were in the system, so it was necessary to gather the information and map the EVs and solar by feed to determine how much capacity was left at each feeder to add additional solar or EVs before doing a major infrastructure upgrade. Mr. O'Donnell suggested obtaining DMV records to determine EV ownership. Mr. Patel agreed that staff could reach out to the DMV to see if they were willing to share the information and, once staff knew which homes had EVs, then the meter could be installed to determine usage. Mr. O'Donnell emphasized that an EV rate would be an incentive for EV owners to share their information and Mr. Patel confirmed because the owners would receive a discount rate so the owners and the City would both experience financial savings. Dr. Huntley asked that the City advertise and request EV owners to register so that the City would have the data prior to the rate study. Mr. Patel appreciated the suggestion and would discuss with staff. Ms. Smith asked how staff would collect data from EV commuters working in the City. Mr. O'Donnell explained that EV commuters would use the public stations and shared that over 95% of EV owners charged at home. Mr. Patel reminded that if the commuters worked for UD, UD was planning to install EV chargers for employees, so the situation depended on what was available for work sites. He shared that the City's goal was to install a separate meter for EV, solar, and normal load to apply different rates.

Mr. Patel explained that staff was currently towards developing a standard procedure and policy for commercial EV installations with the consultants. Mr. O'Donnell asked how the procedures would work for residential customers and Mr. Patel said that staff would work with the consultants to determine how other utilities were implemented but emphasized that the current plan was to address commercial EV stations. Mr. O'Donnell informed that the Charge Point Home charger generated a monthly report of usage rates with a multitude of details and some smart meters output the data that could be fed to the City. Mr. Patel reminded that customers had to be willing to share the information.

Ms. Smith asked if there was a requirement for charging stations with new developments. Mr. Patel was unsure that there were any requirements for providing EV stations but pointed that Planning had a parking requirement. He reminded that staff first had to determine the system capacity and how much the City could absorb within the infrastructure before offering a requirement. Ms. Smith pointed that encouraging EV infrastructure was part of the Commission's Sustainability Plan goals and the request

should be made to include installations in all new buildings. Mr. Martindale understood that most developments had a points-based system and EV chargers were an option. Dr. Huntley noted that there was no requirement for buildings to be EV ready and Ms. Scheld pointed that developers were making the effort and revealed that The Mill would have ten. Mr. O'Donnell read that the County required all new residential garages to be EV ready. Mr. Patel confirmed and believed the requirement was to install an additional 40-amp circuit into the garage for future EV level 2 charger use. Dr. Huntley asked if the requirement applied to the City. Mr. Patel would reach out to Code for an answer. Mr. O'Donnell wanted the City to follow suit.

Mr. O'Donnell asked if Mr. Patel had any input about the creation of the Newark Energy Transition (NET) team that was tasked with the transition to renewable electricity by 2035. He asked if there were any suggestions for potential membership, goals, and resources. Mr. Patel suggested that the group include members who understood how distribution systems and energy markets worked so that there was a balance of knowledge within the team who could determine whether the system was ready for any suggested implementations and if there were any obstacles. Mr. O'Donnell noted the first task was to obtain the carbon inventory, but staff could still make accurate assumptions such as the first and second sources of carbon emissions were transportation and electricity generation. He wanted the transition plan to be as aggressive as possible and members such as Mr. Patel would be benefits to the team. He asked Mr. Patel's impression of the opt-in/opt-out program. Mr. Patel was supportive of the program and thought it would help residents contribute to green energy. Mr. O'Donnell asked for suggestions to enhance the program. Mr. Patel shared that advertising would be a great help as well as the ability to provide the solar installation map to customers so they could determine if solar was a possibility for their property. He wanted to educate customers on solar power, but he and Mr. Coleman determined that the City did not have a proper Solar 101 fact page for the purpose. He also wanted to add information about the opt-in/opt-out program and any other pertinent programs for customers.

Dr. Huntley asked for clarification on the areas of the City that were not eligible for solar installation. Mr. Patel explained that currently, the City knew how many of its customers had solar, but staff had not mapped the customers by circuit. Each individual circuit had its own limitation, and it was important that staff could determine that the feeders that came out of the substation did not get overloaded with solar generation which would cause a system reliability problem. By creating a map of solar in the City and the related feeders, staff could determine which customers would be ineligible for solar installation. He reiterated that staff was still in the process of collecting the data and making it available to customers as a first step towards installation. Dr. Huntley asked if customers could currently install solar without checking the City's infrastructure. Mr. Patel explained that customers had to submit a solar application that was directed to the Electric Department where staff would review and provide a response.

Mr. O'Donnell interjected that solar energy was so popular in Vermont that the installations were overloading the wires and draining the grid. Mr. Patel revealed that there could not be more than 15% of the feeder capacity dedicated to solar so with that data, staff would map the feeders and determine those that had already exceeded the limitation and what type of infrastructure upgrades were necessary to open the feeders for customers to opt-in for more solar. Ms. Smith asked if NET would have any involvement in developing the map and Mr. Patel said that all of the data would be collected by the Electric Department staff; he already had the TIS technician working on the GIS map. Staff already knew which addresses had solar so the next step was identifying the feeders to which they belonged and performing technical analysis on the City's system. Mr. O'Donnell revealed that in order to alleviate the condition in Vermont, Green Mountain utilities were providing rebates for residents to install energy storage in their

homes which helped to balance the grid and allowed residents to have battery storage during power loss; a person did not need to have solar to have battery storage.

Dr. Huntley asked if the 15% limitation was because of solar energy's intermittency and Mr. Patel explained that 15% was the cable's capacity. Dr. Huntley asked for clarification on how the load on the wire would be different whether it came from solar panels or a fossil fuel plant. Mr. Patel explained that if all solar customers were installed on one feeder, the feeder would be subject to power intermittency which would cause issues throughout the rest of system. Ms. Chajes asked if there could be a problem if too much energy was drawn out of the system if there was a blossoming of EV charger installation on a particular feeder line. Mr. Patel confirmed and explained that it depended on which chargers were installed because some required excessive energy. Staff did not want to overload the feeders with extra energy drawn at the same because overloading the feeders would cause cable and equipment failure on the system. Staff was also working on mapping EV chargers to determine whether EV infrastructure was distributed appropriately. Ms. Chajes understood that there were circuit boxes that allowed different appliances to be used at different times of day and analyzed the system for the homeowners; she hoped the City could somehow incentivize using the analysis if capacity became a problem. Mr. Patel reiterated that EV and time of use rates would drive customers to use the energy during off-peak hours instead of during the daytime when prices were high. Ms. Chajes suggested partnering with Energize Delaware to encourage efficiency audits and equipment.

Dr. Huntley asked if the EV charger mapping efforts were for commercial charges. Mr. Patel explained that staff wanted to track all chargers possible. Dr. Huntley explained that her charger plugged into a normal outlet, and she was unsure how the City would track which outlet was used. Mr. Patel clarified that staff would track her charging behavior. Dr. Huntley pointed that personal chargers were often mobile, and the City would not be able to control which circuit she used in the City. Mr. Patel explained that residents would normally charge their vehicles at their homes so the occasional charge at another location would not damage the system. Dr. Huntley clarified that the City's system was capable of handling occasional abnormalities, but staff wanted to be sure that the regular load was planned for; Mr. Patel confirmed. Mr. O'Donnell noted that level 1 chargers were not likely a concern and staff was more concerned with level 2 chargers; he supported partnering with Energize Delaware and noted that analytic monitors were not very expensive. Ms. Smith suggested that the monitors be added to the Green Building Code for new construction and Mr. O'Donnell pointed that the meters could be retrofit.

Ms. Smith asked when the solar installations would be complete and if Mr. Patel would be interested in providing a tour for residents. Mr. Patel informed that staff was completing the last site and had a month left to go online. Afterwards, staff would inform the Commission and schedule tour for all stakeholders. He revealed the City's website included information on project types, where solar was installed, and other details. Mr. Martindale added that he and Ms. Gravel had been collecting photographs throughout the project and would share upon completion during public outreach tours.

Ms. Smith asked for an update on streetlight dimming capability. Mr. Patel explained that as part of the ESCO project, staff converted old streetlights to LED while installing a photocell, or node, that could be controlled by the software; the node provided staff with information on energy usage on individual lights and allowed for dimming capabilities. He revealed that about 800 lights had been completed and the second portion was lights that were LED but did not have dimming capabilities which required staff to change out the photocell to allow for energy usage and dimming. Staff was aiming to make all underground lights operate at 65% and determine lumens; 80% used 100% lumen and power was reduced by 20%. If staff found that there was enough light output that met safety requirements, then the City

might choose to keep all lights operating at 65% operation to save energy. He continued that 100% of the underground lights were complete and 34% of the overhead lights were complete with a remaining 2,000 but staff did not have access to the software that controlled all of the lights. The contractor was programming and setting all of the nodes and would handover control once the project was complete. Ms. Smith asked when the lights could be dimmed. Mr. Patel instructed the contractor to put all of the underground neighborhood lights at 65% and provide a map that he would share with the Commission. Ms. Smith pointed that the LED lights were extremely bright but revealed that the cobra lights were more downcast than the acorn models.

Mr. Martindale interjected that staff had a few options with the acorn lights and the contractor originally suggested a 5,000-k light, which was more intensive and brighter than what the City currently had. The contractor also offered clear options or frosted options and staff opted for a 4,000-k frosted version. Mr. Patel explained that acorn and cobra lights were different heights which meant that higher lights required more brightness to reach the road. Ms. Smith felt that the lights were overkill and she had hoped that dimming would reduce the lumens. Mr. Patel confirmed and repeated that the project was not yet completed, and the lights could be dimmed once staff was given control over the software. The project was scoped out so that the outside contractor would install all of the underground lights and all of the City crew would handle the other lights; City staff was involved in multiple projects simultaneously and also had to train four new linemen. Staff requested a quote from the contractor to help with the installation. Ms. Smith explained that she was asking because the Commission had hoped the City would be able to dim its lights for Lights Out, but she understood the backlog. Mr. Martindale shared that the ESCO project was taking much longer than anticipated with the pandemic; he asked Mr. Patel when the LED cobra-head lights were installed. Mr. Patel informed that they were not part of the ESCO project and had been installed five or six years ago.

6. BUDGETARY SPENDING – JEFF MARTINDALE

Mr. Martindale explained that after the Commission's additional funding of the fall Tree Giveaway and Greenfest, the Commission had \$86,000 for the remainder of the year. He asked that the group begin considering future spending opportunities. He recalled that Dr. Huntley suggested looking into the George Wilson Center solar option as a potential project and informed that he was speaking with ESCO about related additional work. He informed that the George Wilson Center was initially part of the plan for the project, but staff was able to get more efficient panels to install elsewhere so there was no need to address the Center at the time. He thought the project might be feasible again, but he was unsure how much funding remained in the contingency fund because the project was \$10.7 million. He thought the Commission might be able to help supplant some of the additional funding if needed but noted that there was plenty of time for discussion and the chance to fund smaller projects through out the year as well.

7. NEWARK ENERGY TRANSITION RESOLUTION – ANDREW O'DONNELL

Mr. O'Donnell shared that he had sketched out some language for the resolution and asked that it be discussed at the next meeting. Dr. Huntley asked that the draft be forwarded to the members, and he agreed. She shared that she attended the last City Council meeting where there was a discussion on whether to go with the high-performance option that Commission recommended. She reported that she was able to convince the Council to pull the item off of the consent agenda and have a discussion, but Council did not choose the option. She revealed that the main problem with the Commission's analysis was that the City had to share the savings with all of DEMEC; it would not go back to the City. She continued that the expenses would be paid solely by the City, but the savings had to be spread across all

of DEMEC. The City only made up 40% of DEMEC so the return of investment would take five years instead of two. Ms. Scheld reminded that Council would have also had to pass a budget amendment and Dr. Huntley confirmed and added that Council would have to draw the money out of reserves. Dr. Huntley believed there was no sense of urgency on City Council regarding cutting greenhouse gas emissions and the Commission should rise to the occasion and make sure there was an awareness because the City could not continue with business as normal. She hoped that if the Commission approached Council with emphasis on the necessity of putting NET together with people who could create a concrete plan of how to complete the transition in the next five years would actually lead to some small steps in the right direction.

Ms. Smith hoped that the results of the GHG inventory would have some bearing on the ideas. She spoke to Dave Athey and shared that the consultants were unable to get all of the necessary information from Delmarva because it was proprietary. As a result, the consultants created an extrapolation to fill in the missing piece of gas customer information.

8. LIGHTS OUT

Ms. Rypkema shared that she and Ms. Smith had been working with UD and The Newark Partnership (TNP) for Lights Out Newark and would attend Earth Day at UD on April 22 from 1pm to 4pm. The pair would host a booth with UD research students who would discuss Lights Out and bird migration basics to bring awareness to the community. She shared that New York City passed a bird amendment that indicated that all new buildings had to meet a new bird-safe code; she wanted the Commission to investigate the policy and submit it to Council. She informed that the bill was passed in 2019, began in 2020, and was amended in 2021 so that all new buildings had to meet bird-safe requirements, including bird-safe glass, addressing number of windows and height. Dr. Huntley asked if Ms. Rypkema was volunteer and she confirmed.

Ms. Smith shared that they had been working with UD through its Sustainability Council and now had contact information to reach the building facility managers to dim the lights.

9. ANTI-IDLING CARD REDESIGN – SHEILA SMITH

Ms. Smith spoke to Director of Communications Jayme Gravell about changing the text to be more friendly and positive. She shared that Ms. Gravell suggested asking the Parking Authority if they would be willing to distribute the cards to idling cars on Main Street.

10. MONTHLY CONSERVATION ARTICLE WITH THE NEWARK POST – SHEILA SMITH

- March – Cooling/Summerizing – John Mateyko
- April - Eastern Box Turtle Habitat Conservation – Jean Hedrich
- May – Lawn Equipment and Greenhouse Gases – Beth Chajes
- June – Hillside Park and its Plantings – Sheila Smith
- July – Renewable Energy Program/City Solar Update – Andrew O'Donnell
- August – Reservoir Plantings/Clover Lawns

11. PLANNING AND DEVELOPMENT REPORTS

12. OLD/NEW BUSINESS

- **GREENFEST RECAP**

Ms. Smith shared that the Greenfest went well, and the Commission was able to network within the community. She learned about the current problems with the City's recycling and the ever-changing standards. The Commission worked with Steven Reeder from Public Works who answered any questions from the public.

Mr. O'Donnell informed that he displayed his EV and had 50 people investigating the car. He allowed children to go through the vehicle and answered any questions to clear up misconceptions. He was enthusiastic about the result and said that nearly every person declared that their next automobile would be an EV. Ms. Smith noted that Mr. O'Donnell's car was the same make and model as the City's car.

- **UPCOMING EARTHDAY EVENTS**

Friday, April 23, UD North Campus at 1pm.

Ms. Smith informed that she would be handing out flyers at the Youth Environmental Summit Event, organized by Dee Durham, with 32 participating high schools at Clayton Hall on Thursday. Ms. Smith would be attending on behalf of the Native Species Commission and suggested that the CAC host a table the following year. Dr. Huntley asked that Ms. Smith invite any of the engaged students to present their ideas to the CAC.

- **COMMUNITY DAY – SUNDAY SEPTEMBER 18, 2022**

Ms. Smith shared that Greenfest offered an insight into possible Community Day activities with recycling sorting and Mr. O'Donnell's vehicles. Mr. O'Donnell thought repeating the activities would be very successful.

13. NEXT MEETING – MAY 10, 2022

MOTION BY MR. O'DONNELL, SECONDED MS. RYPKEMA: TO ADJOURN THE MEETING.

The meeting adjourned at 9:17 pm.

Nichol Scheld
Deputy City Secretary

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