Roseville Public Works, Environment and Transportation Commission
Meeting Agenda

Tuesday, September 23, 2014, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

6:30 p.m.	**1.**	**Introductions/Roll Call**
6:35 p.m.	**2.**	**Public Comments**
6:40 p.m.	**3.**	**Approval of August 26, 2014 Meeting Minutes**
6:45 p.m.	**4.**	**Communication Items**
7:00 p.m.	**5.**	**Parking Requirements Discussion**
7:15 p.m.	**6.**	**Ramsey County Recycling Presentation**
7:40 p.m.	**7.**	**GreenStep Cities Inventory**
8:05 p.m.	**8.**	**Community Solar/City Facility Energy Use**
8:25 p.m.	**9.**	**Possible Items for Next Meeting – October 28, 2014**
8:30 p.m.	**10.**	**Adjourn**

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Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 3

Item Description: Approval of the August 26, 2014 Public Works Commission Minutes

Attached are the minutes from the August 26, 2014 meeting.

Recommended Action:
Motion approving the minutes of August 26, 2014 subject to any necessary corrections or revision.

August 26, 2014 Minutes

Move**:** _____

Second**:** _____

Ayes**:** _____

Nays**:** _____

Roseville Public Works, Environment and Transportation Commission Meeting Minutes

Tuesday, August 26, 2014, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

1. Introduction / Call Roll

Chair Stenlund called the meeting to order at approximately 6:30 p.m.; and Public Works Director Schwartz called the roll.

Members Present: Chair Stenlund; and Members Duane Seigler, Brian Cihacek, Sarah Lenz, and Joan Felice

Members Excused: Members Steve Gjerdingen and Joe Wozniak

Staff Present: Public Works Director Duane Schwartz; Assistant Public Works Director/City Engineer Marcus Culver; and Environmental Specialist Ryan Johnson

2. Public Comments

None.

3. Approval of July 22, 2014 Meeting Minutes

Member Cihacek moved, Member Felice seconded, approval of the July 22, 2014, meeting as amended.

Corrections:

- **Page 1, Line 17 (Recording Secretary**
  Correct date to July 23, 2014
- **Page 3, Line 79 (Felice)**
  Strike "…disappointment and…"
- **Page 5, Line 180 (Cihacek)**
  Change "density" to "development"
- **Page 6, Line 244 (Lenz)**
  Typographical error: correct "who's" to "whose"
- **Page 8, Line 329 (Cihacek)**
  Correct to read: "…his personal concern with wildlife *[and water quality]* in that park…"

Ayes: 5

Nays: 0
Motion carried.

4. Communication Items

Staff provided project updates and maintenance activities as detailed in the staff report dated August 26, 2014.

City Engineer Marc Culver reported on City Council actions taken since the last staff report to the PWETC, including restricting parking on County Road B between Fairways Avenue and Fulham Street based on preferences received by resident survey and additional pathway pavement in that area; resolved to declare County Road B as an urban section roadway, thereafter designating and posting it at a 30 mph speed limit, with some neighborhood opposition but the general consensus of neighbors to lower it to keep in character of that roadway.

Discussion included sidewalk on the east side of Lexington Avenue under the Highway 36 bridge area stubbed up to the ramps and providing a safe haven for bicyclers and currently striped to the ADA curb area on that segment; re-use by the City of aluminum panels for traffic control signs as sheeting materials can be overlaid, with some done in-house by staff and others done by a traffic control subcontractor; a status update of the recently installed infiltration vaults in the northwest corner (Sandcastle Park area) and central area (Dellwood/Sherren area) of Roseville with operational observations pending in these historic drainage problem areas for containing 10-year rain events and cost sharing by Ramsey-Washington Metro Watershed District for the central system.

Further discussion included staff's monitoring of infiltration systems and raingardens, with Environmental Specialist Ryan Johnson recently having completed an inventory of best management practices (BMP's) in Roseville and periodically inspections and review of applicable maintenance agreements to ensure continuing compliance, and developing a maintenance plan for the City, and participation by and from the public in their monitoring of those working or not working from their perspectives.

Public Works Director Duane Schwartz noted the inclusion in the agenda packet primer materials on tax increment financing (TIF) from the City's website (Attachment C) as previously requested by members; and offered to ask Finance Director Miller to attend a future meeting, or invited members to contact Mr. Miller personally at City Hall if they had additional questions or wanted more in-depth information.

Member Cihacek expressed interest in criteria used in developing TIF Districts, their renewal, their specific purpose, and terms, particularly those in the Twin Lakes Redevelopment Area. As an information request for the next PWETC meeting, Member Cihacek requested a clarification on the remaining duration of

those TIF Districts, how they can be used, and the remaining excess amount available. At the request of Chair Stenlund, Member Cihacek confirmed that his intent was to determine if there was any funding available to address the financing gap for upcoming infrastructure improvements in the Twin Lakes Redevelopment Area.

At the request of Member Cihacek, Mr. Schwartz advised that some soil remediation had been completed in the Twin Lakes area as part of past infrastructure projects, but there was some remaining to be completed as developments came forward.

Recess

Chair Stenlund recessed the meeting at approximately 6:54 p.m. and reconvened at approximately 6:56 p.m.

5. Community Solar Discussion

Mr. Schwartz introduced Brian Ross from CR Planning, an expert in the solar field and expected to be under contract within the next month to provide technical assistance to cities on solar projects.

Mr. Ross, who had also attended the PWETC meeting in April of 2014, provided a brief biography of his work as an Urban Planner and Solar Energy Consultant, before his presentation entitled "Solar Ready Roseville." Mr. Ross advised that his firm was currently working on the Minnesota Solar Challenge, a program of the Minnesota Department of Energy. Mr. Ross referenced a U of MN graduate program research project that may be of interest to the PWETC, and available free online consisting of a GIS mapping of the entire state of MN's solar potential, with Chair Stenlund noting that sample image was included in commissioner packet materials.

Mr. Ross's presentation included four main points:

- "Why solar for local governments?
- What are solar resources?
- What are solar-ready communities?
- Public sector opportunities.

Mr. Ross noted the steps needed for a community to become solar ready, including the policy aspect (Comprehensive Plan – development); regulatory, permitting processes, and financing. Along that line, Mr. Ross addressed the many roles government agencies could assume as a solar developer. Those roles included: as a <u>regulator</u> addressing policy, zoning, and permitting; as a <u>financier</u> or <u>assembler</u> in an economic development authority type rule providing financing tools, development preparation, or assembly of resources for private sector investment; as a <u>developer</u> such as an HRA or public housing authority type role, owning and managing development for use by residents; or as a consumer developing solar for public sector use.

Mr. Ross reviewed the three typical public sector opportunities or options: installations on public property (either self-financed, installation only, lease/buyback, or with a purchase power agreement); by enabling the private sector to develop community solar systems by removing regulatory barriers and/or creating regulatory incentives, participation in PACE or other financing options; or by sponsoring a community solar installation, which is an available option, but not yet done in MN even though there are several projects in their initial states of analysis.

At the request of Chair Stenlund, Mr. Ross advised that if using a financial option, such as PACE, it would be beneficial to have a project in mind for an idea of total dollars needed, with several of the projects currently under joint powers agreements (JPA's) with the St. Paul Port Authority.

Mr. Ross reviewed some of the considerations for solar installations on buildings, including solar resources, roof age, roof structure, and interconnection with substation or distribution line depending on size. For ground "solar farm" installations, Mr. Ross reviewed some of those considerations, including solar resources (e.g. trees, topography), surrounding land uses (important for larger systems), potential future uses for adjacent land (aesthetics impacts to adjacent neighborhood), and again interconnection needs.

At the request of Mr. Schwartz, Mr. Ross addressed the feasibility of community solar systems over parking lots, noting that while it may look like a huge opportunity and potential asset, only a few have been done to-date on a small scale. Mr. Ross advised that part of the problem was that when done over a parking lot, the design of the structure had to be engineered to ensure if a car hit them, it wouldn't impact the solar array or that the supporting structure itself wouldn't create a problem with traffic flow – all requiring more expensive design and engineering specifications and construction.

Discussion ensued regarding benefits and considerations under tariff rates, of which there are nine different rates, for community solar systems within the residential, commercial, and industrial rate structure; along with renewable energy credits versus standard electricity rates. Mr. Ross noted that utility companies would soon be mandated to provide a certain percentage of solar power by 2020 under the tariff and renewal energy credit. Mr. Ross further noted that the minimum a utility company must achieve is 1.5%, with Xcel Energy already having added two large projects to their system, so they would be half way to the mandated goal once they were installed. However, if more than that comes to fruition, and the market supports the additional solar project development, Mr. Ross opined that the utility companies have to accept them into their system.

Mr. Ross noted there were benefits of community solar system models for businesses who want to invest in solar, if the system is installed on the roof, they pay energy and demand charges, but solar systems interact differently and don't

have much impact on demand charges as community solar systems are not measuring demand against production, and if impugning demand in an applicable retail rate, the business gets credit on a per KW basis, which was much more attractive for commercial versus residential customers, and gave them an advantage.

Public Comment

Sara Barsel (and Randy Neprash), 1276 Eldridge Avenue

Ms. Barsel asked if a municipal facility installed solar on their roof, would it be considered commercial or a different category.

Mr. Ross responded that it would depend on which of the different roles came into play for developing a community solar system, just like other types of developer as previously referenced: whether the City serves as the developer, builder, financier, customer, or host; but clarified that the role was defined by subscriber not by the location of the system.

At the request of Mr. Schwartz, Mr. Ross confirmed that, under the tariff, different rates applied depending on the type of subscriber on the same system, with a minimum purchase required under State law per subscriber, theoretically equivalent to one solar panel per customer, and treated as if on your roof whether you were a commercial or residential subscriber.

At the request of Member Seigler, Mr. Ross clarified that the City could serve in a regulatory role if private individuals or companies (e.g. developers) in the community chose to install solar systems without City involvement, or the City could be more involved to make things more streamlined, or any other role as previously identified. As noted by Member Seigler, if the City did not become involved and allowed solar installations, they could essentially be giving away an asset if a system was installed on their roof. However, as noted by Mr. Schwartz, under that scenario, there would also be no cost to the City except for installing the system, with Mr. Ross pointing out that the onus of anything on the solar system would require a subscription manager or an agreement put in place for roof maintenance or replacement (e.g. depreciation and tax credits going directly to the developer), but providing a revenue stream for the City as host.

Member Seigler questioned if it would be prudent for the City to give a public building roof away, as a potential asset, if the private developer would make a profit from it versus the City.

With the entire solar energy field forging new ground, Mr. Ross noted the many options available, but the need for a process and established standards for community solar systems, as not only local vendors and in-state developers, but vendors from other states and/or countries, tapping into this opportunity. While many of those companies have experience installing the solar systems, Mr. Ross opined that the other trick was to establish how well the solar systems would be

managed over time, with the benefit for the subscription manager to own the system and subscriptions, so if an original subscriber moved out of the system, it could be sold back to the subscription manager for resale, but the entity had to know how to manage the system for twenty five year or more.

At the request of Member Seigler, Mr. Ross advised that he didn't see financing for community solar systems to be a problem at this time, especially with 30% tax credits available until 2016; with the City considering financing options for facilities on City buildings, as confirmed by Mr. Schwartz.

Ms. Barsel asked for comparisons on a private community solar versus one hosted by the City on the City Hall campus, or versus the City owning its own system.

Mr. Ross noted there was uncertainty in how those different options played out, with the City of Falcon Heights entering into a PPA and not owning their system, with charges based on the system's production; while the City of Minneapolis bought the system and installed it on their fire station using grant monies, and capturing all the benefits of it, and since it is a fire station, it pays a demand charge making it difficult at this point to determine how much of a benefit they'll receive from that arrangement.

Ms. Barsel noted that the City of Minneapolis still had liability, whereas with an external developer, they had the risk for liability and maintenance.

Mr. Ross concurred, but noted the average lifespan for a solar system was twenty-five years or more, with the typical problem being failure of some solar panels, but typically those panels lasted for a long time and usually outlasted their projected life cycle. Mr. Ross advised that the failure usually was in the wiring or inverters (e.g. electronics) requiring some maintenance, and periodic cleaning of panels to keep their production at maximum.

Mr. Schwartz noted, confirmed by Mr. Ross, that the expected life for the inverter was 15 years, with some replacement needed during the lifetime of the system.

Mr. Schwartz questioned if it was safe to say that buying your own system, unless getting grant monies, the payback was long-term compared to the role of a private financial partner able to take advantage of tax credits.

For a public entity unable to take advantage of tax credits, Mr. Ross advised that there was a big difference. However, Mr. Ross advised that his firm was working on the potential GESP (government energy savings program) to assist local governments in capturing credits, with the state overseeing the program to meet their goal for energy savings. However, at this time, Mr. Ross advised that contracts were private versus public so any public systems were at the mercy of the performance contractor. Therefore, Mr. Ross opined a municipality would almost always do better on their own, but if they didn't have experienced staff to

do the work, they were taking on risk. If it comes to fruition, Mr. Ross noted that the State GESP program would provide a standard contract that was transparent with approved vendors and endorsed by the State, lumping programs together to maximize efficiencies, not just those prime and best payback projects. Mr. Ross advised that this Department of Commerce Project, only in place for a few months or a three year development timeframe, would hopefully allow for sufficient analysis and comparison of which programs and ownership roles were the most viable for municipalities.

At the request of Member Seigler, Mr. Ross reviewed the solar subscription reduction, with total energy and use per panel calculated monthly, and utility bills credited as applicable by utility providers (e.g. Xcel Energy). In order to avoid running in the negative with those credits, Mr. Ross advised that there was a limit as to the size system you could purchase (e.g. 120% of your usage); with no incentive to over-purchase beyond that 120% as the rate was not that attractive, as pointed out by Mr. Schwartz.

At the request of Member Seigler, Mr. Ross clarified that the subscription manager had to cover their administrative costs, and could do so in a number of ways: charge a higher rate for subscriptions to bank money to invest in the system and any work required to keep the system managed; retain a portion of the system (10% for example) rather than selling 100% of the subscriptions, and use that portion to administer the system with that revenue; or charge subscribers a monthly fee of the maximum allowable amount of .05% of their costs.

Mr. Schwartz questioned what protection subscribers had if they provided upfront money before the system was built or after the system became operational.

Mr. Ross responded that by law, the subscription manager could not start charging the customer for the system until a certain time after operations began, a protection built into the law. However, protection over time was more difficult, as outlined by Mr. Ross, for subscribers to a poorly-managed company that eventually went out of business; with the roof asset (solar system) on a twenty-five year lease with a proposed guaranteed income stream, and unless someone else purchased the system and took over the subscriptions, it would be problematic. Mr. Ross stated that there were many “nightmare” stories out there, but there was a risk that subscribers could be out of luck in such a scenario. In his consulting role, Mr. Ross opined that it would not be his recommendation for a neighborhood or community group to be the developer or manager, but he would rather suggest that they hire someone with experience and more longevity.

Ms. Barsel noted a previous presentation by Mr. Kim Havey of the Department of Commerce. His description of a program put in place some kind of solar system and worked with different sized communities; with the City of Roseville sending a letter of interest to be considered as one of their pilot medium-sized communities for the program. Ms. Barsel asked if that was still a viable option.

Mr. Ross advised that the program had submitted their grant application, and interviews were held last week. Mr. Ross clarified that this particular program referenced by Ms. Barsel was an $800,000 grant that the State wanted to create a program called "Solar Energy Ready Communities" and certify cities as they took certain steps. If the grant is received and becomes operational, Mr. Ross advised that it worked with Solar Challenge to provide assistance to communities to become solar ready, working hand in hand with them. Mr. Ross advised that other programs would handle the financial aspects and certification process for the Phase II portion of the program. At the request of Ms. Barsel, Mr. Ross anticipated knowing the status of the grant application by October of 2014.

If the City wanted to be part of that, Ms. Barsel asked what steps it needed to take, and what should it be doing in the interim to be in place or phased in for when the grant comes through or not.

Chair Stenlund further asked for clarification of which of the five steps or items in the list of priorities were found by Mr. Ross to be the biggest bottleneck or most difficult to rectify.

Mr. Ross stated his original thought had been that the comprehensive plan and zoning step would prove most difficult, since they required City Council signoff; however, he advised that step had turned out to be easier. Mr. Ross advised that he was finding the most difficult step at this time was the permitting issue, as there was not formalized process, and because of not process in place, projects had a tendency not to happen, creating a bit of a bottleneck. Mr. Ross noted that the other concern was in financing for local governments who were finding their roles uncertain, how to define their risk, and how to proceed, since the solar ready community program was not yet funded, the first step in any program would be to program the design of the process, and determine what exactly was needed. Mr. Ross noted that the City of Roseville was already anticipating some of that planning, and reacting to the process, and therefore fairly engaged in the process already, with certification probably nine months from the start of a program.

As to Ms. Barsel's question, Mr. Schwartz reiterated what the City should be doing while waiting, in terms of determining their role in community solar or using public buildings to become part of that solar development.

Mr. Ross responded that if the City made a determination whether to have a community solar system on public land or a public building that would be a check in favor of Roseville becoming a solar ready community, with credit given as that element is looked at. Mr. Ross reviewed the base materials needed and suggested an analysis of existing policies with the comprehensive plan and zoning, whether a permitting process was available that was transparent and if that formal permit process was open for solar development that outlined the exact steps and thresholds (e.g. a structural study of a roof intended for solar installation, what

permit fee should be charged for different types of solar systems, and best practices advocacy available).

Ms. Barsel asked if this should include the code addressing the entire range of options and applicable processes and fees for residential and commercial installations.

Mr. Ross responded affirmatively, anticipating few changes in best practices required in zoning for roof installations, and fortunately noted that the comprehensive plan portion would be wrapped up in the updates of those plans with the Metropolitan Council. Mr. Ross noted that the Metropolitan Council was participating in Phase II and Solar Ready Community components at this time, and his firm and the industry was trying to get them to formally recognize communities having met statutory standard requirements for solar in the Council's comprehensive plan review and approval process.

Mr. Schwartz questioned if there was anything prohibiting a community from moving forward while these longer-term processes are pending; and asked Mr. Ross what he would recommend for the PWETC's next steps in making a recommendation to the City Council. Mr. Schwartz also asked Mr. Ross to speak briefly about particular opportunities for credits and timeframes coming up and current solar rewards programs.

Specific to the solar rewards program, Mr. Ross reported that Xcel Energy's program had just opened up applications for the next round of funding, which was of course creating a land rush to submit applications; however, it was not yet completely subscribed. Mr. Ross clarified that their process was not a lottery process, but they evaluated each project according to their award criteria. If the City of Roseville was thinking of taking advantage of this round, Mr. Ross suggested that they do so quickly, as there was a limitation on those solar rewards, with one for 20 KW and the other for 40 KW between two different programs, the Solar Rewards program and the Minnesota Made program, both with different application windows and varying criteria, with both programs opening applications on an annual basis.

Mr. Ross suggested a good first step for the PWETC to consider would be to move ahead with the site assessment process and what made the most sense, especially for considering a community solar system and its size, noting that the larger the system, the bigger bang for the buck, but then needing more land, more interconnection review, and reviewing adjacent land uses and roof structures, etc. Mr. Ross noted that such a preliminary assessment was necessary in any regard; and with the solar mapping data available, and some already done by the City of Roseville, they could overlay their other criteria onto that, and suggested that analysis get started quickly as a preliminary step to put the City in a good place moving forward.

Mr. Schwartz questioned what technical assistance could be provided by a consultant, such as Mr. Ross's firm, and what they would help with, or assistance in finding a financial partner or developer to assess those criteria.

Under the Phase II program, Mr. Ross advised that CERTs was currently working with a Wisconsin entity running the financial piece of the program, although each state was different. If he was to proceed, Mr. Ross advised that he would begin the planning, zoning, and permit pieces, and also help with other analyses related to land use, his area of expertise. Mr. Ross advised that he was involved with the overall program design, and therefore would be recruiting communities to participate in that discussion.

Member Cihacek moved, Member Felice seconded, to move the proposed agenda item entitled "GreenStep Inventory" to the September meeting agenda to allow sufficient discussion time tonight on the community solar item to determine next steps and responsibilities with this new information.

Ayes: 5
Nays: 0
Motion carried.

At the request of Ms. Barsel, Mr. Ross clarified that the programs are applicable equally to either a community solar or public city system, with the thresholds the same and either qualifying.

Chair Stenlund focused remaining discussion on steps needed to accomplish by the PWETC to prepare a recommendation for the City Council as Member Cihacek was requesting to establish that framework moving forward. Member Stenlund suggested steps as follows:

1) Assess potential solar sites/locations using the GIS map data;
2) Analyze the current permit system to determine how a solar application process would get through code requirements.

Mr. Schwartz clarified that the overall solar ready community could move on an entirely different track than if the City provided an opportunity for residents on a community solar installation.

Member Cihacek suggested a step looking at the permit process itself and what needed to be revised, what fees are in place or needed to be enacted, and what a developer would need to know; then moving onto the comprehensive plan. Member Cihacek suggested that the PWETC's first step was to delegate those aspects to the Planning Commission and other commissions as applicable for their review within the realm of their expertise; and how to structure a solar initiative to incentivize private, public or quasi-private applications for developers using a regulatory framework.

Member Seigler opined that the permit process should be transparent for any application, whether residential or commercial.

Mr. Schwartz clarified that the whole permitting side would flow through the City's Community Development Department, noting that the PWETC was charged by the City Council in making a determination as to how Roseville wants to participate and their role, if on public properties, where and how. Mr. Schwartz advised that the Community Development Department was already analyzing their areas, and were slated for a City Council discussion at a September 15, 2014 work session on solar issues. Mr. Schwartz noted that one Roseville church was currently looking into taking advantage of available St. Paul Port Authority monies; and that part is already in process. Mr. Schwartz clarified that the PWETC is charged with determining how the City of Roseville should participate, and provide options for public infrastructure space for a community solar system, and whether to own part of it or use if exclusively for its own energy usage needs.

Member Cihacek agreed on the need to determine the City's role, opining that the contractor option was out, but whether or not to serve in the developer role was a decision that needed to be made quickly to take advantage of the referenced programs available. Mr. Cihacek opined that he was supportive of the City serving in the role as a host entity, with the possibility of serving in the role of financier once more discussion was held on using TIF funds; with the role as regulator obvious for the City.

Member Seigler noted the need to determine which public assets were applicable and their value, how many parties were interested, and how to determine which party gets it or what criteria to use in making that determination, as well as associated costs and how to fund those costs.

At the request of Member Cihacek, Member Seigler confirmed he would be amenable to the City serving as a host, but that needed to be a decision made before the City gave away its public roof to another party and their system, and then in a few years could install their own system as a way to save money for the City, but had already given that ability away to someone else to receive the profit versus the City's own energy savings.

At the request of Member Cihacek, Member Seigler opined it wouldn't make sense for the City to consider small scale solar installations to displace its energy costs without the availability of tax credits. However, if funding was available, Member Seigler opined that the City could buy its own system or fund a small portion of different ones to take funding to create a specialist to build lots of systems.

At the request of Member Cihacek, Mr. Ross confirmed that the City could sell community solar shares, with the City as an entity owning the system and receiving the same tariff rate.

Member Seigler opined it may be more advantageous to be a subscriber.

Member Cihacek opined a host partner and subscriber would also be an advantage, allowing the City to finance a system indirectly to receive a benefit.

At the request of Mr. Schwartz, Mr. Ross confirmed that the community solar option has been in operation long enough that developers could come in and talk about known tariff rates, financing and payback terms based on their income streams or subscriber income streams, based on their performance. However, Mr. Ross cautioned that those developers each had their own confidential business model, and they were competitive in nature. Mr. Ross advised that those multiple developers and host firms could also be invited to bid. However, Mr. Ross opined that the challenge would be for the City to be able to develop a template or pathway to follow in the public realm for the best transparency.

Member Cihacek suggested the next step should be for the PWETC to develop such a conceptual model, from three different perspectives or roles: as a host, a host subscriber, or financier and focus conversation on what was needed to accomplish any or all of those roles.

Chair Stenlund suggested that analysis would allow review of code language or processes to determine if something or anything was missing that could be readily identified.

Member Cihacek clarified that the three roles have a review of what framework was needed for the City Council or advisory commissions to work on, opining that this was a time sensitive issue and dynamic to move quickly to provide one or the other argument for the best role for the City to pursue.

Member Seigler asked if the City was in favor of owning solar assets.

Mr. Schwartz clarified that that is at the discretion of the City Council; but from staff's perspective, in-house staff did not have the expertise or ability to manage a power generation business model. However, Mr. Schwartz noted that the City did have a significant number and volume of rooftops, and at this time, staff was supportive of the City providing that space, with others managing the solar systems or being responsible for them. If there are dollars available for leasing those spaces and creating a revenue stream, Mr. Schwartz advised that staff was supportive of that.

Member Cihacek moved, Member Seigler seconded, for the purposes of discussion over the next three months, consideration be given for the City to consider serving as a host solar site; and for those discussions to explore what that means to be a host or host for a community solar system.

Member Cihacek asked that each of those monthly agendas provide a standing agenda item to explore the City's role as a host solar site, including determining applicable public buildings, and financial models; and whether or not to move forward with a recommendation to the City Council.

At first, Member Seigler offered a friendly amendment to the motion that financials also be part of that discussion as public information and due diligence transparent in the discussions, in order for the PWETC and public to fully understand current energy costs and potential savings available.

Member Cihacek clarified that this financial information would include current utilities spread sheets for usage and costs across the City Hall campus.

Mr. Schwartz advised that to provide that information, it would require a financial partner, which shouldn't be problematic, but clarified that staff did not have the expertise to calculate that data, but Metro CERTs could help steer staff in the right direction and where to find resources.

Mr. Ross concurred with Mr. Schwartz' observations.

Under those circumstances, Chair Stenlund suggested this be handled as a request for information to staff from the PWETC versus being made part of the motion.

Ayes: 5
Nays: 0
Motion carried.

Ms. Barsel noted some individual Councilmembers were very interested in this prospect and community solar on public buildings, so suggested the PWETC already had some support and should capitalize on that support. Ms. Barsel suggested, moving forward, that it would be informative to have an assessment on what size project the PWETC was considering to determine which municipal building would serve best, or which other site may be appropriate, as well as analyzing roof structures as part of that consideration. If that information, including the number of KW was available, Ms. Barsel opined it would help the financing information make more sense, rather than being overwhelming, and help determine which program to go after if inside or outside those parameters.

Chair Stenlund opined he would prefer to stay within the range of 20 KW as a minimum.

Mr. Schwartz advised that Mr. Johnson looked up the City Hall building, and the consumption for just this building was approximately 77 KW.

Chair Stenlund suggested a system such as that installed on the Minneapolis fire station as a minimum to consider comparable numbers.

From an engineering standpoint and the PWETC's role, Chair Stenlund expressed information from Mr. Ross on anything he was aware of in the market place that would indicate improving technologies that would reduce the payback period, and how that could be incorporated into the discussion tree (e.g. solar shingles, roads, walls, etc.).

Mr. Ross admitted there had been a large social media front for the potential of solar roads; however, he opined that technology was very questionable from an engineering standpoint as a road surface, and may have a better application for a parking area surface. Mr. Ross advised that there had been dissention on whether or not those doing the study had focused on southern versus northern states in performing their research. Mr. Ross did note that technology is always changing, which may significantly change financials in the next few years; however, his response was that it was unlikely that those technological advances would change the efficiency level for panels, which were the main component in solar systems. While the efficiency of panels are low, Mr. Ross opined that obviously the more efficient the panel, the more expensive they were, but how that played out in manufacturing remained an unknown at this time. In considering how those future increased efficiencies of panels or technology versus a set of incentives, Mr. Ross opined was another dynamic. Mr. Ross noted there were some new products (e.g. solar installation sin walls and windows) that were forthcoming; however, with that additional capability, the cost increased while their functionality decreased. Mr. Ross opined that the most reliable system remained silicone panels.

At the request of Chair Stenlund, Mr. Ross opined that the ordinance he found most appropriate at this time, even though he had authored some of them, were those for the City of Rosemount as it applied to a specific set of circumstances with aggregate resources they wanted to protect through using the interim solar use, which had been very creative in that situation. Mr. Ross also recognized the Cities of Minneapolis and St. Paul as they competed to see who could be the most welcoming to solar, making some choices that allowed for great flexibility in how the systems, mainly residential, are permitted. Mr. Ross noted that those cities decided not to apply design standards by exempting them from those requirements. Mr. Ross noted that the ordinance also had an incentive built in to not allow installation of hideously ugly panels as had been installed in the past.

Mr. Ross noted that those cities continuing to hedge on developing an ordinance were not seeing much development accordingly. Mr. Ross advised that one issue of concern he found was in the more restrictive design standards of homeowner associations compared to other residential properties.

6. GreenStep Inventory

7. Possible Items for Next Meeting – September 23, 2014

- Ramsey County Recycling Presentation
- GreenStep Inventory
- Community Solar Discussion
- TIF questions (Communications item)
- Parking examination as requested from a previous meeting (Cihacek)

Mr. Schwartz advised that Eureka Recycling was ready to host a tour of their new recycling facility in NE Minneapolis (Kennedy Street west of Highway 280; approximately 7 minutes from Roseville City Hall), sometime after September 9, and limited to groups of five between the hours of 9:00 am and 4:00 p.m. Mr. Schwartz noted that some Councilmembers were also interested in participating in the tour; and sought interest from the PWETC, asking that they get back to him with their preferred time and date.

Since the majority of the PWETC seemed interested in a tour, Mr. Schwartz suggested setting up two groups; however, Chair Stenlund asked that staff seek a variance for the PWETC to all tour as a group, and waive their exemption. Mr. Schwartz advised that he would check with Eureka as to their regulations with the number of occupants at the facility and keeping the operation running during the tour or having to close it down.

Some members expressed their preference as to the best date to tour, but Mr. Schwartz advised that he would talk to Eureka and communicate via e-mail on the results of that conversation, and would try immediately before or after lunch.

Preferences: Stenlund (not Wednesday); Seigler (Friday best for him); Felice (Not Monday or Wednesday); and Lenz (not Tuesday).

8. Adjourn

Member Cihacek moved, Member Felice seconded, adjournment of the meeting at approximately 8:45 p.m.

Ayes: 5
Nays: 0
Motion carried.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 4

Item Description: Communication Items

Projects update:

- 2014 PMP- We are nearing completion of this project. The remaining work includes paving Dellwood, some backyard drainage improvements near Dellwood and Sherren, and directionally boring a new water main along Rice Street to complete a link near Lake McCarrons. All work will be complete by the end of October.
- County Road B2 Sidewalk Construction – Last week the contractor poured concrete up to Western Ave. The contractor expects to have the sidewalk poured up to Rice Street by the first week of October, including the section along Victoria St. Restoration work is ongoing. The project will be complete by the end of October.
- Snelling Ave Bus Rapid Transit: Final plans for this project are still under development. Staff will see 90% plans by the first week of October. All of the stations will be under construction in 2015 with the BRT service stating in late 2015. Staff was recently notified that given current cost projections, Metro Transit has made the decision to drop the Roselawn station from any further design stages. We were informed that the Roselawn station was being "deferred" but the design was continuing in case project costs allowed for the inclusion of the station. We now know that will not be a possibility. Staff will continue to work with Metro Transit in the future to lobby for the construction of the Roselawn station in a future phase of the BRT line.
- County Road B Pathway: The pathway along County Road B has been paved. Crews will be working on final restoration and the installation of the storm water BMP's over the next couple of weeks. Some concrete work will also occur at the intersection of County Road B and Cleveland for the installation of the ADA pedestrian ramps.
- Victoria Street Reconstruction and Sidewalk Project: Staff is starting preliminary work on next year's reconstruct project along Victoria Street south of County Road B. This project will involve complete reconstruction of the roadway, curb and gutter installation at various points, storm water improvements, as well as a new sidewalk. The sidewalk will extend north and tie into the new sidewalk at County Road B2. The City is working with the County and their expected mill and overlay project on Victoria north of County Road B to possibly narrow the roadway to make room for the sidewalk on the east side of the roadway. Staff has scheduled a public meeting to introduce the project to area residents and receive input about any specific issues along the roadway. That meeting will be held at 7 PM on Thursday, October 9th in Rose Room in the Oval Skating Center.
- The City's water tower painting is complete. The tank will be refilled for testing on the 22nd and hopefully back in service on the 26th of September with good test results.
- Mn/DOT will be presenting at the City Council work session on Monday, October 20th. They will be focusing on the TH 36 bridge over Lexington Ave project as well as having

a quick discussion about several upcoming projects in the area that will impact regional traffic around the City of Roseville. Staff will present any materials from the work session to the PWETC Committee at the October meeting.

Maintenance Activity:

- Street maintenance staff is performing fall mowing of boulevards and maintaining streetscape areas.
- Seasonal street maintenance activities continue with general patching operations and curb and sidewalk repairs.
- Street crews are restoring along the newly paved County Road B shoulder widening for the pedestrian facility.
- A segment of the Langton Lake Pathway was resurfaced recently and restoration of vegetation is being done.
- Utility crews continue with preventive maintenance activities including hydrant and gate valve repairs, meter installations, and sewer jetting (cleaning) operations.
- Registration cards for the Leaf Collection Program will be mailed out in the next week.

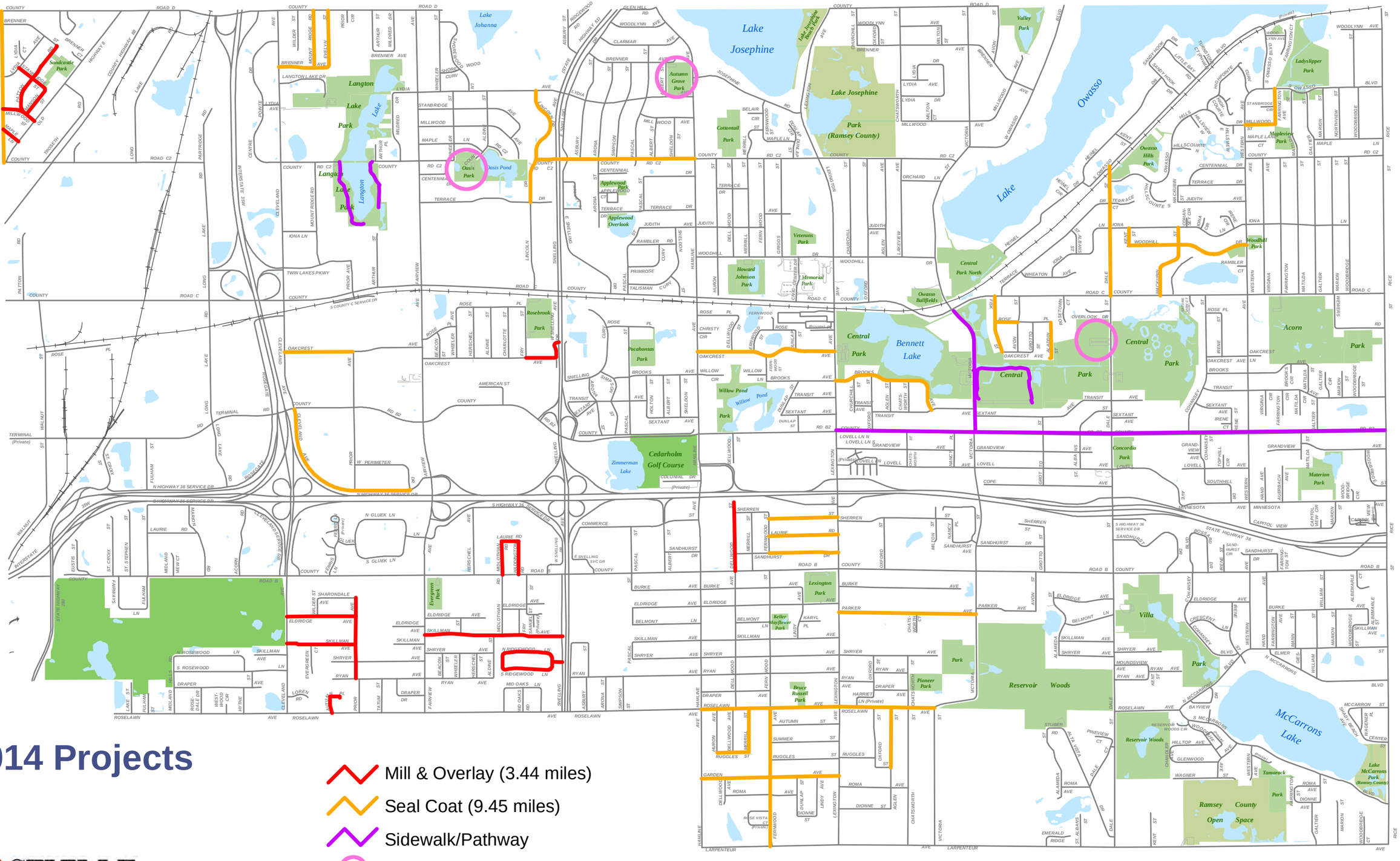
Other:

Staff will have follow up information on TIF at the meeting as requested.

Attachments:

A: 2014 Project Map
B: 2014 Sewer Lining Map
C:

Attachment A



2014 Projects

- Mill & Overlay (3.44 miles)
- Seal Coat (9.45 miles)
- Sidewalk/Pathway
- Parking Lot

ROSEVILLE

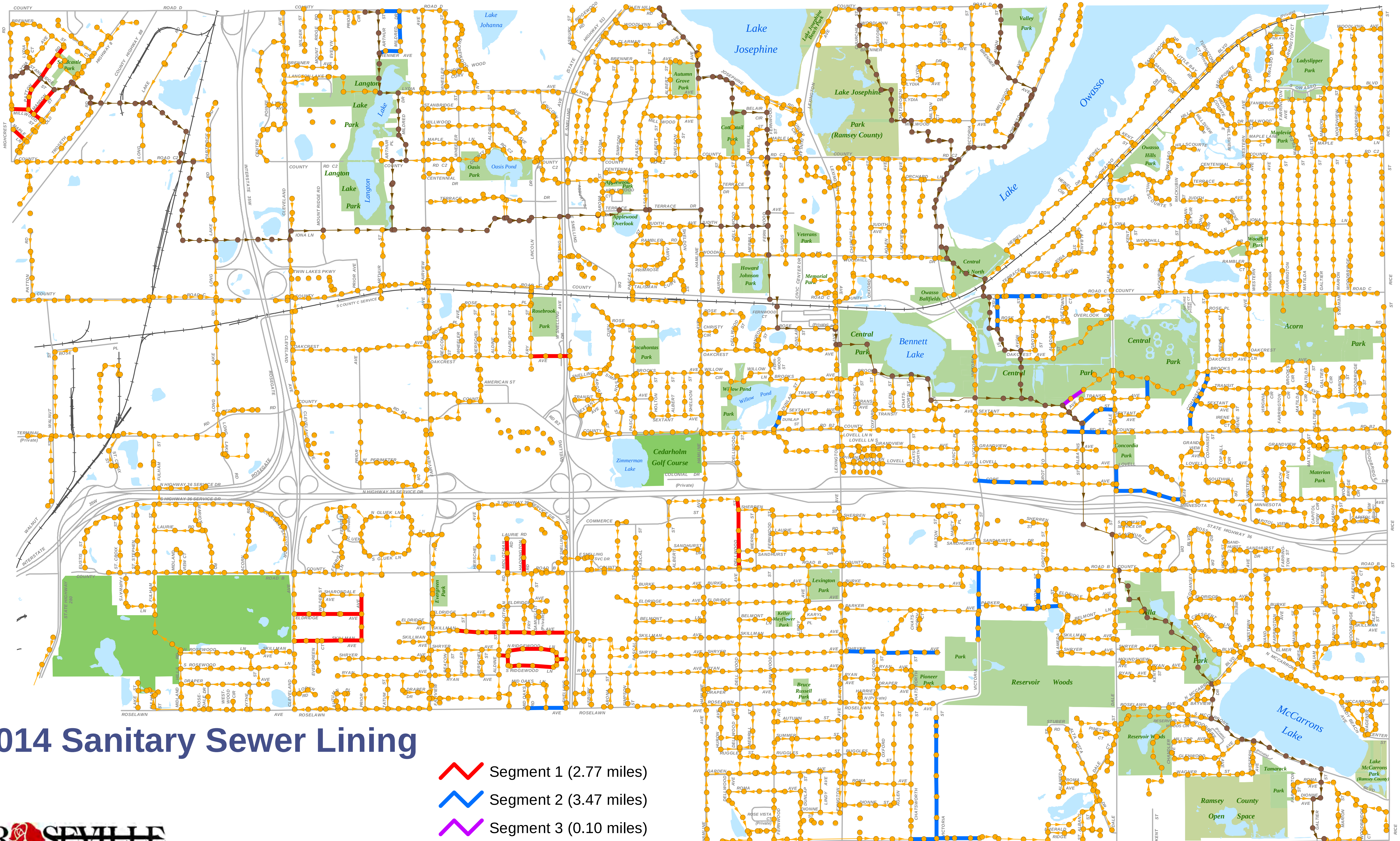
Prepared by:
Engineering Department
May 22, 2014

Data Sources and Contacts:
* Ramsey County GIS Base Map (4/29/13)
* City of Roseville Engineering Department
For further information regarding the contents of this map contact:
City of Roseville, Engineering Department,
2660 Civic Center Drive, Roseville MN

0 500 1000 1500 2000 Feet

N

mapdoc: 2014Projects.mxd
map: 2014Projects.pdf



2014 Sanitary Sewer Lining

Segment 1 (2.77 miles)

Segment 2 (3.47 miles)

Segment 3 (0.10 miles)

City Sanitary Pipe

Metro Sanitary Pipe

ROSEVILLE

Prepared by:
Engineering Department
January 23, 2014

Data Sources and Contacts:
* Ramsey County GIS Base Map (12/2/13)
* City of Roseville Engineering Department
For further information regarding the contents of this map contact:
City of Roseville, Engineering Department,
2660 Civic Center Drive, Roseville MN

0 500 1000 1500 2000 Feet

mapdoc: 2014Lined.mxd
map: 2014Lined.pdf

N

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 5

Item Description: Parking Requirements Discussion

Background:

The Commission requested a discussion with Community Development staff to better understand city development requirements for parking in an effort to reduce impacts on infrastructure and the environment. Paul Bilotta, the Community Development Director will be in attendance to discuss requirements and answer questions the Commission might have.

Recommended Action:

None

Attachments:

A.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 6

Item Description: Ramsey County Recycling Presentation

Background:
Member Wozniak had offered a presentation by Ramsey County on their BIZ Recycling and grant program to incent businesses to recycle. Joel Anderson from Ramsey County will be in attendance to give the presentation.

Recommended Action:

None

Attachments:
A.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 7

Item Description: GreenStep Cities Inventory

Background:
Attached is a summary sheet of the Greenstep Cities inventory of current practices that the city has achieved and the entire list of practices and requirements for the Greenstep program. Staff will walk through the program with the Commission and discuss areas we are working on.

Our website is active and staff is assembling data to enter into the program.

Recommended Action:
Receive presentation and discuss next steps.

Attachments:
A. Current Inventory
B. Greenstep Cities requirements

	>> to receive recognition from the GreenStep Cities program, you will need to type information on completed actions into the GreenStep website <<		
	MINNESOTA GREENSTEP CITIES BEST PRACTICES, ACTION OPTIONS AND PROGRAM REQUIREMENTS (8/30/2013)	Use this spreadsheet to do an initial inventory of city actions. Consider checking off which actions are: **Completed, In process, Planned, & Who the responsible person / entity is.**	**Required for a Category A city**
	Buildings & Lighting Best Practices Category		BP #1 plus ONE other Building BP required
	Best Practice #1: Efficient Existing Public Buildings		Required BP
	Action (1) for this best practice: Enter baseline information into the Minnesota B3 database and routinely enter monthly energy use data from city-owned buildings.	In Progress	Required action
	(2) Make no/low cost facility operations & maintenance changes to city-owned/school buildings to reduce energy costs.	In Progress	Required action
	(3) Invest in energy efficiency opportunities through recommissioning/retrofitting city-owned/school buildings or by using the Guaranteed Energy Savings Program.		
	(4) Implement information technology efforts and city employee engagement to reduce plug loads and building energy use.		
	(5) Document that the new construction or major remodeling of a public building has met or qualifies under a green building framework.	Completed	Required: choose one additional BP action from actions (3) - (7)
	(6) Document that the operations & maintenance of city-owned/school buildings meets or qualifies under a green building framework.		
	(7) Install for one or more city-owned/school buildings at least one of the following energy efficiency measures:		
	a. A ground-source, closed loop geothermal system.	Completed	
	b. A district energy/microgrid system.		
	>> For each best practice, see the web page listed to view detailed guidance, implementation tools and which cities are completing the actions: http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=1		
	2. Efficient Existing Private Buildings		Optional BP
	(1) Create or participate in a marketing and outreach program to promote/achieve residential energy/water use reduction and energy efficiency.	Completed	
	(2) Integrate green building pratices information and assistance into the building permit process.		
	(3) Implement an energy rating/disclosure policy for residential or commercial buildings.		
	(4) Describe energy/water efficiency actions and other green building practices at businesses located within/nearby the city.		
	(5) Conserve drinking/groundwater resources by adopting a watering ordinance, water-wise landscaping ordinance/guidance, or a WaterSense purchasing program.	Completed	If implementing this BP, complete at least TWO actions.

	(6) Provide a financial or other incentive to private parties who add energy/sustainability improvements or renovate using a green building framework.	Completed	
	(7) Customize a model sustainable building renovation policy and adopt the language to govern commercial renovation projects that: a. Receive city financial support, and/or b. Require city regulatory approval (conditional use permits, rezonings, variances, PUD status).		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=2		
3. New Green Buildings			Optional BP
	(1) Require by city policy that new city-owned buildings built in the future use a green building framework.	Completed	
	(2) Work with the local school district to ensure that future new schools are built using a green building framework		If implementing this BP, complete at least action (1) or (2) and …
	(3) Customize a model sustainable building policy and adopt language governing new private development projects that:		
	a. Receive city financial support, and/or		
	b. Require city regulatory approval (conditional use permit, rezoning, variance, PUD).		... complete at least ONE additional action (3) through (5).
	(4) Provide a financial or other incentive to private parties who build new buildings that utilize a green building framework		
	(5) Adopt environmentally preferable covenant guidelines for new common interest communities addressing issues such as stormwater, native vegetation, growing food, clothes lines and renewable energy.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=3		
4. Efficient Outdoor Lighting and Signals			Optional BP
	(1) Require energy efficient, Dark-Sky compliant new or replacement outdoor lighting fixtures on city-owned/private buildings and facilities.		
	(2) Require all new street lighting to be Dark-Sky compliant and all new traffic signals to be EnergyStar compliant.	Completed	
	(3) Modify any city franchise or other agreement with a utility to facilitate rapid replacement of inefficient street lighting.	Completed	
	(4) Coordinate traffic signals and/or optimize signal timing so as minimize car idling at intersections yet maintain safe and publicly acceptable vehicle speeds.		If implementing this best practice, complete at least TWO actions, including one of actions (5) through (8).
	(5) Use LED/solar-powered lighting for a flashing sign or in a street, parking lot or park project.	Completed	
	(6) Relamp/improve exterior building lighting for city-owned buildings/facilities with energy efficient, Dark-Sky compliant lighting.	Check	
	(7) Replace city-owned parking lot/ramp lighting with Dark-Sky compliant, energy efficient, automatic dimming lighting technologies.	Check	
	(8) Replace the city's existing traffic signals with energy efficient LED or equivalent lighting technologies	Check	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=4		
5. Building Reuse			Optional BP
	(1) Adopt an historic preservation ordinance/regulations to encourage adaptive reuse.		

	(2) Implement the Minnesota Main Street model for commercial revitalization.		
	(3) Work with a local school to either add-on space, or to repurpose space into non-school uses.		If implementing this BP, complete at least ONE action.
	(4) Create/modify a green residential remodeling assistance/financing program to assist homeowners in adding space to their existing homes.	Completed	
	(5) Adopt development and design standards that facilitate infill and redevelopment.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=5		
Land Use Best Practices Category			BP #6 plus ONE other Land Use BP required
6. Comprehensive Plan and Implementation			Required BP
	(1) Adopt/have an adopted comprehensive plan OR, Category B and C cities may simply adopt a land use plan that was adopted by a regional entity or the county.	Completed	Required action
	(2) Demonstrate that regulatory ordinances comply with the comprehensive plan including but not limited to having the zoning ordinance explicitly reference the comprehensive plan as the foundational document for decision making.	Completed	Required action
	(3) Include requirements in comprehensive and/or other plans for intergovernmental coordination addressing land use and watershed impacts, infrastructure, economic development and city/regional services.		
	(4) Include ecological provisions in the comprehensive plan that explicitly aim to minimize open space fragmentation and/or establish a growth area with expansion criteria.		
	(5) Adopt climate protection/adaptation, resiliency or energy independence goals and objectives in the comprehensive plan or in a separate policy document, and link these goals to direct implementation recommendations.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=6		
7. Efficient City Growth			Optional BP
	(1) Limit barriers to higher density housing by including in the city zoning ordinance and zoning map:		
	a. Neighborhood single-family density at seven units per net acre or greater.	Completed	
	b. Multi-family housing at a gross density of at least 15 units per acre adjacent to a commercial zoning district or transit center.		
	(2) Encourage higher density housing through at least two of the following strategies:		
	a. Incorporate a flexible lot size/frontage requirement for infill development.		
	b. Use density and floor area ratio (FAR) bonuses in selected residential zoning districts.		
	c. Tie a regulatory standard to comprehensive plan language defining compact city expansion zones that limit low-density development.		
	d. Allowing accessory dwelling units or co-housing by right in selected zoning districts.	Completed	If implementing this BP, complete at least ONE action.
	(3) Encourage a higher intensity of commercial land uses through at least one of the following strategies:		

	a. Include in the city zoning ordinance and zoning map a commercial district with reduced lot sizes and zero-lot-line setbacks, or a FAR minimum between .75 and 1.		
	b. Set targets for the minimum number of employees/acre in different commercial zones.		
	(4) Provide incentives for infill projects, or for life-cycle housing at or near jobs or retail centers, or for achieving an average net residential density of seven units per acre.	Check	
	(5) Modify the city zoning ordinance and zoning map to allow, without variance or rezoning in at least one district, developments that meet the prerequisites for LEED-Neighborhood Development certification.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=7		
8. Mixed Uses			Optional BP
	(1) Organize or participate in a community planning/design process for a mixed use area of the city.		If implementing this BP, complete at least TWO actions.
	(2) Locate or lease a school, city building or other government facility that has at least two of these attributes:		
	a. Adjacent to an existing employment or residential center.		
	b. Designed to facilitate and encourage access by walking and biking.		
	c. Accessible by regular transit service.		
	(3) Modify a planned unit development – PUD - ordinance to emphasize mixed use development or to limit residential PUDs to areas adjacent to commercial development.	Completed	
	(4) Certify a new development as complying with LEED for Neighborhood Development standards, including the mixed-use credits.		
	(5) Have a downtown zoning district that allows residential and compatible commercial development.		
	(6) Incorporate form-based zoning approaches into the zoning code, in those areas where a diverse mix of uses is desired		
	(7) Create incentives for vertical mixed-use development in appropriate locations (downtown, commercial districts near colleges or universities, historic commercial districts).		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=8		
9. Efficient Highway-Oriented Development			Optional BP
	(1) Establish design goals for at least one highway corridor.	Completed	
	(2) Participate in regional economic development planning with representatives from surrounding townships, cities, the county and business interests to:		
	a. Estimate commercial/industrial needs among all jurisdictions.		
	b. Jointly implement recommendations to stage highway commercial development in order to avoid overbuilding and expensive low-density development.		If implementing this BP, complete at least ONE action.
	(3) Adopt transportation infrastructure design standards that protect highway, economic and ecologic functions of the corridor through clustering of development and incorporating access management standards.	Completed	

	(4) Adopt a highway commercial zoning district that permits only auto-oriented land uses.	Completed	
	(5) Require decommissioning in development agreements for large format developments should they remain vacant for several years.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=9		
10. Conservation Design			Optional BP
	(1) Conduct a Natural Resource Inventory or Assessment (NRI and NRA); incorporate protection of priority natural systems or resources through the subdivision or development process	Check	
	(2) For cities outside or on the fringe of metropolitan areas, conduct a cost of public services study for development outside the city grid and adopt development standards or a concurrency ordinance to ensure staged urban growth that protects natural systems.		If implementing this BP, complete at least ONE action.
	(3) For cities within metropolitan areas, incorporate by policy woodland best management practices into zoning or development review.		
	(4) For cities with undeveloped natural resource areas use, or adopt as policy the use of a conservation design scorecard as a tool in negotiating development agreements.		
	(5) Develop/fund a conservation easement program, such as a purchase of development rights program, in collaboration with a land trust.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=10		
Transportation Best Practices Category			BP #11 and BP #12 required
11. Complete Green Streets			Required BP
	(1) Adopt a complete streets policy that also addresses street trees and stormwater.	Check	Complete action (1), and …
	(2) Adopt zoning language or approve a development agreement for a selected area/project that is substantially equivalent to the LEED for Neighborhood Development certification, including credits for Walkable Streets and Street Network.		
	(3) Document inclusion/installation of green infrastructure elements as well as grey infrastructure elements in at least one complete streets reconstruction project.	Completed	
	(4) Identify, prioritize and remedy complete streets gaps and lack of connectivity within your road network by, for example, adding a bike route/lane, truck route or sidewalk.	Completed	… complete TWO additional actions.
	(5) Identify and remedy street-trail gaps between city streets and offroad trails/bike trails to better facilitate walking and biking.	Check	
	(6) Implement traffic calming measures, including road diets, shared space and depaving, in at least one street redevelopment project.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=11		
12. Mobility Options			Required BP
	(1) Promote walking, biking and transit use by one or more of the following means:		
	a. Produce/distribute route maps, signage or a web site.		
	b. Document increased bike facilities, such as racks, bike stations, and showers.		
	c. Add bus infrastructure, such as signage, benches, shelters, park and ride lots and real-time arrival data streaming.		

	d. Increase the number of employers who promote multiple commuting options, including offering qualified transportation fringe benefits instead of only a tax-free parking fringe benefit.		
	e. Be recognized as a Walk Friendly or Bicycle Friendly Community.	Completed	Complete at least TWO actions.
	(2) Launch an Active Living campaign such as a Safe Routes to School program.		
	(3) Prominently identify mobility options: transit; paratransit/Dial-A-Ride; cab service; rental cars; bikes.	Completed	
	(4) Promote carpooling or ridesharing among community members, city employees, businesses, high schools and institutions of higher education.	Completed	
	(5) Launch telework/flexwork efforts in city government, businesses or at a local health care provider.		
	(6) Add/expand transit service, or promote car/bike sharing.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=12		
13. Efficient City Fleets			Optional BP
	(1) Efficiently use existing fleet of city vehicles by encouraging trip bundling, video conferencing, carpooling, vehicle sharing and incentives/technology.		
	(2) Right-size/down-size the city fleet with the most fuel-efficient vehicles that are of an optimal size and capacity for their intended functions	Completed	
	(3) Phase-in no-idling practices, operational and fuel changes, and equipment changes including electric vehicles, for city or local transit fleets.	Completed	If implementing this BP, complete at least TWO actions.
	(4) Phase in bike, foot or horseback modes for police, inspectors and other city staff.	Completed	
	(5) Document that the local school bus fleet has optimized routes, start times, boundaries, vehicle efficiency and fuels, driver actions to cut costs including idling reduction, and shifting students from the bus to walking, biking and city transit.		
	(6) Retrofit city diesel engines or install auxiliary power units, utilizing Project GreenFleet or the like.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=13		
14. Demand-Side Travel Planning			Optional BP
	(1) Right-size or eliminate parking minimum development standards and add parking maximums in pedestrian-friendly or transit-served areas.	Completed	
	(2) For cities with regular transit service, require or provide incentives for the siting of retail services at transit/density nodes.		
	(3) For cities with regular transit service, require or provide incentives for the siting of higher density housing at transit/density nodes.	Completed	If implementing this BP, complete at least TWO actions.
	(4) Adopt a travel demand management plan for city employees or incorporate into development regulations TDM or transit-oriented development standards.	Completed	
	(5) Document that a development project certifies under the LEED for Neighborhood Development program and is awarded at least one of the following credits:		
	a. Transportation Demand Management.		
	b. Housing and Jobs Proximity.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=14		
Environmental Management Best Practices Category			BP #15, BP #16, BP #17 and ONE other BP required

15. Purchasing			Required BP
	(1) Adopt an environmentally preferable purchasing policy or administrative guidelines/practices directing that the city purchase at least:	Check	Complete action (1), and …
	a. EnergyStar certified equipment and appliances and		
	b. Paper containing at least 30% post-consumer recycled content.		
	(2) Purchase energy used by city government/distributed by a municipal utility from renewable energy sources.		… complete at least ONE additional action.
	(3) Establish a local purchasing preference and, working with a local business association, develop a list of locally-produced products and suppliers for common purchases.		
	(4) Require purchase of U.S. EPA Water Sense-certified products.	Completed	
	(5) Set minimum standards for the percentage of recycled-content material in asphalt and roadbed aggregate or other construction materials.		
	(6) Require printing services to be purchased from companies certified by Minnesota Great Printers or by the Sustainable Green Printing Partnership.		
	(7) Lower the environmental footprint of meetings and events in the city.	Completed	
	(8) Use state and national green standards/guidelines for at least 3 categories of purchasing.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=15		
16. Urban Forests			Required BP
	(1) Certify as a Tree City USA.	Completed	Complete at least TWO actions.
	(2) Adopt as policy MN Tree Trusts' *Best Practices* and use the guidelines in at least one development project to achieve an excellent or exemplary rating.		
	(3) Budget for and achieve urban canopy/ tree planting goals.		
	(4) Maximize tree planting along your main downtown street or throughout the city.	Completed	
	(5) Adopt at least one of the following tree/landscape ordinances/policies:		
	a. Adopt a policy of no net loss of specified natural landscapes.	Completed	
	b. Adopt an ordinance/policy relating to protection of trees on public and private parcels affected by city planning/regulatory processes.	Completed	
	c. Adopt landscaping/nuisance ordinances that promote, rather than create barriers for, native vegetation.	Completed	
	(6) Build community capacity to protect existing trees/to plant resilient species by certifying at least one or more local staff/volunteers.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=16		
17. Efficient Stormwater Management			Required BP
	(1) Complete the Blue Star City stormwater management assessment and be recognized for implementing the actions therein.		
	(2) Adopt by ordinance one or more of the following:		
	a. A narrower streets provision that permits construction of 24-foot roads for public, residential access and subcollector streets (with fewer than 500 average daily trips).		
	b. A 1.5 inch rainfall on-site rainwater infiltration design requirement for construction sites.		

	c. A stormwater runoff volume limit to pre-development volumes for the 5-year, 24-hour rainfall maximum event.		
	(3) THIS ACTION UNDER CONSTRUCTION		
	(4) Create a stormwater utility that uses variable fees to incentivize enhanced stormwater management, minimize the volume of and pollutants in runoff, and educate property owners.	Completed	Complete at least ONE action.
	(5) Adopt and implement guidelines for, or adopt required design standards/incentives for, at least one of the following stormwater infiltration/reuse techniques:		
	a. Rain gardens or green roofs.	Completed	
	b. Cisterns and other stormwater reuse strategies.		
	c. Green alleys or green parking lots.		
	d. Pervious/permeable pavement or pavers.		
	(6) Adopt an ordinance with erosion and sediment control provisions as well as requirements for permanent stormwater treatment.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=17		
18. Parks and Trails			Optional BP
	(1) Identify and remedy gaps within your city's system of parks, offroad trails and open spaces.	Completed	
	(2) Plan and budget for a network of parks, green spaces, water features and trails in all new development areas.	Completed	
	(3) Achieve minimum levels of city greenspace.	Completed	
	(4) Adopt low-impact design standards in parks and trails that infiltrate or retain all 2 inch, 24-hour stormwater events on site.	Completed	
	(5) Create park management standards/practices that maximize at least on of the following:		If implementing this BP, complete at least THREE actions.
	a. Low maintenance turf management/native landscaping.		
	b. Organic or integrated pest management.		
	c. Sources of non-potable water, or surface/rain water for irrigation.	Completed	
	(6) Certify at least one golf course in the Audubon Cooperative Sanctuary Program.		
	(7) Document that the operation and maintenance, or construction/remodeling, of at least one park building used a green building framework.	Completed	
	(8) Develop a program to involve community members in hands-on land and stewardship projects.	Completed	
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=18		
19. Surface Water Quality			Optional BP
	(1) Assist at least one lake or river association to earn or qualify for the Star Lake/River designation for their lake/river.		If a city has at least one state-designated public water body within its boundaries and chooses to implement this best practice, complete action (4) and at least ONE additional action. *** If a city
	(2) Support a multi-party community conversation around improving local water quality.	Completed	
	(3) Adopt and report on measureable, publicly announced surface water improvement targets for water bodies.	Completed	
	(4) Adopt a shoreland ordinance for all river and lake shoreland areas.	Completed	

	(5) Adopt goals to revegetate shoreland and create a local program or outreach effort to help property owners with revegetation.		
	(6) Implement an existing TMDL implementation plan.	Completed	
	(7) Create/assist a Lake Improvement District.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=19		
20. Efficient Water and Wastewater Facilities			Optional BP
	(1) Compare the energy use and performance of your facilities with other peer plants using standardized, free tools.		
	(2) Plan and budget for motor maintenance and upgrades so as to assure the most energy efficient, durable and appropriate equipment is available when upgrades or break downs occur.	Completed	If implementing this best practice, complete actions (1) and (2) and ...
	(3) Establish an on-going budget and program for decreasing inflow and infiltration into sewer lines.		
	(4) Assess energy and chemicals use at drinking water / wastewater facilities and report on implemented changes that had a short payback period.		… at least ONE additional action.
	(5) expired action		
	(6) Implement an efficiency project/program: pretreatment, water conservation, co-generation and water reuse.		
	(7) Create a demand-side management program to reduce demands on water and wastewater systems.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=20		
21. Septic Systems			Optional BP
	(1) Report to landowners suspected noncompliant or failing septic systems as part of an educational, informational and financial assistance and outreach program designed to trigger voluntary landowner action to improve septic systems.		
	(2) Create a program that follows the five-step process for addressing failing septic systems developed by the University of Minnesota's Onsite Sewage Treatment Program.		
	(3) Clarify/establish one or more responsible management entities for the proper design, siting, installation, operation, monitoring and maintenance of septic systems.		
	(4) Adopt a subsurface sewage treatment system ordinance based on the Association of Minnesota Counties model ordinance.		If implementing this BP, complete at least ONE action.
	(5) Create a program to finance septic systems upgrades through, for example, a city revenue bond, repayable through taxpayers' property taxes.		
	(6) Work with homeowners and businesses in environmentally sensitive areas and areas where standard septic systems are not the least-cost option to promote innovative waste water systems.		
	(7) Arrange for assistance to commercial, retail and industrial businesses with water use reduction, pollution prevention and pretreatment prior to discharge to septics.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=21		
22. Solid Waste Reduction			Optional BP
	(1) Adopt and meet reduction goals for waste generated from internal city operations, including schools, libraries, parks, municipal health care facilities.	Check	If implementing this BP, complete at least action (1) or (2), and …
	(2) Adopt and meet recycling/composting goals for waste/toxics generated from internal city operations.		

	(3) Document significant waste reduction/recycling, through a resource management contract or other means, for one or more of:		
	a. City government operations.		
	b. Schools, libraries, parks, or municipal health care facilities.		
	c. A commercial or industrial business.		
	(4) Publicize, promote and use the varied businesses/services collecting and marketing used, repaired and rental consumer goods in the city/county.	Completed	
	(5) Arrange for a residential or business/institutional source separated organics collection/management program.	Check	
	(6) Implement one or more city-wide solid waste collection/recycling systems:	Completed	
	a. Mandate collection of recyclables form multi-unit residential buildings.		... at least ONE of actions (4) through (8).
	b. Mandate collection of 3 or more recyclables materials from commercial entities.		
	c. Organize regular, ongoing residential solid waste collection by private and/or public operations to link one (or more) geographic district(s) to only one hauler.		
	(7) Offer significant volume-based pricing on residential garbage and/or incentives for recycling.		
	(8) Adopt a construction and demolition ordinance governing demolition permits that mandates levels of recycling and reuse for materials and soil/land-clearing debris.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpid=22		
23. Local Air Quality			Optional BP
	(1) Conduct an education/financial assistance campaign around one of the following wood burning / auto exhaust issues:		
	a. Indoor and outdoor wood burning behavior, to ensure that wood burning is only done with seasoned wood and in a manner that doesn't negatively impact neighbors.		
	b. Indoor wood burning technology, to result in community members upgrading from inefficient/more polluting fireplaces and wood stoves to pellet/natural gas/biogas stoves and fireplaces or the most efficient certified wood stoves.		
	c. Smoker cars - older model/high polluting vehicles, to result in repairs spurred by repair vouchers.	Completed	
	(2) Regulate outdoor wood burning, using model ordinance language, performance standards and bans as appropriate, for at least one of the following:	Completed	
	a. Recreational burning.		If implementing this BP, complete at least TWO actions.
	b. Outdoor wood boilers.		
	(3) Conduct one or more policy or education/behavior change campaigns on the topics below and document:		
	a. Decreased vehicle idling in specific locations.		
	b. Increased sales by retail stores of low and no-VOC household products.		
	c. Replacement of gasoline-powered equipment with lower polluting equipment.		
	d. Adoption of a smoking-free policy at one or more multi-unit housing buildings, private or public.	Completed	
	(4) Document the participation of at least 3 larger businesses in emission/idling reduction programs.		

	(5) Install at least two public charging stations for plug-in hybrid and full electric vehicles.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=23		
	Economic and Community Development Best Practices Category		BP #24 and BP #25 and ONE other BP required
24. Benchmarks & Community Engagement			Required BP
	(1) Use a committee to lead, coordinate and report to community members on implementation of GreenStep City best practices.		Required action
	(2) Organize goals/outcome measures from all city plans and report to community members data that show progress toward meeting these goals.		Required action
	(3) Engage community members in a public process that results in city council adoption of and commitment to measure and report progress on sustainability indicators.		
	(4) Conduct or support a broad sustainability education and action campaign involving:		
	a. The entire community		
	b. Homeowners		
	c. Block clubs/neighborhood associations		
	d. Congregations		
	e. Schools and youth	Completed	
	(5) Conduct or support a community education, visioning and planning initiative using a sustainability framework such as:		
	a. Strong Towns, Natural Capitalism		
	b. Transition initiatives, resiliancy, Post-Carbon Cities.		
	c. Eco-municipalities/The Natural Step, ecological footprinting, permaculture.		
	d. ISO 14001, Genuine Progress.		
	e. Healthy communities, multi-generation learning		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=24		
25. Green Business Development			Required BP
	(1) Support new/emerging green businesses and green jobs through targeted assistance.		
	(2) Connect businesses with assistance providers, including utilities, who provide personalized energy, waste or sustainability audits and assistance.		
	(3) Actively promote green tourism resources to tourism and hospitality businesses in/around the city.		
	(4) Strenthen value-added businesses utilizing local waste products and renting products/services.		Complete at least TWO actions.
	(5) Lower the environmental footprint of a brownfield remediation/redevelopment project.	Completed	
	(6) Promote green businesses that certify under a local, regional or national program.	Completed	
	(7) Conduct or participate in a buy local campaign.		
	(8) expired action		

	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=25		
26. Renewable Energy			Optional BP
	(1) Adopt solar energy standards or a wind energy ordinance that allows or encourages appropriate renewable energy installations.	Completed	If implementing this BP, complete at least TWO actions.
	(2) Consistently promote at least one of the following means of increasing renewable generation:		
	a. A local utility's green power purchasing program that allows residents/businesses to order/buy new renewable energy.		
	b. Local, state and federal financial incentives for property owners to install renewable energy systems.		
	(3) Create/participate in a renewable energy financing program such as PACE for commercial property owners to install generation capacity/energy efficiency equipment.		
	(4) Support or create a program that enables property owners to participate in a community renewable energy project.		
	(5) Install a public sector/municipally owned renewable energy technology, such as solar electric (PV), solar hot water or hot air, micro-hydro or wind.		
	(6) Enable a new or demonstrate prior collaboration for installed private sector renewable energy/ energy efficient generation capacity with at least one of the following attributes:		
	a. Fueled by flowing water, wind, or biogas.		
	b. Fueled in part or whole by manure or woody biomass, optimized for minimal air and other environmental impacts and for energy efficiency and water conservation.		
	c. Distributing heating/cooling services in a district energy system.		
	d. Producing combined heat and power.		
	(7) Create an expedited permit process for residents and businesses to install solar energy systems.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=26		
27. Local Food			Optional BP
	(1) Incorporate working landscapes - agriculture and forestry - into the city by adopting an ordinance for one of more of the following:		If implementing this BP, complete at least ONE action.
	a. An agriculture and forest protection district.		
	b. A local food production district		
	c. Performance standards for minor and major agricultural retail.		
	(2) Facilitate the creation of home/community gardens, chicken & bee keeping, and incorporation of food growing areas/access in multifamily residential developments..	Completed	
	(3) Inventory and promote local food production/distribution within the city:		
	a. A farmer's market.		
	b. An urban agriculture business or a community-supported agriculture (CSA) arrangement between farmers and community members/employees.		
	c. A community or school garden, orchard or forest.		

	d. A rural grocery store or urban healthy convenience store.	Completed	
	(4) Measurably increase institutional buying, and sales through groceries and restaurants.		
	a. Purchasing of local/organic/humane/equitable foods by schools, hospitals, nursing homes and event centers.		
	b. Sales of local/organic/humane/equitable food in markets, retail food co-ops, rural grocery stores, urban convenience stores, hotels and restaurants.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=27		
28. Business Synergies			Optional BP
	(1) Help businesses register as users of the Minnesota Materials Exchange and document their exchanges/sales of byproducts with other local/regional businesses.		
	(2) Document that at least one business/building uses waste heat or water discharge from another business.		If implementing this BP, complete at least ONE of actions (2) - (4).
	(3) Require, build or facilitate at least four of the following in a business/industrial project:		
	a. Shared parking/access OR shared recreation/childcare facilities.		
	b. Green product development, manufacturing or sales OR a green job training program.		
	c. Building located within walking distance of transit and/or residential zoning.		
	d. Renovated buildings OR buildings designed for reuse.		
	e. Green buildings built to exceed the Minnesota energy code by 20% OR renewable energy generated on-site.		
	f. Combined heat and power (CHP) generation capacity OR shared geothermal heating/cooling.		
	g. Low-impact site development.		
	(4) Use eco-industrial park tools to identify industrial facilities that could achieve economic and environmental benefit by co-locating in the city's industrial park or industrial zone.		
	http://greenstep.pca.state.mn.us/bestPracticesDetail.cfm?bpnum=28		
From among all the best practices (1 - 28), the "floating BP" requirement:			Any THREE additional best practices
	>> To be recognized as a Step 3 GreenStep City, you must satisfy the distributrion requirements for the 5 best practice categories, and for each best practice and which ever best practice actions you chose, AND in total implement at least this many best practices:		**16**
	>> To be recognized as a Step 2 city, simply implement any BPs to total:		8

GreenStep Program Requirements

			>> for details see http://tinyurl.com/3mx3bob	A	Completed	In Progress/ Researching
Buildings & Lighting	1		Efficient Existing Public Buildings	*Required*		x
	2		Efficient Existing Private Buildings		x	
	3		New Green Buildings			x
	4		Efficient Building & Street Lighting and Signals		x	
	5		Building Reuse		x	
			Buildings & Lighting BPs Required	*2*		
Land Use	6		Comprehensive Planning & Implementation	*Required*	x	
	7		Higher Density		x	
	8		Mixed Uses			x
	9		Efficient Highway-Oriented Development		x	
	10		Conservation Design		x	
			Land Use BPs Required	*2*		
Transportation	11		Complete Green Streets	*Required*		x
	12		Mobility Options	*Required*	x	
	13		Efficient City Fleets		x	
	14		Demand-Side Travel Planning		x	
			Transportation BPs Required	*2*		
Environmental Management	15		Environmentally Preferable Purchasing	*Required*		x
	16		Urban Forests	*Required*	x	
	17		Efficient Stormwater Management	*Required*	x	
	18		Parks & Trails		x	
	19		Surface Water Quality		x	
	20		Efficient Water & Wastewater Facilities			x
	21		Septic Systems			o
	22		Solid Waste Reduction			x
	23		Local Air Quality		x	
			Environmental BPs Required	*4*		
Economic, Community Development	24		Benchmarks & Community Engagement	*Required*		x
	25		Green Business Development	*Required*	x	
	26		Renewable Energy			x
	27		Local Food		x	
	28		Business Synergies			o
			Development BPs Required	*3*		
			Floating BPs (additional to required BPs)	*3*		
			Total BPs Required (including floating) for Step 3	**16**		

NOTES

1 For each BP there are specific requirements, e.g. "complete any 2 actions."

2 For BP groups, e.g. Buildings & Lighting, a mix of BPs is required.

3 The "floating BP:" a city implements the required # of BPs in the 5 categories AND implements any 3 other BPs.

4 When a city has implemented a total of 16 BPs, taking into account the details in notes 1-3 above, Step 3 GreenStep recognition is granted at the mid-June conference of the League of Minnesota Cities.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 8

Item Description: Community Solar/City Facility Energy Use

Background:
Staff will update the Commission on city facility energy use and roof opportunities for PV solar installations. Staff has been talking with manufacturers of solar panels and potential financial/development partners working toward some scenarios to present at the October meeting. We will share information gained to date at the meeting.

The link to the GIS solar mapping tool is:
http://maps.umn.edu/solar/

Recommended Action:
None

Attachments:

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: September 23, 2014 **Item No:** 9

Item Description: Look Ahead Agenda Items/ Next Meeting October 28, 2014

Suggested Items:

- Update on MnDot and city projects
- 2014 Public Works workplan
- Community Solar
-

Recommended Action:
Set preliminary agenda items for the October 28, 2014 Public Works, Environment & Transportation Commission meeting.