


REQUEST FOR COUNCIL ACTION

Date: January 11, 2016
Item No.: 11.b

Department Approval



City Manager Approval



Item Description: Approve 2016 Street and Utility Preliminary Work Plan

1 **BACKGROUND**

2 Each year Public Works staff monitors and evaluates the condition of City infrastructure for
3 development of ongoing maintenance and replacement needs plans. We use this information to
4 develop capital improvement plans and in the development of the annual budget request in these
5 areas. We also work closely with Ramsey County and MnDOT on improvements to City
6 infrastructure as a part of their road improvement projects within Roseville. 2016 proposed road
7 construction on city streets consists of mill and overlay or the replacement of existing pavement
8 due to surface distress related to the age of pavement since many streets were reconstructed 20 to
9 30 years ago. We have attached a map (Attachment A) depicting the proposed improvement
10 areas which also identifies the preliminary work plan for utility improvements. The proposed
11 work plan is consistent with the 20 year capital improvement plan and pavement management
12 program policies.

13 **POLICY OBJECTIVE**

14 1. **Pavement Management Program Projects:** Each year the Public Works Department
15 evaluates infrastructure needs based on the City's Pavement Management Program and
16 assessment of utility infrastructure. Streets in marginal condition are recommended for
17 major maintenance by mill and overlay. Streets in poor condition and that do not meet the
18 City standard for street construction are recommended for reconstruction.

19 The majority of the streets are proposed to have the top layer of pavement milled and
20 replaced with new bituminous pavement. The exceptions are Heinel Drive, Terrace Drive
21 and Farrington Street. These streets are recommended to have the full depth of pavement
22 reclaimed and replaced due to the condition of the roadway. Spot curb replacements are also
23 done at this time but only where there are significant structural issues with the in-place curb
24 or significant settling.

25 The Mill and Overlay projects are proposed to be financed through our street infrastructure
26 funds and Municipal State Aid (MSA) funds. After receiving bids for these projects, we will
27 request that the City Council award the bid to the lowest responsible bidder.

28 As part of the Pavement Management Program staff will evaluate the underlying water mains
29 and sanitary sewer lines in the street right-of-way in these areas. We will take advantage of
30 the repaving of the roadways to repair/replace these utilities. These repairs and replacements
31 will be funded from the water and/or sanitary sewer utility funds.

32 **Reconstruction:** No roads are proposed to be reconstructed in 2016.

33 **Seal Coat:** As in 2015, the City will not be doing a seal coat program due to pavement
34 delamination issues. The budget for seal coating will be used to mill and overlay additional
35 roads as part of the PMP project.

36 **2. Utility Infrastructure:**

37 **Sanitary Sewer Lining:** The majority of the city's sanitary sewer mains were constructed in
38 the late 1950's and early 1960's, utilizing clay tile pipe and reinforced concrete pipe. Over
39 time the joint materials have failed allowing root intrusion. The pipe is also susceptible to
40 cracking and construction damage. The 2016 Capital Improvement Plan recommends
41 funding for a sanitary sewer main lining program to extend the life of our sanitary sewers by
42 50 years or more. This technology essentially installs a new resin pipe inside the old clay tile
43 sewer main without digging up city streets, which results in minimal disruption to residents
44 during construction. The liner pipe is inserted into the main through existing manholes and
45 cured in place with a heat process. Any given segment is usually completed in one working
46 day. Service line connections are reopened using a robotic cutter and remote cameras.
47 During the process, existing flows are bypassed using pumps. This technology has been
48 proven over the past 20 years, and costs have become competitive with open cut
49 replacement. The City started doing this type of renovation on an annual basis in 2006 and
50 will have an annual project for the foreseeable future to replace our aging sewer
51 infrastructure. This technology also reduces infiltration of groundwater into the system and
52 can be credited toward current and future inflow/ infiltration surcharges which are mandated
53 by the Metropolitan Council. In 2016 approximately 4.7 miles of sanitary pipe are schedule
54 to be lined. The location of this work varies and is spread throughout the City based on
55 system priority.

56 **Pipe Replacements/Repairs:** We are also evaluating sanitary and water main replacement
57 needs in our pavement replacement areas as well as utility infrastructure needs in County and
58 State project areas. Those replacements are being identified from recent utility inspections
59 and adjustments to the plan will be communicated to the Council at a later date. To date city
60 staff has identified watermain replacements on Heinel Drive, Terrace Drive and Farrington
61 Street.

62 **Lift Station:** The Cleveland Sanitary Sewer Lift Station, located at Cleveland Ave and
63 Brenner Ave, is recommended for replacement in 2016. The estimated cost of this
64 replacement is about \$522,000

65 **Storm Sewer system improvements:** The City is working to finalize a joint project with
66 the Capitol Region Watershed District at Upper Villa Ballfields (B-Dale Club). This facility
67 will also be an underground storage and reuse facility.

68 Staff is working on replacement of the St Croix storm sewer lift station located along St.
69 Croix Street south of Terminal Road. Project started in the fall of 2015 and should be
70 completed by spring of 2016.

71 Staff continues to analyze the existing drainage systems and localized flooding issues and is
72 identifying mitigation projects. Staff is now working on developing a 2016 drainage
73 improvement project to alleviate some of these flooding concerns. Staff has already
74 identified several projects for 2016. Some of the projects include;

- 75 • Storm Pond Maintenance – Work involves removing sediment that has built up in

76 the ponds to provide better capacity and treatment. Valley Park ponds and the
77 Byerly's pond are scheduled for 2016.

- 78 • Eldridge Backyards – This is a second phase to the Corpus Christi project area.
79 Some additional storm sewer will be added to alleviate poor drainage in between
80 Eldridge Ave and Evergreen Park.
- 81 • Oakcrest Iron Enhanced Sand Filter – The existing storm water pond near
82 Oakcrest Ave, east of Fairview, would be regraded. An iron enhanced sand filter
83 and improved outlet would be added for better storm water treatment and storm
84 water rate control. This project will help the City meet a Total Maximum Daily
85 Load (TMDL) for Long Lake.
- 86 • Owasso Private Drive – This area has been identified as a direct discharge
87 without treatment to Lake Owasso by Ramsey Washington Metro Watershed
88 District. The proposed project is to add a porous driving surface that will provide
89 treatment and reduce drainage issues in the areas.

90 **3. Pathways:** Staff is working with Ramsey County and Community Development to develop
91 a sidewalk on the north side of Larpenteur Ave from Mackubin St to Galtier St. This would
92 connect to sidewalk or pathway on either end of the project and connect a missing gap.
93 County State Aid funding and Community Block Development Grant (CBDG) funding is the
94 proposed funding source for a portion of the sidewalk improvements on Larpenteur Avenue.
95 The attached project map also shows several segments of existing trail or sidewalk that will
96 be repaved/replaced in 2016.

97 **4. Other Improvements**

98 **35W Interchange at Cleveland Avenue:** This project was awarded by Council last year.
99 Some minor work was started last fall. Major work will begin in the spring and the new
100 interchange should be completed by the end of July.

101 **Twin Lakes Parkway Extension:** This project was awarded by Council last year. Major
102 work will begin in the spring to extend Twin Lakes Parkway from Prior Ave to Fairview
103 Avenue. The road is anticipated to be open to traffic in August.

104 **Fairview & Twin Lakes Parkway/Terrace Ave Signal:** As part of the Twin Lakes
105 Parkway improvements a new traffic signal will be installed at Twin Lakes Parkway/Terrace
106 Ave and Fairview Avenue. This signal project would be completed on the same timeframe as
107 the Twin Lakes Parkway Extension project. The project is funded by Twin Lakes TIF
108 bonding that Council approved last year.

109 **Cleveland and County Road C-2 Signal:** As part of the Twin Lakes Parkway
110 improvements a new traffic signal will be installed at Cleveland Ave and County Road C-2.
111 This signal will provide better access to Cleveland Ave in the future as traffic from the
112 redeveloped areas around Twin Lakes Parkway increases. This signal project would be tied
113 with the Fairview and Twin Lakes Parkway signal contract. The project is funded by the
114 Twin Lakes TIF bonding that Council approved last year.

115 **Twin Lakes East Collector:** As an extension of the Twin Lakes Parkway improvements, the
116 intersections of Terrace Ave and Lincoln Ave, and Lincoln Ave and C-2 will be evaluated to
117 provide a better connection from Fairview Ave to Snelling Avenue. An additional left turn
118 lane from east bound County Rd C-2 to Snelling will be provided as part of the project.

119 Funding for the project is through TIF funding.

120 **FINANCIAL IMPACTS**

121 Staff is developing preliminary cost estimates for the projects at this time. We anticipate the
122 total work plan cost to be in the \$7 - \$10 million dollar range. The Street Infrastructure Fund
123 interest earnings support the local street Mill and Overlay program. MSA street overlays are
124 proposed to be funded from the City's MSA account. Utility improvements are funded from the
125 respective Utility enterprise funds. County State Aid funding and Community Block
126 Development Grant (CBDG) funding is the proposed funding source for a portion of the
127 sidewalk improvements on Larpenteur Avenue. Staff has discussed opportunities for funding
128 with the watershed districts for storm sewer system improvements and will continue to pursue
129 those funds where applicable.

130 Crack sealing and major patching are funded from the street maintenance budget. This budget is
131 supported by the general fund tax levy and MSA maintenance allocation. Staff recommends
132 funding a program consistent with our pavement maintenance policies.

133 By taking action now, the Council will be authorizing staff to work on plans for the projects as
134 described. As project bids are opened, staff will bring individual contracts to the City Council
135 for approval. A detailed cost breakdown will be included with those Council Actions.

136 **STAFF RECOMMENDATION**

137 These improvements are recommended for construction in 2016. Additional utility
138 improvements may be identified at a later date and brought to the Council for authorization. All
139 projects will come back to the City Council for further action.

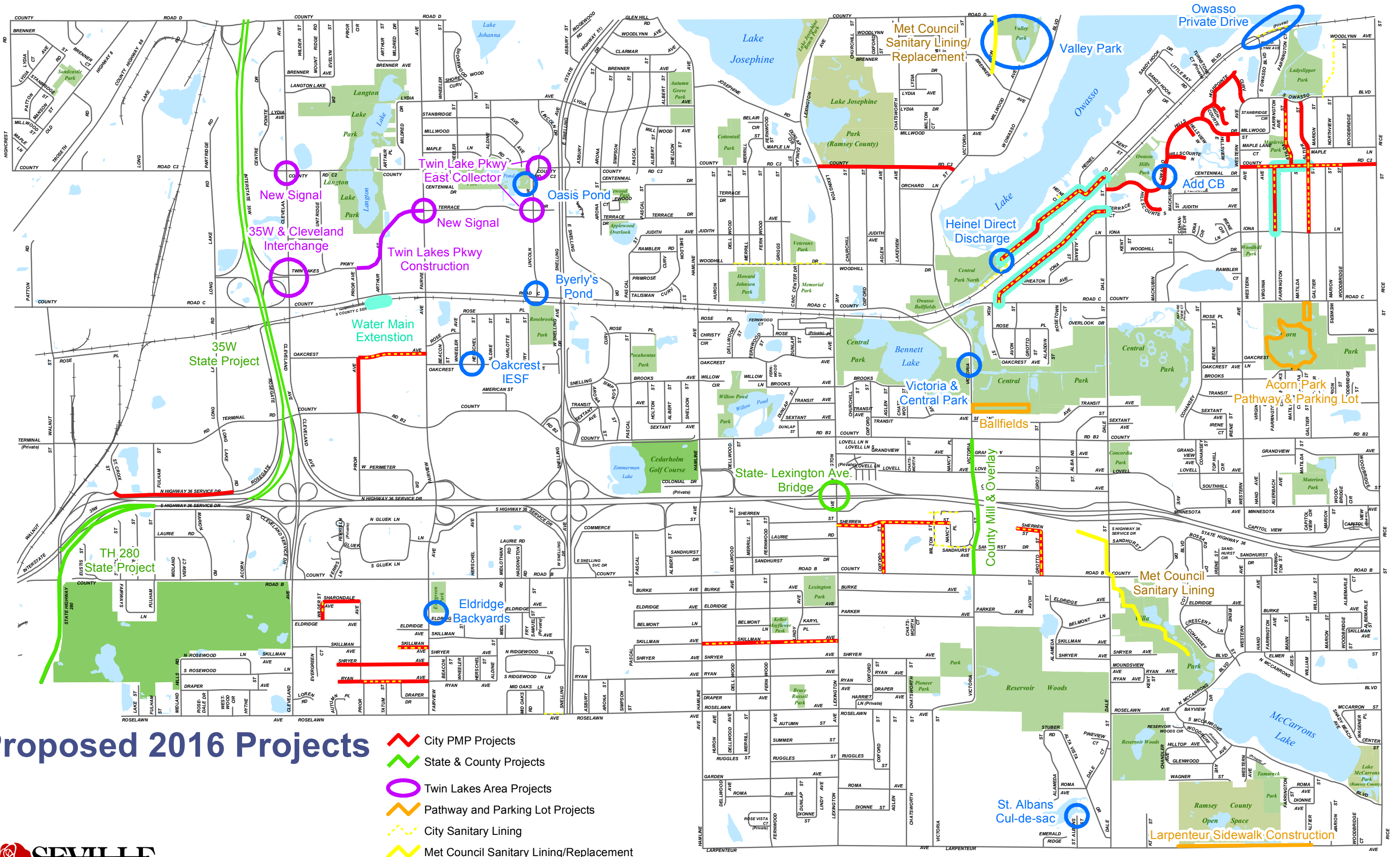
140 **REQUESTED COUNCIL ACTION**

141 Motion approving 2016 preliminary work plan for street and utility improvements.

Prepared by: Jesse Freihammer, Assistant Public Works Director/City Engineer

Attachments: A: Map

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Proposed 2016 Projects

- City PMP Projects
- State & County Projects
- Twin Lakes Area Projects
- Pathway and Parking Lot Projects
- City Sanitary Lining
- Met Council Sanitary Lining/Replacement
- Storm Projects
- Watermain Projects



Prepared by:
Engineering Department
January 05, 2016

Data Sources and Contacts:
* Ramsey County GIS Base Map (11/2/15)
* 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:
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