

Roseville Public Works, Environment and Transportation Commission Meeting Agenda

Tuesday, April 25, 2017, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

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- | | |
|-----------|--|
| 6:30 p.m. | 1. Introductions/Roll Call |
| 6:35 p.m. | 2. Swearing in of New Commissioner / Election of Chair and Vice-Chair |
| 6:40 p.m. | 3. Public Comments |
| 6:45 p.m. | 4. Approval of March 28, 2017 meeting minutes |
| 6:50 p.m. | 5. Communication Items |
| 7:00 p.m. | 6. Organics Recycling Location in Roseville |
| 7:25 p.m. | 7. Stormwater Mitigation Requirements Review |
| 8:00 p.m. | 8. Vegetation Cost/Benefit Analysis |
| 8:15 p.m. | 9. Items for Next Meeting – May 23, 2017 |
| 8:30 p.m. | 10. Adjourn |

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**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: April 25, 2017

Item No: 4

Item Description: Approval of the March 28, 2017 Public Works Commission Minutes

Attached are the minutes from the March 28, 2017 meeting.

Recommended Action:

Motion approving the minutes of March 28, 2017 subject to any necessary corrections or revision.

Move: _____

Second: _____

Ayes: _____

Nays: _____

Roseville Public Works, Environment and Transportation Commission Meeting Minutes

Tuesday, March 28, 2017, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

1 **1. Introduction / Roll Call**

2 Chair Cihacek called the meeting to order at approximately 6:30 p.m. and at his
3 request, Public Works Director Marc Culver called the roll.

4
5 Chair – reminded commissioners of upcoming Ethics Training 4/12

6
7 **Present:** Chair Brian Cihacek; Vice Chair Sara Brodt-Lenz; Members John
8 Heimerl, Duane Seigler, Kody Thurnau, Thomas Trainor and Joe
9 Wozniak

10
11 **Staff Present:** Public Works Director Marc Culver and Assistant Public
12 Works Director Jesse Freihammer;

13 **2. Public Comments**

14
15 **3. Approval of February 28, 2017 Meeting Minutes**

16 *Comments and corrections to draft minutes had been submitted by PWETC*
17 *commissioners prior to tonight's meeting and those revisions incorporated into the*
18 *draft presented in meeting materials.*

19
20 **Motion**

21 **Member Trainor moved, Member Heimerl seconded, approval of the**
22 **February 28, 2017 meeting minutes as amended.**

23
24 **Corrections:**

- 25 ▪ **Page 1, Line 29 (Wozniak)**
26 Typographical correction to “regraded”

27
28 **Ayes: 7**

29 **Nays: 0**

30 **Motion carried.**

31
32 **4. Communication Items**

33 Public Works Director Culver and Assistant Public Works Director Freihammer
34 provided additional comments and a brief review and update on projects,

35 maintenance activities, and City Council actions listed in the staff report dated
36 March 28, 2017.

37
38 Discussion included staff updates and clarification of Xcel Energy private utility
39 work replacing and/or relocating gas lines in the area (County Road C in the past,
40 west of Hamline, and this year County Road B between Dale and Rice Street to
41 replace aging infrastructure); and completion of first citywide street sweeping for
42 the season, and subsequent sweeping of pathways and sidewalks currently
43 underway.

44
45 Mr. Culver reported on the receipt of a grant from 3M to supplement city capital
46 improvement program (CIP) funds to update citywide street signage and some
47 additional “No Parking,” “Stop,” and various warning signs over the next few years,
48 possibly allowing the reallocation of some CIP funds starting in 2019 to reflect
49 potential savings from grant funds.

50
51 Mr. Culver recognized Member Brodt-Lenz that this is her last PWETC meeting,
52 and thanked her for her service. Mr. Culver noted that an upcoming City Council
53 meeting would formally recognize outgoing advisory commissioners.

54
55 Mr. Culver announced the City Council appointment of Ms. Nancy Misra to serve
56 on the PWETC starting in April.

57
58 Chair Cihacek announced elections at the April PWETC meeting for the positions
59 of Chair and Vice Chair.

60 61 **5. Metro Transit Update**

62 Chair Cihacek introduced Metro Transit representative, Senior Transit Planner at
63 the Service Level for Route System Planning, Scott Thompson.

64
65 Mr. Thompson advised that his department was responsible for ongoing
66 maintenance of routes and schedules, the AVL information system (similar to GPS)
67 to track buses and subsequently set schedules; and maintain data on ridership with
68 passenger counters now equipped on all buses. Mr. Thompson advised that his staff
69 was also tasked with larger planning projects for the transit system, including
70 development of the Central Corridor Green Line with service implemented in 2014,
71 but planning started in 2012.

72
73 Mr. Thompson reported that his staff was beginning a small area study that included
74 the Cities of Roseville, Shoreview and Arden Hills, with the purpose to review the
75 Sector 2 route since it was last done sixteen years ago, in 2001.

76
77 Mr. Thompson distributed a packet of information for tonight’s discussion and his
78 presentation that may serve to answer some of the PWETC’s questions about
79 service and the productivity of Metro Transit in this area and the broader region.
80 In reviewing the information, Mr. Thompson referenced a fact sheet, system map,

81 Farebox Recovery Data from 2015 detailing service type and number of passengers;
82 and the productivity of light rail transit (LRT) that was proving successful, with
83 both the Green Line and Blue Line showing higher ridership than anticipated. With
84 the A-Line along Snelling Avenue, the first Bus Rapid Transit (BRT) installation
85 to-date, Mr. Thompson reported that was also performing well to-date, and
86 compared to the previous Route 84 service, initial performance levels and service
87 improvements showed significant improvements to the enhanced Route 84 and
88 combined A-Line BRT and Route 84.

89
90 Mr. Thompson reviewed the Executive Summary for the Service Improvement Plan
91 covering service improvement plans for the near future based on daily comments
92 from customers and cities seeking additional service. Mr. Thompson reported that
93 there had previously been no one location to evaluate the request, including how
94 many riders and the cost of operations; with this plan developed as a result for
95 evaluation of all services, stakeholder comments, and a number of comments
96 received (page 2); all to serve as guiding principles to maximize ridership for any
97 investment in services. Mr. Thompson noted that all services in the document are
98 currently unfunded, and the intent would be to seek a priority list to emphasize
99 ridership and productivity, as well as to enhance connectivity with the remaining
100 transit system, and to consider transit-friendly land use design and improve transit
101 equity.

102
103 Mr. Thompson provided specific Roseville routes proposed for improvement
104 within the community. As to future development and extension of the A-Line, Mr.
105 Thompson advised that the proposed ridership didn't justify the ridership level
106 needed for the financial investment, and ranked low until the former TCAAP site
107 developed and perhaps influenced that ranking. Based on past development
108 examples throughout the region, Mr. Thompson reported that a 2% to 3% increase
109 in transit ridership resulted from a new development.

110
111 With the intent to update the plan document in 2019, Mr. Thompson advised that
112 they were now starting to look at transit services for the Cities of Roseville,
113 Shoreview and Arden Hills, and ideas to improve that service. While recognizing
114 that there are challenges, Mr. Thompson noted that there were also changes in the
115 communities since the 2001 study, and noted that the respective city comprehensive
116 plans would also guide changes in transit service. Mr. Thompson noted that it
117 allowed re-evaluation for possible improvements, and advised that Metro Transit
118 would look to those cities to guide it on this small area service plan project.
119 Therefore, Mr. Thompson stated that they would appreciate receiving guidance
120 from the cities on today's routes and service and whether it was still appropriate, or
121 suggestions for possible route changes and/or service levels.

122
123 Mr. Thompson noted Member Lenz's concerns with limited frequency now, noting
124 that was another part of the process based on cost analyses, including cross-town
125 routes in the past and those currently in place. With the possible exception of the
126 Lexington Avenue route, which had been added as part of the expanded theme, Mr.

Thompson opined that the routes were in the right place, but the desire was for more frequent service and a wider span of service. Mr. Thompson reported that the biggest improvement seen recently was in ridership for weekend service to Rosedale Center, as some routes in the past didn't even come into Roseville on weekends (e.g. Route 87) and hours were marginal (e.g. no nights). Mr. Thompson advised that Metro Transit had invested significant resources to expand that service resulting in added ridership.

In recent discussions with Rosedale Center related to the Transit Center and sharing performance levels with them on routes and today's added ridership, Mr. Thompson advised that while not considering the Roseville transit system to be wonderful, agreed there were areas for improvement. However, Mr. Thompson also noted that there was no budget available for those enhancements, even though there remained a strong desire to identify where improvements can be made whether or not they can happen immediately. Mr. Thompson opined that it was a valuable exercise to be prepared to implement additional or expanded services when funding became available.

PWETC Questions

When the PWETC last met jointly with the City Council, Member Lenz noted discussions were held about east/west connectivity through Roseville. As an example, Member Lenz noted that Route 223 along County Road C only came by every ninety minutes. In listening to tonight's presentation, Member Lenz offered her insights that the former Circulator service would serve the needs of pre- and post-drivers, even though it may not improve service for commuters. However, Member Lenz noted the frustrations in attempting any east/west cross-town connectivity in Roseville, including getting to Rice Street, with buses only running every twenty minutes.

Mr. Thompson responded that Metro Transit had just received a federal grant for services on Rice Street to Larpenteur Avenue that should improve the service level from the current thirty minutes.

Member Lenz opined that making that connectivity would be well-advised given current tri-city revitalization efforts along the Rice Street/Larpenteur Avenue Corridor. Member Lenz further opined that enhancing transit in conjunction with the three cities and Ramsey County could make a huge impact to those revisioning efforts.

Mr. Thompson reported that Metro Transit had most recently looked at the potential to extend the short line route 62A to the west to the proposed new school in St. Paul. While this is only a marginal improvement, Mr. Thompson noted that it could bring service somewhat further. However, one problem reported by Mr. Thompson was that buses were unable to achieve the turn radius of East Larpenteur Avenue to southbound Rice Street, causing them to turn into the left-turning westbound turn bay. Mr. Thompson reported on Metro Transit's interest in and desire to be

involved with any redesign of that intersection. Mr. Thompson noted that a similar redesign had been experienced elsewhere (Arcade at Maryland). With left turn bays, Mr. Thompson noted the challenge created for buses and turn radii at those intersections.

Member Lenz asked for an update on the safety, cleanliness and maintenance of bus stops themselves; with Mr. Culver clarifying this included snow removal and garbage pick-up. Member Lenz also noted that some stops were not actually bus stops, but simply a sign poked in the boulevard. Even though some of those situations may involve a county roadway, Member Lenz asked if and how the city could influence improvements to make transit more attractive. Member Lenz opined that transit, including its bus stops, needed to be more attractive to entice ridership.

Member Seigler referenced the stop in front of his property where he installed steps rather than stand on the snow bank to board the bus.

While data indicates an upward trend in ridership, Member Lenz noted that it remained unappealing in many places. Member Lenz referenced the new housing development on Woodhill Avenue as an example of a needed service area. Member Lenz stated if Metro Transit and the city wanted new residents to use public transit, then bus stops needed to be more appealing.

Mr. Culver reported that Metro Transit had stepped up maintenance – including garbage, recycling and snow removal – at the BRT stations along Snelling Avenue, expanding efforts to make transit more attractive at those locations.

Mr. Thompson noted the challenges in improving maintenance at all bus stop locations, with 12,000 to 14,000 stops in this broader service area.

Mr. Culver noted the installation of concrete pads at some bus stop locations. However, he noted that could also be problematic if there was no sidewalk connection to those pads. Mr. Culver further noted that they still didn't address winter snow clearing of those pads for their usability. While recognizing Member Lenz points, Mr. Culver agreed that generally speaking, the city didn't do a good job in making transit more attractive either.

As an example of service issues, Member Lenz noted that she couldn't get to the airport from her home using the Metro Transit option at this point unless she could somehow get to the A-line. As another example, Member Lenz noted that she couldn't get from her home to Rosedale. Member Lenz opined that these were just two examples of convenient use of mass transit that could be available for Roseville residents if services on smaller buses (e.g. Circulator) were available, and using them was more attractive and user-friendly. Member Lenz suggested additional or enhanced information on routing options should be made available on the Metro Transit website for potential or regular customers to plan routing options.

219
220 In response, as the map shows, Mr. Thompson noted existing Metro Transit bus
221 stops in Roseville; and proposed locations for new areas meeting criteria. However,
222 Mr. Thompson noted that capital funding for additional shelters is currently tied up
223 in Metro Transit's facility department and capital funding tied up at the legislative
224 level, causing any new shelters to be on hold until funding becomes available. Mr.
225 Thompson admitted that there were some locations in Roseville with terrific
226 boarding counts that deserved a shelter (e.g. County Road B at Har Mar Mall with
227 80 people boarding daily, and in need of a shelter). Mr. Thompson noted that the
228 capital investment was the small part of the equation, with maintenance the more
229 expensive piece.

230
231 Chair Cihacek asked if the city could petition to move bus stops (e.g. to a road
232 cutout or park). As an example, Chair Cihacek noted the current example on
233 northbound Lexington Avenue with the bus stop 100' from an obvious stop at the
234 Lake Josephine Park facilities rather than having people stand between a busy street
235 and bus stop, when more than 1/8 of a mile away was a neutral gathering space at
236 the park with amenities already in place.

237
238 Mr. Thompson agreed that there were more examples as well, and asked that the
239 PWETC relay information on those areas through Mr. Culver, and after receiving
240 them at Metro Transit, the operating department would review and consider each
241 of them. Mr. Thompson noted that they were responsible for locating bus stops and
242 took consideration for liability and safety as well; and therefore preferred to locate
243 them well, and remained open to their relocation if it would better serve customers.

244
245 Member Lenz noted that Dale Street was another problem area and had been for a
246 long time: specifically northbound with a sign poked in the boulevard, and in the
247 winter months customers were required to cross snow mounds to board busses.

248
249 As Metro Transit reviewed various comprehensive plans and amendments to them,
250 Mr. Thompson advised that they stressed that cities look at pedestrian connections
251 to transit as a critical piece for redevelopment of development. As sites are
252 improved, Mr. Thompson further advised that communities press developers to take
253 mass transit into consideration as they design their projects.

254
255 Member Seigler noted the need for improvements to the Green Line between the U
256 of MN campus parking and the football stadium.

257
258 Mr. Thompson noted the same situation could be considered for the Blue Line, with
259 ridership count data and funding dictating those service levels and any
260 improvements to them.

261
262 Member Seigler noted an area of concern for him and other riders was the increase
263 in homeless people living on the trains. While it may seem a humane approach for
264 the homeless and it had become even more problematic over the last year from his

265 perspective, Member Seigler noted it was a horrible and very unpleasant experience
266 for riders who had paid to ride (e.g. odor). Member Seigler suggested a change in
267 Metro Transit policy to address this situation, opining that would serve to increase
268 ridership considerably.

269
270 As another option for east/west connectivity, Member Lenz suggested other quick
271 connections beyond Snelling Avenue (e.g. Dale or Rice Streets) that would be
272 excellent in feeding into the Green Line and make better north/south connections.

273
274 Mr. Thompson recognized Member Lenz' statement indicating the need for
275 improved frequency north of Larpenteur Avenue; confirmed by Member Lenz.

276
277 Mr. Thompson stated that these were the exact comments and feedback that Metro
278 Transit was looking for in developing its service improvement plan, incorporating
279 small area studies for any other improvements in the city.

280
281 In St. Anthony directly adjacent to Roseville, Member Seigler noted changes in the
282 former trailer park, and with an estimated 3,000 to 4,000 people feeding into
283 Rosedale Center; suggested that that type of traffic could also flow to the other side
284 of Rosedale Center as well.

285
286 With Member Lenz questioning if the University of Northwestern was considered
287 a destination, Mr. Thompson advised that it had come forward as an area desiring
288 improved service, noting that it was currently infrequent service.

289
290 Mr. Culver noted past interest from the Roseville City Council, spearheaded by
291 Councilmember Laliberte, for an A-Line extension primarily to better serve
292 Northwestern and University of Bethel institutions.

293
294 As TCAAP develops over the next 5-6 years, Member Lenz recognized that the
295 landscape would change.

296
297 Mr. Culver responded that it didn't change the economics for capital investment of
298 the BRT; but could prove to serve as a driver for more regular local service.

299
300 Member Lenz also noted that Metro Transit couldn't be everything to everyone;
301 and transit riders needed to be cognizant of the potential need for transferring buses
302 to get from one point to another.

303
304 Mr. Thompson agreed with Member Lenz' point; noting that one theme in Sector
305 1 and 2 in other areas of the region in the service area was the need to try to serve
306 everyone and through restructuring sectors had tried to make obvious changes.
307 However, Mr. Thompson agreed that it was unfortunate in some cases that service
308 in low ridership areas may have been removed from someone relying on it. Mr.
309 Thompson advised that attempts had been made to make the system simpler to
310 understand and relocate services, but admitted it was a balancing act. Mr.

Thompson noted elimination of some of the deviations created in the 1960's to 1980's to address current needs.

On page 18 of the plan document, Chair Cihacek noted the need to avoid duplication of service (e.g. Routes 60 and 62) that was essentially the same and often minutes apart from each other. Chair Cihacek asked how Metro Transit addressed not having buses back to back or covering the same territory.

Mr. Thompson responded that several routes on 262 had recently been eliminated when found to be within five minute of each other, while one may be faster than another, but serving as an example of what was being reviewed. As further economies were sought, Mr. Thompson agreed that this type of duplication could not nor should it continue. However, specific to the A-Line Route 80 and Route 84, Mr. Thompson reported that was a different situation for several reasons, including that while the A-Line is accessible for most people, some could not access it. In the case of the University Avenue service, Mr. Thompson reported that the Green Line versus Route 16 had been down to 5% ridership before the change; and those routes were continued to fill gaps for those unable to make it to the train station or in this case, the A-Line Station. For Route 84, Mr. Thompson recognized that was a holdover that also served the Highland area as well.

Chair Cihacek questioned if an option would be to reduce the size of the bus along a certain route or to run Metro Mobility or other contracted services to fill that gap.

Mr. Thompson noted that was a question asked fairly often of Metro Transit: the right-sizing of buses to meet demand. While having tried to do so to some extent, Mr. Thompson advised that the real savings is in operation, whether a 25' or 40' bus, with those costs not changing all that much, since 90% of the cost is for the driver/operator. However, Mr. Thompson advised that Metro Transit would continue looking at possible options for any economies to be found in the upcoming budget situation.

Additional discussion ensued, including AVL service availability for third-party apps, some of which were available through the Metro Transit site and several other non-Metro Transit apps that could provide arrival times; new express Route 267 into Maplewood from Roseville to downtown St. Paul with western connectivity across Highway 36 to I-35E; Park and Ride facilities on Cleveland Avenue/I-35W and Rice Street/Highway 36; and Rosedale Center parking under future agreements and policing of those areas, frequently considered sanctuaries or "Park and Hides."

Mr. Culver recognized Member Heimerl and thanked him for submitted his questions in advance of tonight's meeting, with responses from Metro transit provided via email to Mr. Culver.

Member Heimerl suggested that staff include some of the information materials (e.g. Blue Book) as attachments to tonight's meeting minutes for information to the public.

As a transit rider to commute to work, including airport travel, using both the A-Line and Green and Blue Lines as well, Member Heimerl questioned the commitment to make public transportation a good fit. Member Heimerl opined that it seemed to receive half commitment at best, using the example of the time required to go from downtown Minneapolis to downtown St. Paul, opining that he could ride his bike faster than that. Since part of that delay was caused by stopping for traffic lights along the way, Member Heimerl questioned why the train didn't get the right-of-way versus cars allowed to dictate to trains, especially given the significant investment in light rail and ultimate goal of attracting ridership with a faster option. If the trains aren't proven successful, Member Heimerl opined that they were just a waste of money; and stated his preference for either a full commitment or abandoning the effort completely. If people were to be encouraged to ride it, Member Heimerl stated that there was the need for a public push to make that happen. Member Heimerl also noted his safety concerns when riding a bus along the shoulder of the Interstate next to a retaining wall, opining it was just an accident waiting to happen. Member Heimerl asked how to get sufficient commitment to support transit; and therefore it had prompted one of his questions as to Metro Transit's overall budget and the percent collected from fares versus that total budget. Member Heimerl opined that the A-Line was a great improvement; but stated if he was a person with limited mobility, he would have concerns at the stations when the bus didn't stop at the pad each time.

Mr. Thompson advised that the buses should do so.

If someone was handicapped, Member Heimerl noted the inconsistency could create issues; and suggested that improvements such as this would make a strong statement for customers who would in turn support public transportation. At this point, however, Member Heimerl opined that there was mixed support and therefore mixed messages on the program.

Mr. Thompson reviewed the running time for the Green and Blue Lines from one downtown to the other, agreeing that there were significant interruptions at insignificant intersections as pointed out by Member Heimerl. Mr. Thompson gave credit to the City of St. Paul and MnDOT in recent corrections made to improve those issues. Regarding one specific intersection cited in Member Heimerl's email, Mr. Thompson advised that he had spoken to the rail operation staff, who had informed him that some intersections could not have priority (e.g. traffic flow issues from Lexington Avenue onto University due to vehicle stacking at I-94). However, Mr. Thompson agreed that there were some locations where it seemed that trains should have signal priority but didn't at this time.

Specific to shoulder lanes, Mr. Thompson noted that when initially implementing that project and when proposed, many people at MnDOT had expressed safety concerns and interaction between ramps and buses on shoulders. However, as it turned out, Mr. Thompson reported that MnDOT now wholeheartedly supports it and as they rebuild roadways, not currently built for buses, they rebuild them to accommodate that use and design them to bus use specifications. Mr. Thompson stated that he wasn't aware that there may be times when a bus clipped a vehicle mirror; but overall the safety record was proving pretty good.

Chair Cihacek thanked Mr. Thompson for his helpful information; and questioned "next steps" as the city and PWETC continued with the comprehensive plan update and specifically the transportation portion.

Mr. Thompson asked for continued feedback from the city through that process on routes for connectivity and areas for improvement.

Chair Cihacek noted that there would be a number of public comment opportunities for the public to speak up and provide their feedback as well on their concerns and/or ideas.

Member Lenz opined that the opportunities for public input had improved dramatically over the last few years.

Chair Cihacek asked Mr. Thompson and representatives of Metro Transit to return to the city periodically as part of the process, offering the city's interest in being a partner and collaborator for transportation efforts in the community and region.

Mr. Thompson agreed to return to the PWETC; opining it was helpful for Metro Transit to understand areas for improvement or unmet needs to guide future development of service. While not asking the city to draw routes, Mr. Thompson noted that as comprehensive plans developed, it would help inform where future development or redevelopment may be indicated and thereby address proposals for new services.

6. Eureka 2016 Year-End Report

Mr. Culver introduced Eureka Recycling representative Chris Goodwin for the 2016 year-end report, following 2015 report held in recent past.

Mr. Goodwin briefly summarized the written report including recent increased tonnage even though materials (e.g. paper and plastic) got lighter; increases in volume with the single-sort collection method, and reasons for Roseville residents to be proud of that increased volume and continued highest participation rate in the areas served by Eureka, currently at 94% participation.

Mr. Goodwin reviewed changes made in tracking data with improved technologies in determining participation rates; continuing spikes in cardboard boxes as part of

that composition with increased online shopping; and an unfortunate increase in residuals (non-recyclable items) and current review to determine that result, perhaps requiring additional education, since nothing new or different was coming into the facility.

Mr. Goodwin noted some favorable improvements in revenue share with market improvements with those funds going back into Roseville's Recycling Enterprise Fund for other waste reduction programs or to retain or reduce household program costs.

Mr. Goodwin reviewed global, regional and local market conditions affecting prices and a summary of current market conditions, with slow and steady corrections being observed in the beginning of 2017.

Mr. Goodwin provided a brief report of the planning for this summer's park pilot program at Central Park, including the challenges and implementation of the study and impacts to park collection, visitor experience, contamination levels and other areas to gain experience for a more informed proposal to take those efforts citywide. Mr. Goodwin advised that the City of Roseville's Public Works and Parks & Recreation staff were working collaboratively with Eureka to roll out the pilot program by the end of April for collection of that information over the summer months.

PWETC Questions

At the request of Member Wozniak, Mr. Goodwin confirmed that where possible, recycling containers would be placed next to trash cans. Mr. Goodwin noted consideration of other areas where trash containers should be located but were not (e.g. areas frequently flooded).

As noted by Mr. Goodwin, Mr. Culver expanded on some of the hurdles and rationale in focusing on one general area as a pilot program. Mr. Culver noted a concern is in having Eureka's vehicles on pathways with people and how that interaction happened. While the city may have vehicles on the pathways using an established safety plan, Mr. Culver noted that pedestrians and bikers were more used to that interaction, and trusted city vehicles versus private contractors on the pathways. With this pilot program, Mr. Culver noted the intent to determine that interaction, how to address remote locations, and potential damage to pathways from vehicular use; with an end report to analyze those issues.

Member Wozniak expressed concerns if both the Parks staff and Eureka were respectively picking up trash and recycling separately.

Mr. Culver advised that he couldn't speak to the Parks & Recreation staff and their constraints and efforts to keep materials separated, or other factors with space, etc.

Specific to ongoing education, Member Trainor noted labels on bins providing “do’s” and “don’t’s” and asked if there were any plans to update labels on carts (e.g. changes in refrigerator containers).

Mr. Goodwin advised that it would depend if the city considered it worth the expense, since those current labels were molded into recycling bins, and would require replacing lids, not simply adhering a new sticker. Mr. Goodwin suggested exhausting additional educational opportunities as a more cost-effective method to start with; and since it represented only a small percentage of collected materials. As an example of that educational aspect, Mr. Goodwin noted the need to differentiate between refrigerator boxes and freezer boxes, where plastic was woven in with paper fibers to repel liquor and therefore can’t be made into pulp and if found at the paper mill those materials were tossed, making the broader recycling effort negligible.

Mr. Trainor, with agreement from his colleagues, noted that distinction had not been communicated as well as it should be.

Chair Cihacek thanked Mr. Goodwin for his report; and Mr. Goodwin encouraged individual commissioners to address additional comments or questions to staff for forwarding to him for a response.

7. Engineering Design Standards

Mr. Freihammer provided a short presentation and draft of the recently-developed Public Works Engineering Department Design Standards Manual that was currently being updated in conjunction with revisions to the city’s subdivision codes. Mr. Freihammer advised that the intent was have those engineering standards and engineering-related specificities that could change periodically separated out from city code, with only references provided in city code to the manual. With engineering standards located in one spot, Mr. Freihammer advised that it would make it easier for all parties.

Mr. Freihammer’s presentation included what was and was not included in the manual, including city design standards for utilities and infrastructure, material specifics and other details. Once adopted by the City Council, Mr. Freihammer advised that the document would be posted on the city’s website.

PWETC Questions

At the request of Member Wozniak, Mr. Freihammer confirmed that there were not many areas available in Roseville for possible subdivision, beyond those considered three-lot yard splits (e.g. Acorn Road); with the most recent large scale development that of Wheaton Woods. Unless homes are removed and lots redone, Mr. Freihammer opined that he didn’t see a huge needs; but clarified that the manual would be used for new construction as well (e.g. Aldi development). At the request of Member Lenz, Mr. Freihammer clarified that these standards applied

to new work; with some still applying to reconstruction or as part of more general zoning and building code standards.

Mr. Culver advised that, if a new utility service was required, elements of this manual would apply to bring them up to current standards.

8. Items for Next Meeting – April 25, 2017

- April – transportation plan – consultant kick-off and process to update Pathway Master Plan
- Oath of Office
- Election of officers

In Ramsey County's efforts to expand organics collection services, Member Wozniak opined that Roseville would be a desirable location to highlight those efforts. Member Wozniak outlined needs for a collection site drop box behind an enclosure in a parking lot that would be serviced by a county vendor several times each week. Member Wozniak noted that Ramsey County would construct the enclosure and pay for all costs, including fencing and helping to maintain the appearance of the site. Member Wozniak suggested that the Public Works Department could consider a suitable location for placement (e.g. Dale Street soccer parking lot across from the leaf drop off site).

Mr. Culver agreed to do some preliminary research; however, he questioned the interest level of the Parks & Recreation Department on using space in the parking lot. Mr. Culver noted that the timing was interesting given recent public emails, and agreed it could lead up to in-house staff discussions on possible locations.

At the request of Member Lenz, Member Wozniak reviewed how the compostable bags were distributed, used and dropped off for organic waste; and educational efforts and outreach provided by Ramsey County in cooperation with the City of Roseville.

Chair Cihacek asked that staff review this for possible discussion at the April PWETC meeting; and Mr. Culver advised that staff would consider whether or not staff supported a formal recommendation to the City Council or if a formal agreement with Ramsey County was supported.

Member Wozniak stated his intent to consult with Ramsey County staff to see if they would be interested in attending the April PWETC meeting.

Specific to the educational aspect, Member Trainor noted information included in the latest Ramsey County recycling flyer specific to organic recycling.

Member Wozniak advised that Ramsey County was seeking six additional sites for composting, and opined that Roseville could help serve this area that was currently considered underserved.

At the request of Member Seigler, Mr. Culver provided an update on establishment of Quiet Zones in area communities for trains and related crossing upgrades.

Member Wozniak noted a recent email regarding the Alliance for Sustainability and how their efforts may inform the comprehensive plan update specific to policy statements for the sustainability chapters. Member Wozniak advised that he and a representative of the Planning Commission had been in attendance and had agreed to bring it to the attention of their respective commissions. Member Wozniak encouraged the PWETC's consideration of this interest in alternative energy sources and addressing energy use in the future.

While agreeing with the concept, Chair Cihacek asked for staff's feedback.

Mr. Culver offered to work with the Community Development Director on the guidance she was getting from the Planning Commission; suggesting that if a joint meeting was indicated, it would most likely be held at a scheduled Planning Commission, one of two currently being held for their regular business and one dedicated (fourth Wednesday of each remaining month in 2017) to the comprehensive plan update process. Mr. Culver offered to work out schedules and determine interest.

Member Wozniak passed out flyers and suggested a possible presentation at the PWETC of Ramsey County's BizWaste Recycling Program, with Ramsey County grants of up to \$10,000 available for businesses to expand recycling efforts at their businesses.

Chair Cihacek noted that the PWETC had received a presentation in the past, and while not opposed, expressed his preference for discussions with area businesses versus at a PWETC meeting. If there was another presentation, Chair Cihacek asked that it be a short update, and based on research from past PWETC meeting minutes, the update be an expansion of their previous presentation rather than redundant.

Chair Cihacek thanked Member Lenz for her service, and encouraged her to attend future PWETC meetings as an audience participant to provide feedback as appropriate.

9. Adjourn

Member Lenz moved, Member Thurnau seconded, adjournment of the meeting at approximately 8:24 p.m.

Ayes: 7

Nays: 0

Motion carried.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: April 25, 2017

Item No: 5

Item Description: Communication Items

Public Works Project updates:

- Twin Lakes Parkway Phase III and Twin Lakes Area Signals: Extension of Twin Lakes Parkway from Prior Ave to Fairview Ave and construction of traffic signal at Fairview Ave. and Twin Lakes Parkway.
 - Work is anticipated to begin at the end of April.
 - All work on Twin Lakes Parkway is complete other than the new signal and related work at Fairview Avenue.
- Cleveland Lift Station: Lift station replacement project at Cleveland & Brenner.
 - Work will likely begin in May.
- 2017 Lining Project
 - Estimated to line 5.5 miles of sanitary sewer main and 0.1 miles of storm sewer
 - Contractor started work in March and is 25% complete.
- Larpenteur Sidewalk
 - Work involves the construction of new sidewalk on the north side of Larpenteur Ave between Mackubin St and Galtier St.
 - Work began week of April 10. Traffic for east bound Larpenteur is reduced to one lane for the duration of the project.
- 2017 Railroad Crossing Improvements
 - Work involves replacement of railroad crossings on Terminal Road and Walnut Street.
 - Work likely to begin in June.
 - Road closures and detours will necessary during the railroad crossing replacements.
- Dale Street Parking Lot
 - Work involves the complete replacement of the parking lot for the soccer fields located off Dale St just south of County Road C.
 - Council awarded the project on March 13. Work likely to begin in May.
- 2017 Pavement Management Project
 - Council is scheduled to award this project on April 24.
 - Work is anticipated to begin in mid-May
 - This year's projects involves 7 miles of street resurfacing, 1 mile of watermain replacement and various storm sewer upgrades.
 - Approximately 90 residents have elected to have their private sanitary sewer services replaced (only within the right-of-way, not all the way up to the home) as part of the project.
- Staff will be opening bids on the following projects in the next month;
 - 2017 Utility Improvements

- Transportation Plan Update RFP
 - WSB & Associates will be working with the City to update the Transportation Plan and Pathway Master Plan. The plan is to have them at our June PWETC meeting to start the discussion.
- Water Booster Station RFP
 - Staff is recommending to Council that the City enter into an agreement with AE2S for engineering services related to the Water Booster Station Upgrade.
 - This contract will develop an implementation plan to look at upgrading numerous components of the station and develop final plans for replacing the backup generator for later this year.

Ramsey County updates:

- Ramsey County will be resurfacing Cleveland Ave between Iona St and County Road D. Work is anticipated to be completed sometime between July and September.

Private Utility Work:

- Xcel Energy will be replacing a large amount of gas mains ahead of this year's PMP project.
- Comcast will be upgrading its network in the majority of the City. Work involves the installation of additional utility cabinets in City right of way.

Minnesota Department of Transportation updates:

- Snelling Avenue Project – Resurfacing project between Como Ave and TH 36.
 - Creation of additional turn lanes at Larpenteur and County Road B.
 - Project has begun. Scheduled to be completed by the State Fair.
 - Lanes will be reduced to one lane for the duration of the project. Will have all lanes open for Back to the 50's.

City Council Update:

- The City Council will be considering changes to City Code to allow Potbellied Pigs and Goats to be housed at residential properties. This will be discussed in May.
- The City Council will review the proposed 20 Year Capital Improvement Plan in May, with an emphasis on the next five years.
- On April 24th (prior to this meeting) the Council will be considering the renewal of the Minnesota State Fair's Conational Use Permit for several Park and Ride facilities within the City of Roseville. Staff will provide an update on this at the meeting.
- Also on April 24th, the Council is expected to approve an Interim Use Permit for Ramsey County to operate a Household Hazardous Waste drop off site at the Kent St. property (Kent Street just north of Larpenteur Ave).

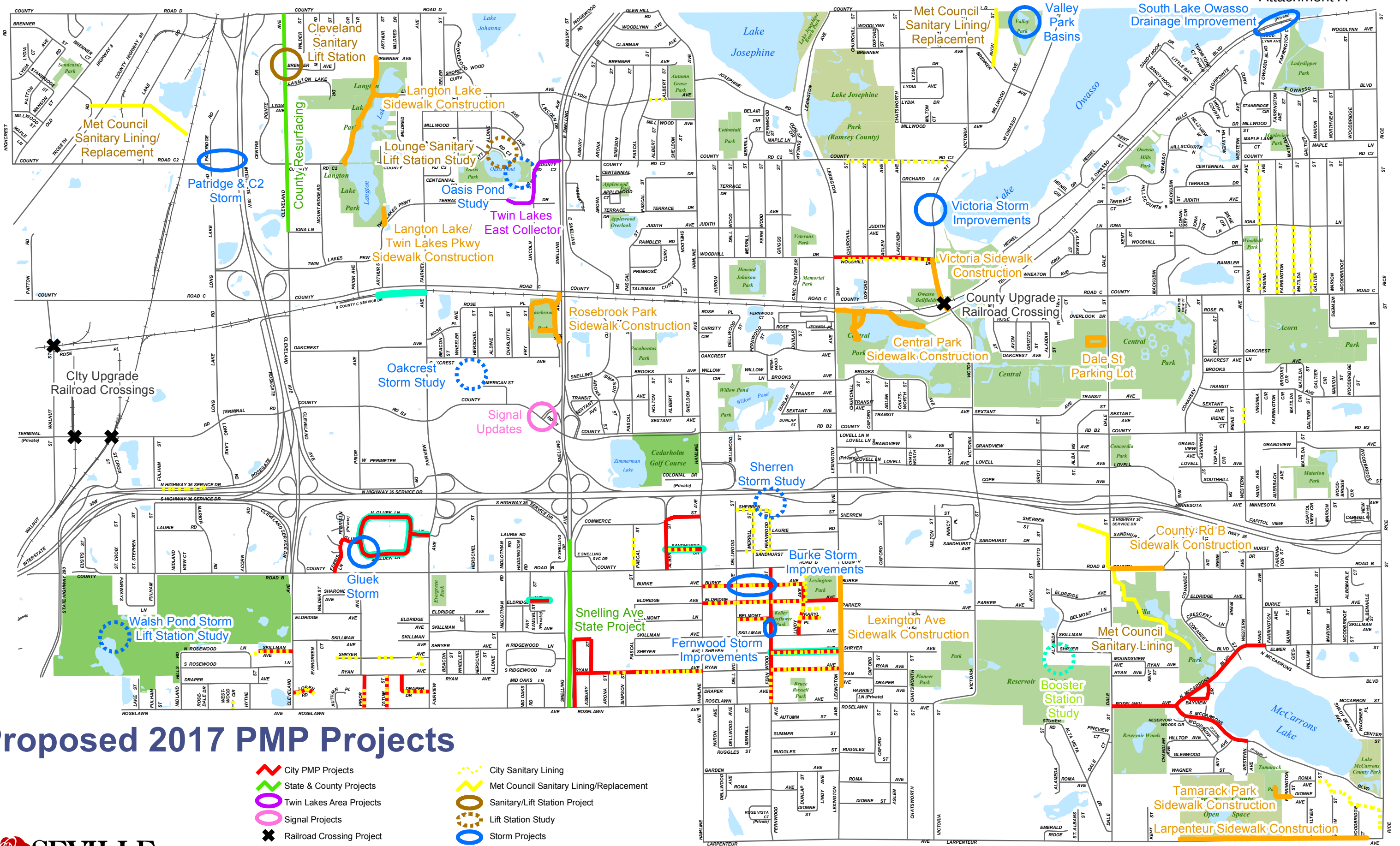
Major Maintenance Activities:

- Spring sweeping is completed.
- Annual spring cleanup of Larpenteur Streetscape is complete.
- Installed pavement at watermain breaks.
- Ongoing spray patching.
- Turned compost at compost site
- Deliveries of compost and woodchips has begun.
- Installed riprap and made repairs at various storm outlets.
- Jetted numerous storm sewer lines.
- Cleaned storm sewer sumps.
- Finished winter tree trimming.
- Began annual sanitary sewer cleaning. Focusing this year north of Highway 36, west of Dale St.
- Collected bacteriological water samples.
- Completed exercising large water distribution system valves.

Attachments:

A: 2017 Project Map

B: Development Activity Report



Proposed 2017 PMP Projects



Prepared by:
Engineering Department
March 27, 2017

- City PMP Projects
- State & County Projects
- Twin Lakes Area Projects
- Signal Projects
- X Railroad Crossing Project
- Pathway and Parking Lot Projects
- City Sanitary Lining
- Met Council Sanitary Lining/Replacement
- Sanitary/Lift Station Project
- Lift Station Study
- Storm Projects
- Future Project Study
- Watermain Projects
- Booster Station Study

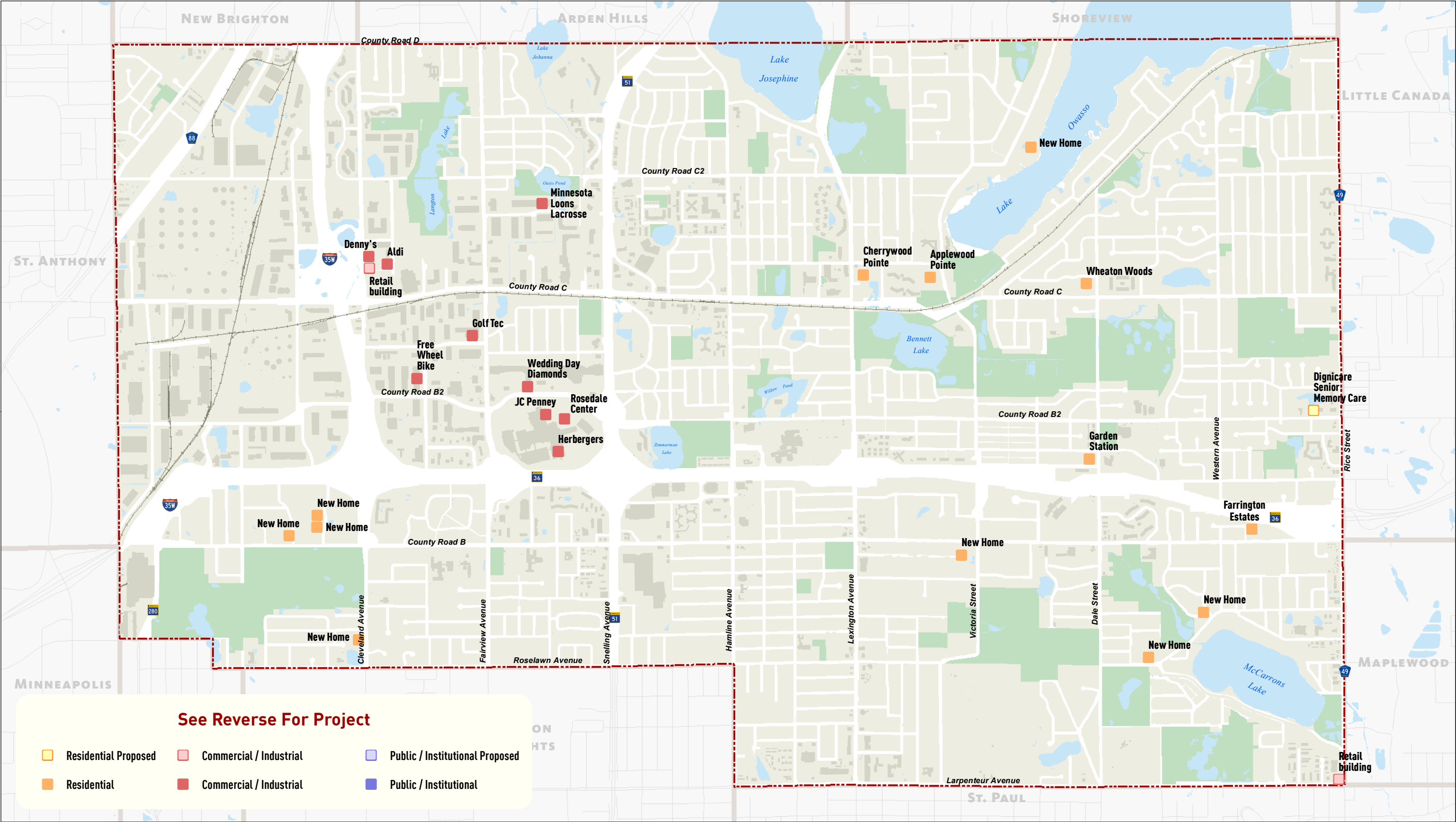
Data Sources and Contacts:
* Ramsey County GIS Base Map (3/10/17)
* City of Roseville Engineering Department
For further information regarding the contents of this map contact:
City of Roseville, Engineering Department,
2660 Civic Center Drive, Roseville MN

DISCLAIMER:
This map is neither a legally recorded map nor a survey and is not intended to be used as one. This map is a compilation of records, information and data located in various city, county, state and federal offices and other sources regarding the area shown, and is to be used for reference purposes only. The City does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and the City does not represent that the GIS Data can be used for navigational, tracking or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. If errors or discrepancies are found please contact 651-792-7075. The preceding disclaimer is provided pursuant to Minnesota Statutes §466.03, Subd. 21 (2000), and the user of this map acknowledges that the City shall not be liable for any damages, and expressly waives all claims, and agrees to defend, indemnify, and hold harmless the City from any and all claims brought by User, its employees or agents, or third parties which arise out of the user's access or use of data provided.

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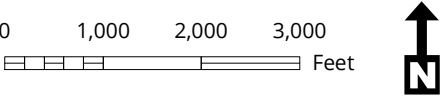
mapdoc: Proposed2017_AllProjectsLabels.mxd
map: Proposed2017_AllProjectsLabels.pdf





Prepared by:
Community Development Department
January 31, 2017

Development Projects: February 2017



Sources
Ramsey County GIS (1/4/2017)
Community Development Department

ROSEVILLE COMMUNITY DEVELOPMENT DEPARTMENT • FEBRUARY 2017 • DEVELOPMENT ACTIVITY REPORT (*NEW IN FEBRUARY)					
	Project Name	Address	Project Description	Applicant/Owner Information	Starting/Occupancy
Residential Proposed	Dignicare Senior Memory Care	197 County Rd B2	26-Unit assisted living memory care facility	Greiner Construction	TBD/TBD
Residential Under Construction	Applewood Pointe	2665 Victoria St	105-Unit senior co-op	United Properties	Summer 2016/Fall 2017
	Cherrywood Pointe	2680 Lexington Ave	Assisted living/memory care	United Properties	Summer 2016/Fall 2017
	Garden Station	2325/2335 Dale St	18 attached townhomes	GMHC	Winter 2015/TBD
	Farrington Estates	311 County Rd B	6-lot single-family subdivision	Premium Real Estate Solutions/Michael B. Oudin	Winter 2016/Fall 2017
	New Home	901 Burke Ave	Single-family home	Equinox Construction, LLC	Summer 2016/Spring 2017
	New Home	1975 Cleveland Ave	Single-family home	David Raab	Winter 2016/Summer2017
	New Home	2006 Cohansey Blvd	Single-family home	Covert Constructions	Summer 2016/Spring 2017
	New Home	2179 Marion Rd	Single-family home	Homeowner	Summer 2016/Spring 2017
	New Home	2201 Acorn Rd	Single-family home	Lee Homes	Winter 2017/Summer 2017
	New Home	2215 Acorn Rd	Single-family home	Lee Homes	Winter 2017/Summer 2017
	New Home	2950 West Owasso Blvd	Construct new single-family home	Homeowner	Fall 2014/Summer 2017
	New Home	535 Roselawn Ave	Construct new single-family home	Bald Eagle Builders	Fall 2016/Spring 2017
	Wheaton Woods	Wheaton Ave & Dale St	17 single-family homes	Golden Valley Land Co/TJB Homes/Accent Homes	Summer 2016/TBD
Commercial/Industrial Proposed	Retail Building	1681 Rice St	New 9500 sq ft, single-story, multi-tenant shell building	Gary Carlson/Danna LLC	TBD
	Retail Building	2035 Twin Lakes Pkwy	New single-story, multi-tenant shell building	Tech Builders/Tech Builders	Fall 2016/Spring 2017
Commercial/Under Construction	Aldi	2005 Twin Lakes Pkwy	New grocery	JAVA Capital Partners	Fall 2016/Summer 2017
	Denny's	2045 Twin Lakes Pkwy	New restaurant	Tech Builders/Tech Builders	Fall 2016/Spring 2017
	*Free Wheel Bike	1955 County Rd B2	Tenant Build out	Fendler Patterson Construction	Winter 2017/Spring 2017
	Golf Tec	2575 Fairview Ave #210	Tenant build-out	Hunerberg Construction/Roseville Properties	Winter 2017/Spring 2017
	Herbergers	1675 Highway 36	Interior remodel	Thomas Grace Construction/Bon Store Realty Two	Winter 2017/TBD
	JC Penney	1700 County Rd B2	New entrance	JC Penny Properties, Inc./Maxwell Builders	Fall 2016/Spring 2017
	Minnesota Loons LaCrosse	1633 Terrace Dr	Tenant remodel	Guptil Construction/St. Paul Fire & Marine Ins.	Winter 2017/Spring 2017
	Rosedale Shopping Center	1700 County Rd B2	Utility work, parking deck, interior updates, new anchor	Jones Lang LaSalle/PPF RTL Rosedale Shopping Ctr, LLC	Fall 2016/TBD
	Wedding Day Diamonds	1747 County Rd B2	New retail	Diversified Construction/Rosedale Commons LP	Winter 2017/Spring 2017
Proposed Public/Inst	NONE				
Under Construction Public/Institutional	NONE				

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: April 25, 2017

Item No: 6

Item Description: Organics Drop Off Location

Background:

According to a recent Minnesota Pollution Control Agency (MPCA) [Waste Characterization study](#), over one-third of what is being thrown in the trash is organic material, 17% alone is specifically food waste. It is important to keep organics out of the waste stream because in a landfill, organic materials degrade without oxygen, resulting in methane production. Fortunately, organics can be diverted from a landfill or incinerator through an organics recycling program.

Roseville does not currently have a drop off location within the City, but residents have the option to divert organics from the landfill by going to a Ramsey County Yard Waste Site (except for the Arden Hills location which does not offer Organics drop-off). The most used location by Roseville residents is the Midway site off Pierce Butler Route.

Other Metro Counties and cities, including Hennepin, Carver, Ramsey, Minneapolis, and St. Paul have one or more organics drop off location. The cities of Maplewood and White Bear Lake are also looking at creating a drop off location in the coming months.

Roseville has a viable drop off location at the City's Leaf Site on Dale St. The site can be accessed 24/7 through a walk-in gate, and wouldn't require additional staff supervision.

Ramsey County will hire a waste hauler to service the dumpster(s) weekly, potentially twice per week if residential use exceeds the capacity. Ramsey County will also supply compostable bags, signage, and will promote the site. The County is also offering to pay for an enclosure to screen the dumpster(s) from the public, but one isn't needed at this site since it is already behind a gate and out of sight. Staff will work with the County to get assistance paying for a concrete slab for the dumpster(s) to sit on in lieu of the enclosure.

Recommended Action:

Receive information and provide feedback to staff.

Attachments: None

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: April 25, 2017

Item No: 7

Item Description: Stormwater Requirements

Background:

During the February 2017 Commission meeting, it was requested that staff look at the different stormwater permitting agencies within the City.

Staff compiled information from the different agencies on when permits are required, and the costs that are associated with each permit.

Recommended Action:

Receive presentation and provide feedback to staff.

Attachments:

- A. Presentation

Stormwater Requirements within Roseville

Engineering Department



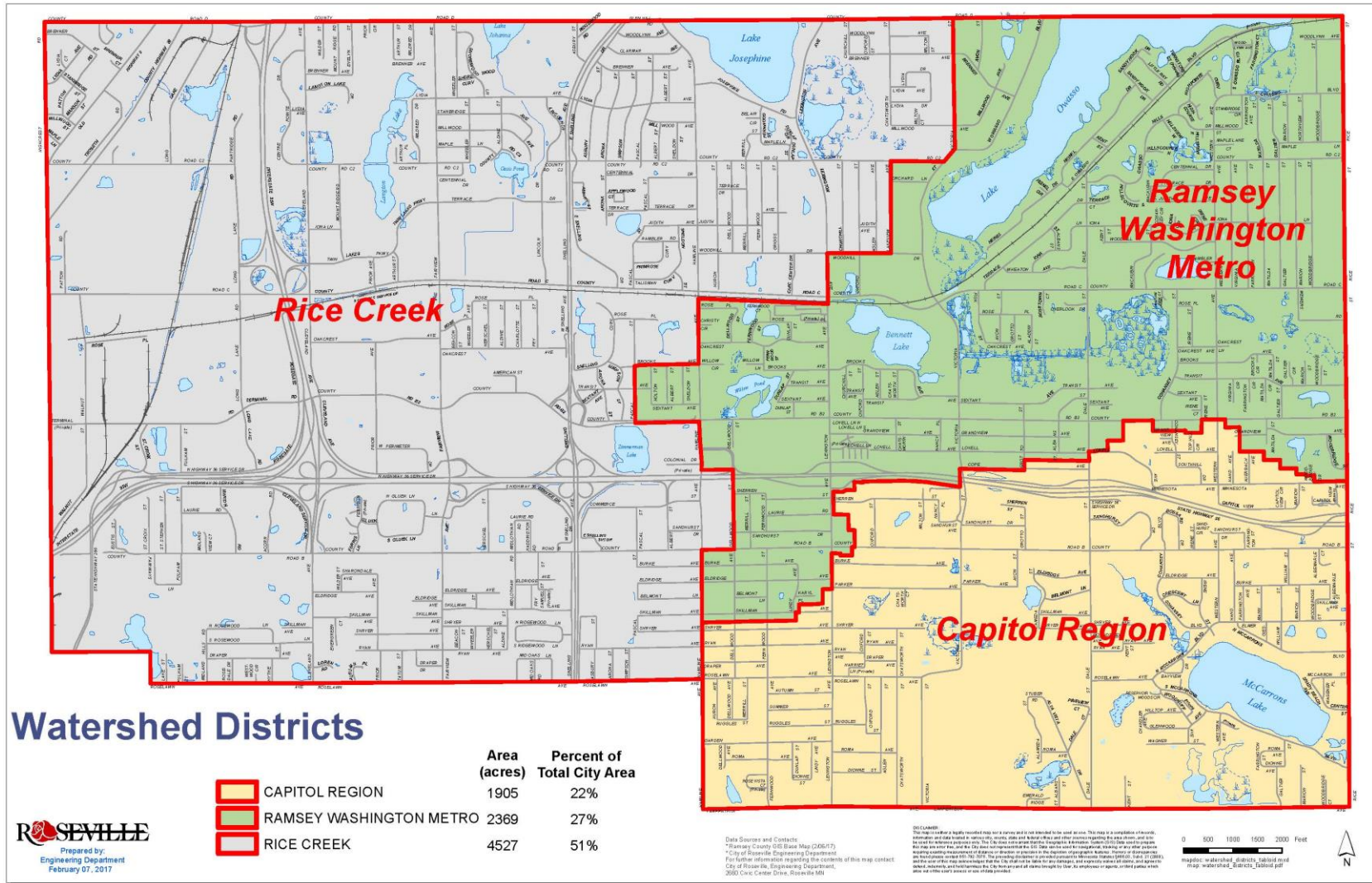
Stormwater Requirements within Roseville

Overview

- Agencies
- Requirements
- Fees & Escrows
- Questions

Stormwater Requirements within Roseville

Agencies



Watershed Districts:

- Local Government Units whose boundaries follow natural watershed lines
- Mission is to manage, improve, and protect local water resources

Stormwater Requirements within Roseville

Requirements

- MS4 Permits
 - Total Maximum Daily Loads and Waste Load Allocations
 - Non-Degradation Plans
 - Stormwater Pollution Prevention Plans (SWPPP)
- Comprehensive Surface Water Management Plans (CSWMP)
- Watershed Restoration and Protection Strategy (WRAP's)
- Roseville Engineering Guidelines
- **Roseville Stormwater Management Standards**

Stormwater Requirements within Roseville

Requirements

- City Code
 - 408 Lawn Fertilizers/Pesticides, 803 Stormwater Drainage, 1004 Residential Districts, 1011 Property Performance Standards, 1017 Shoreland, Wetland, and Stormwater Management, 1019 Parking and Loading Areas, 1102 Plat Procedures, 1103 Design Standards

Stormwater Requirements within Roseville

Requirements



Stormwater Requirements within Roseville

Requirements

- Comprehensive Surface Water Management Plan (Table 7)

	City*	Watershed	Special Drainage Area	MPCA**
Stormwater Permit	5,000 SF	1 Acre	10,000 SF	
Water Quality	BMP's to treat 1.0" - 1.1" of runoff			
Volume Control	BMP's to reduce volume from 1.0" - 1.1" of runoff			
Rate Control	Runoff rates shall not exceed existing for 2, 10, 100 year events			
Erosion & Sediment Control	5,000 SF	1 Acre	10,000 SF	1 Acre
Illicit Discharge and Connection				
Wetlands				
Wetland Bounce/inundation	Any	Any	Any	
Wetland Buffer	25 Ft min	25 Ft min	25 Ft min	
Flood Control	Any	Any	Any	

* Any disturbance within the Shoreland Overlay District also triggers City requirements for Erosion & Sediment Control

** Isn't listed in Table 7 of the City's CSWMP, but is another permit sites are required to apply for if they are 1 acre+

Stormwater Requirements within Roseville

Fees & Escrows

City	Fee	Escrow (\$/acre)
Erosion & Sediment Control and Stormwater		
< 5,000 SF (Shoreland Only)	\$50	0
<0.5 acres (Residential Remodel)	\$350	\$1,000
<1.0 acre	\$625	\$3,000
1 to 5 acres	\$900	\$3,000-\$15,000
5+ acres	\$1,400	>\$15,000

CRWD	Fee	Escrow (\$/acre)
Erosion & Sediment Control	\$500	\$2,000
Stormwater Mgmt	\$1,500	\$5,000
Flood Control	\$1,500	
Illicit Discharge & Connection	\$500	
Wetland Mgmt	\$1,500	

RCWD	Fee	Escrow
Erosion & Sediment Control	\$100	\$1,000 +\$500/acre
Stormwater Mgmt	\$1,000	\$0.50/Cubic-foot
Flood Control	\$100	\$7.50/Cubic- yard
Illicit Discharge & Connection	\$0	
Wetland Mitigation	\$875	\$25,000/acre

RWMWD	Fee	Escrow (\$/acre)
Processing Fee	\$500	
Erosion & Sediment Control		\$2,000
Stormwater Mgmt & Erosion Control		\$5,000

Escrow Fees are refundable by the City and Watershed Districts as long as the agency does not have to take any corrective actions to get the site in compliance with the permit.

Each agency has **Permit Renewal fees**, which is less than the original permit amount and does not require additional escrow fees. Renewal fees are required when the permit isn't closed out by the approved date.

Stormwater Requirements within Roseville

Fees & Escrows

- Examples:

0.75 Acre residential development in RWMWD			
Requires Erosion & Sediment Control and Stormwater Permits			
	Fee	Escrow	Total
City	\$625	\$3,000	\$3,625
Watershed District	\$0	\$0	\$0
MPCA	\$0	\$0	\$0
		Total	\$3,625

3.25 Acre residential development in RWMWD			
Requires Erosion & Sediment Control and Stormwater Permits			
	Fee	Escrow	Total
City	\$900	\$12,000	\$12,900
Watershed District	\$500	\$20,000	\$20,500
MPCA	\$400	\$0	\$400
		Total	\$33,800

Q & A

Questions?



THANK YOU

Engineering Department

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: April 25, 2017

Item No: 8

Item Description: Cost benefits of Turf Grass vs. Plantings in City Right-of-Way

Background:

During the November 2016 Commission meeting, it was requested that staff look into the cost-benefits of different vegetation used in City Right-of-Way.

Staff looked at two scenarios to begin the discussion, each one consisted of a planted and turf grass option: one is 10,000 square-feet of streetscape area; the other is a 1 acre patch of open space on a slope. Cost estimates for the two options were created to look at the installation cost, and also included the annual cost for maintenance. The different scenarios were then modeled for their impact on stormwater and water quality benefits.

Recommended Action:

Receive presentation and provide feedback to staff.

Attachments:

A. Presentation

Vegetation Cost-Benefit Analysis

Engineering Department



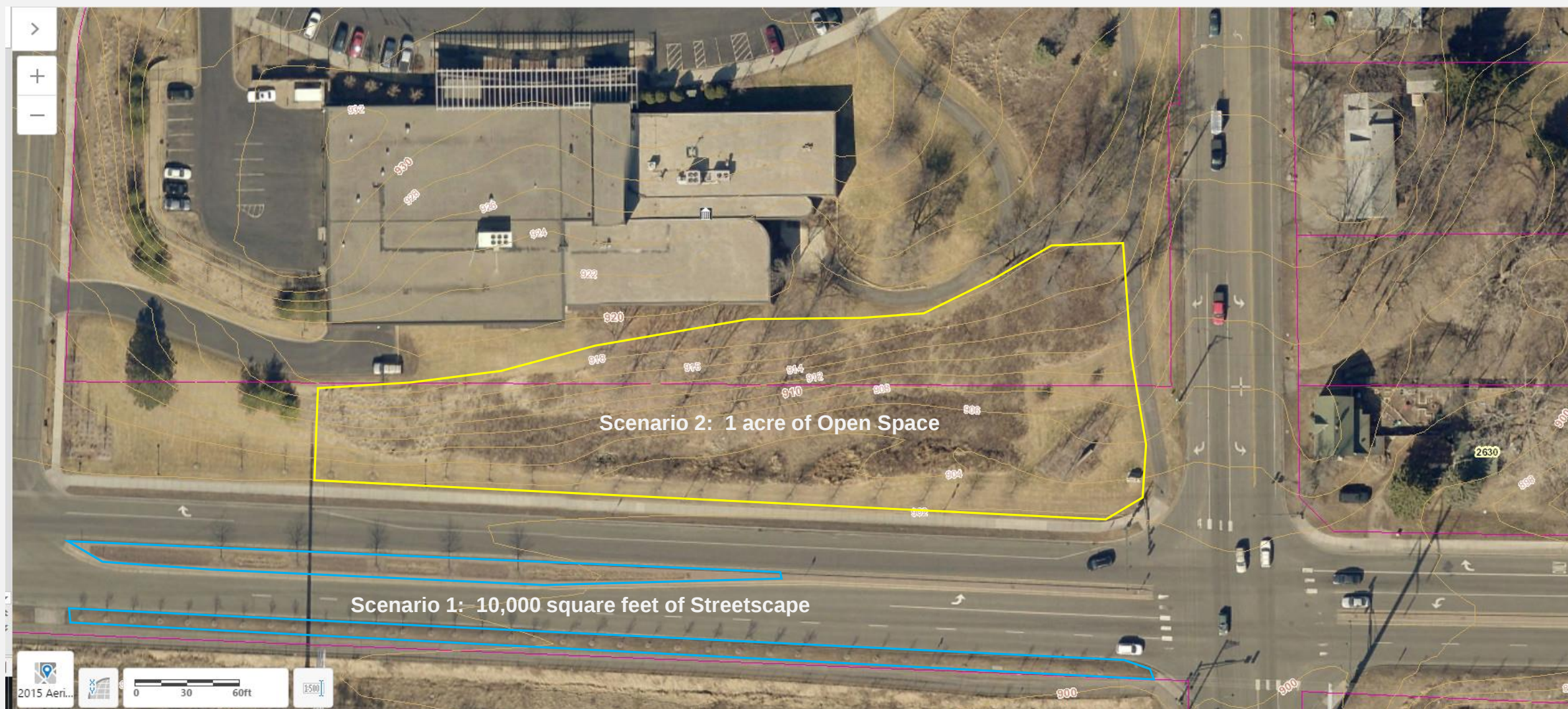
Vegetation Cost Benefit Analysis

Overview

- Overview
- Scenarios
 - Streetscape
 - Open Space (on a slope)
- Secondary Benefits
- Questions

Vegetation Cost Benefit Analysis

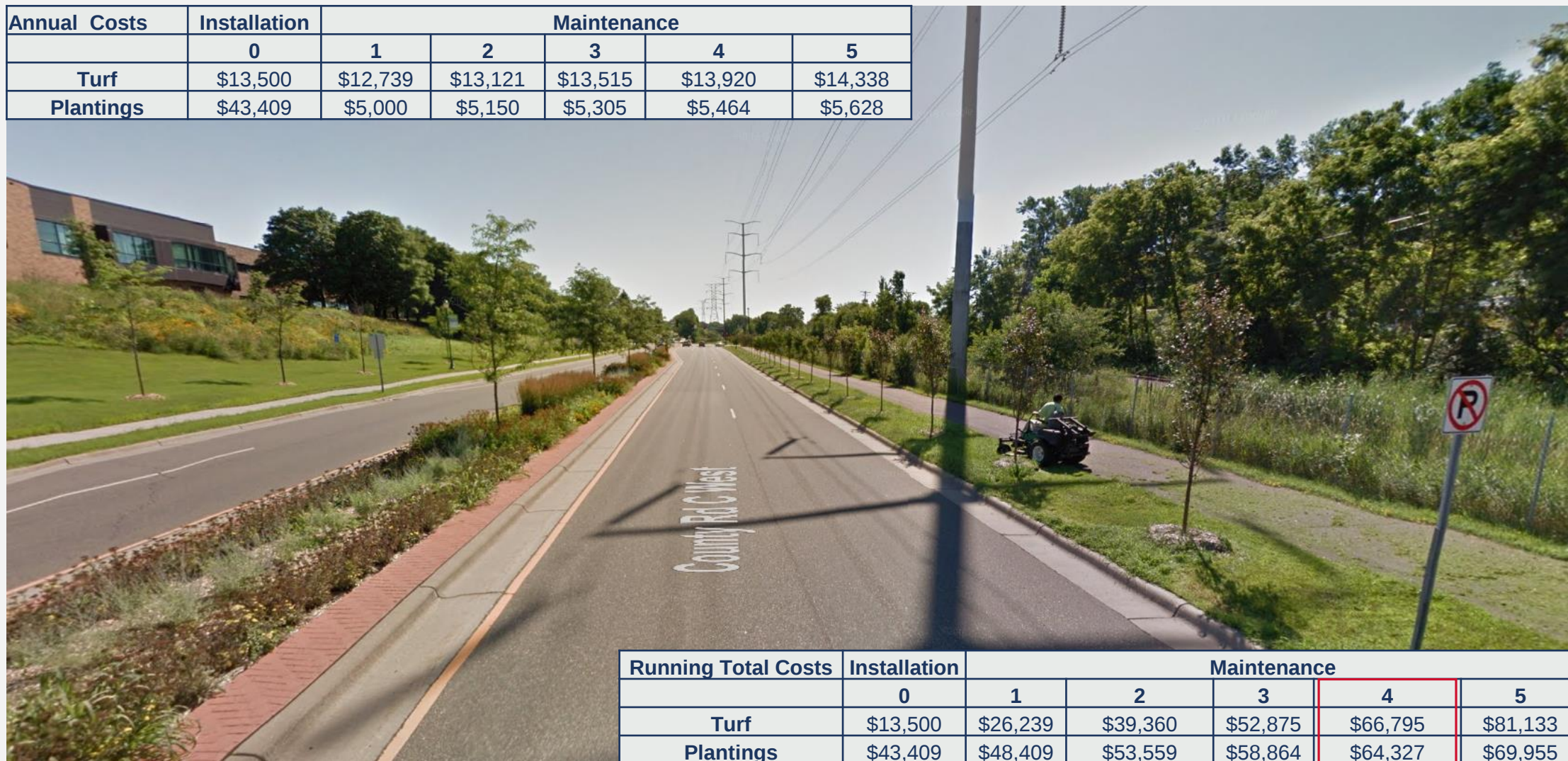
Scenarios



Vegetation Cost Benefit Analysis

Scenario 1 – Decorative

Annual Costs	Installation	Maintenance				
	0	1	2	3	4	5
Turf	\$13,500	\$12,739	\$13,121	\$13,515	\$13,920	\$14,338
Plantings	\$43,409	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628



Running Total Costs	Installation	Maintenance				
	0	1	2	3	4	5
Turf	\$13,500	\$26,239	\$39,360	\$52,875	\$66,795	\$81,133
Plantings	\$43,409	\$48,409	\$53,559	\$58,864	\$64,327	\$69,955

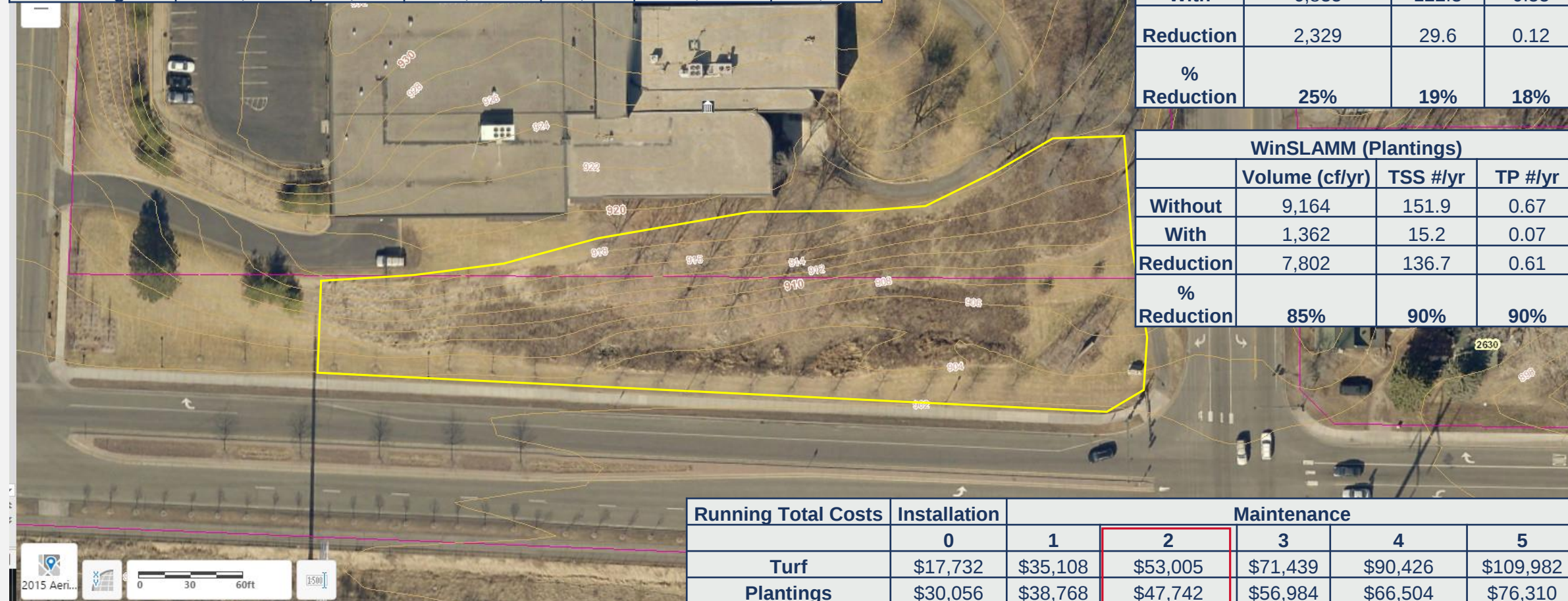
Vegetation Cost Benefit Analysis

Scenario 2 – 1 acre of Open Space

Annual Costs	Installation	Maintenance				
	0	1	2	3	4	5
Turf	\$17,732	\$17,376	\$17,897	\$18,434	\$18,987	\$19,557
Plantings	\$30,056	\$8,712	\$8,973	\$9,243	\$9,520	\$9,805

WinSLAMM (Turf)			
	Volume (cf/yr)	TSS (#/yr)	TP (#/yr)
Without	9,164	151.9	0.67
With	6,835	122.3	0.55
Reduction	2,329	29.6	0.12
% Reduction	25%	19%	18%

WinSLAMM (Plantings)			
	Volume (cf/yr)	TSS #/yr	TP #/yr
Without	9,164	151.9	0.67
With	1,362	15.2	0.07
Reduction	7,802	136.7	0.61
% Reduction	85%	90%	90%



Running Total Costs	Installation	Maintenance				
	0	1	2	3	4	5
Turf	\$17,732	\$35,108	\$53,005	\$71,439	\$90,426	\$109,982
Plantings	\$30,056	\$38,768	\$47,742	\$56,984	\$66,504	\$76,310

Vegetation Cost Benefit Analysis

Overview

- Secondary Benefits not included
 - Traffic calming
 - Reduced headlight glare
 - Habitat
 - Shallow groundwater recharge

Q & A

Questions?



THANK YOU

Engineering Department

**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: April 25, 2017

Item No: 9

Item Description: Look Ahead Agenda Items/ Next Meeting May 23, 2017

Suggested Items:

- MS4 Update

Look ahead:

June: Transportation Plan Update Meeting #1

July: Transportation Plan Update Meeting #2 / Pathway Master Plan Update Mtg #1

Recommended Action:

Set preliminary agenda items for the May 23, 2017 Public Works, Environment & Transportation Commission meeting.