



Preliminary Engineering Report

2016 Street & Utility Improvement Project

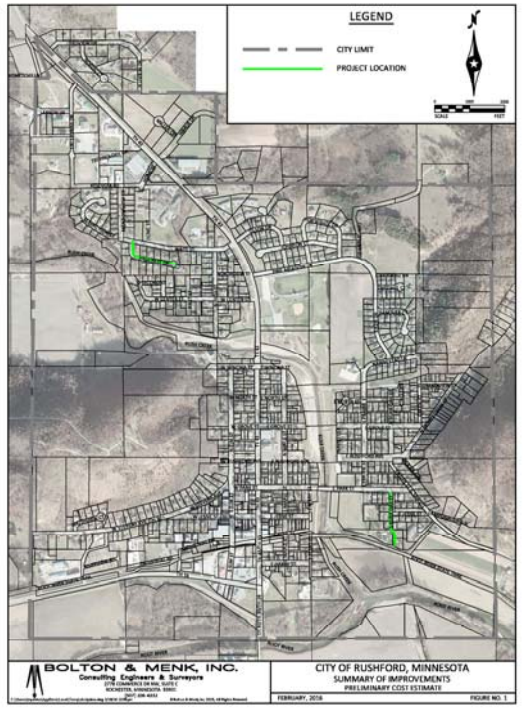


March 14, 2016

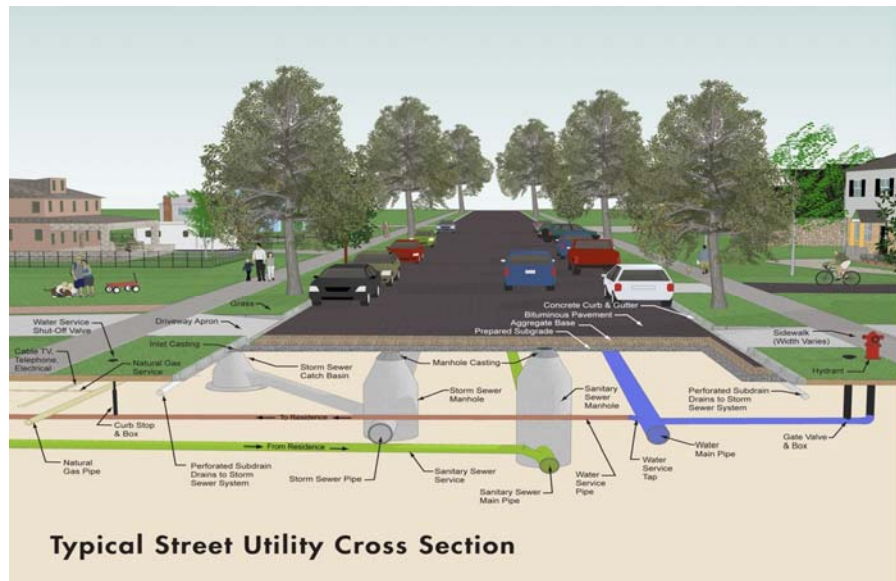
Preliminary Engineering Report

- Project Area
- Existing Conditions
- Proposed Improvements
- Cost Estimate and Financing
- Assessments
- Schedule

Project Location



What is under a typical city street?



Existing Conditions-Street

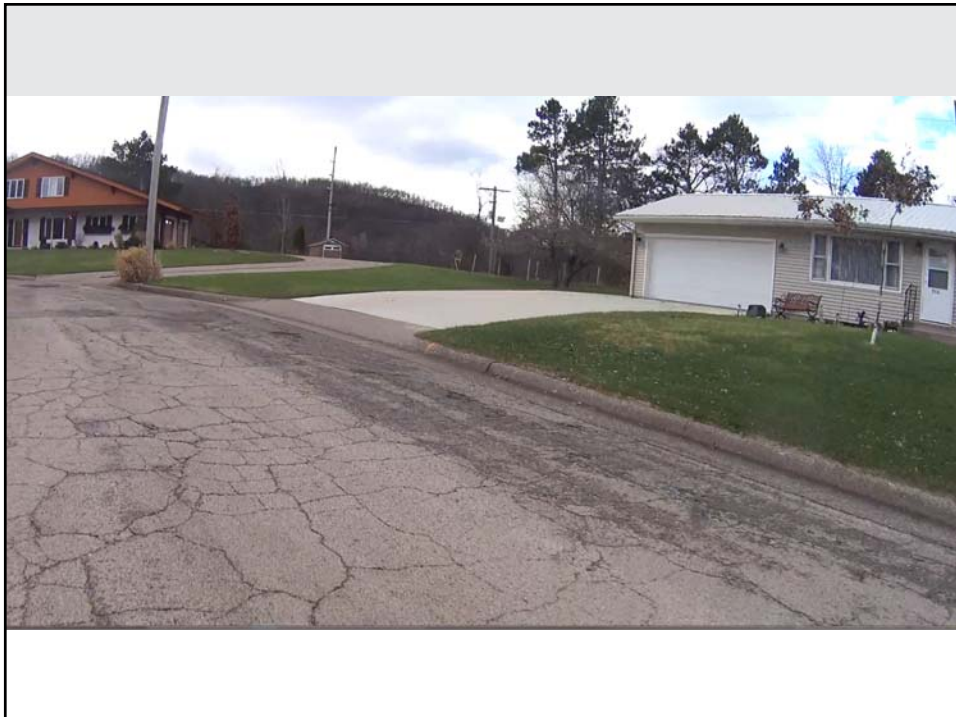
- South Burr Oak Street
 - 32-ft wide bituminous with concrete curb
 - 80-ft right-of-way
 - Bituminous in very poor condition
 - Curb, driveway aprons in fair to poor condition

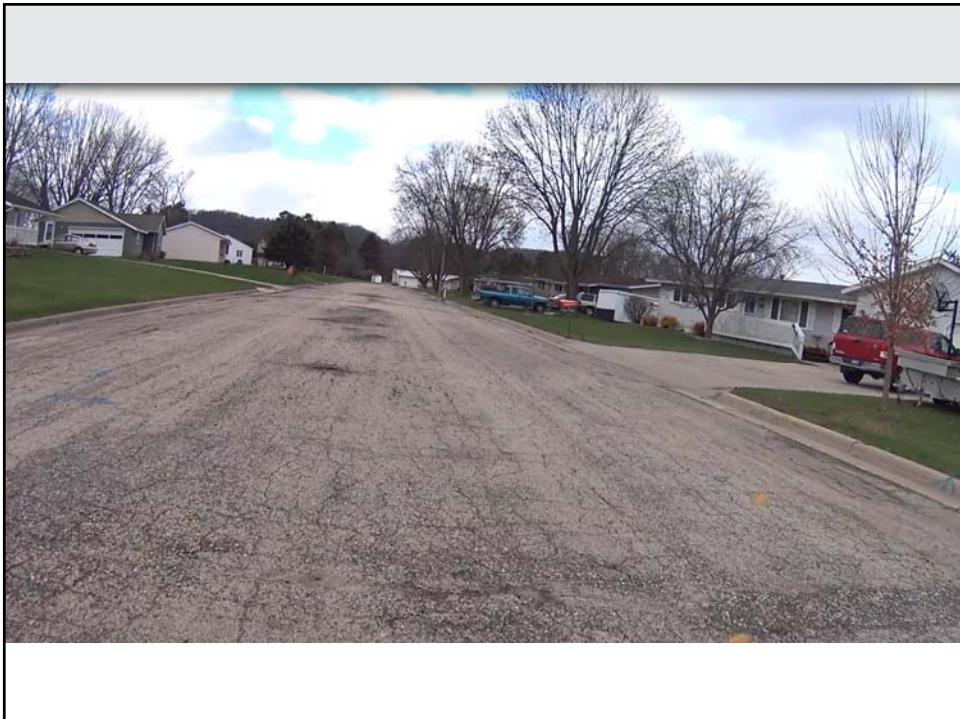




Existing Conditions-Street

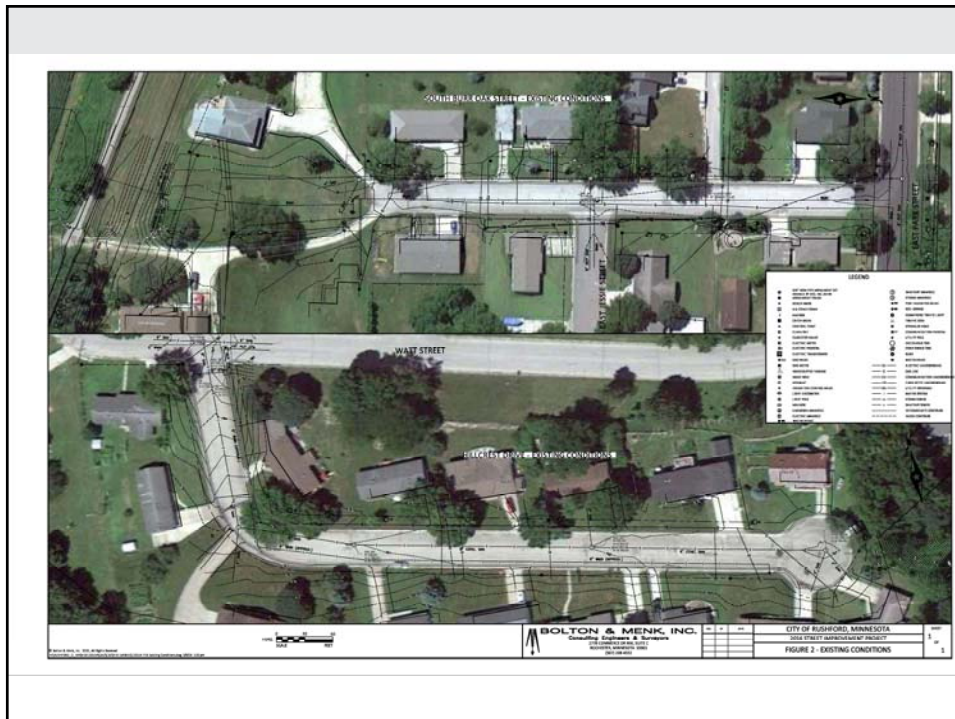
- Hillcrest Drive
 - 36-ft wide bituminous with concrete curb
 - 66-ft right-of-way
 - Bituminous in very poor condition
 - Curb, driveway aprons in fair to poor condition





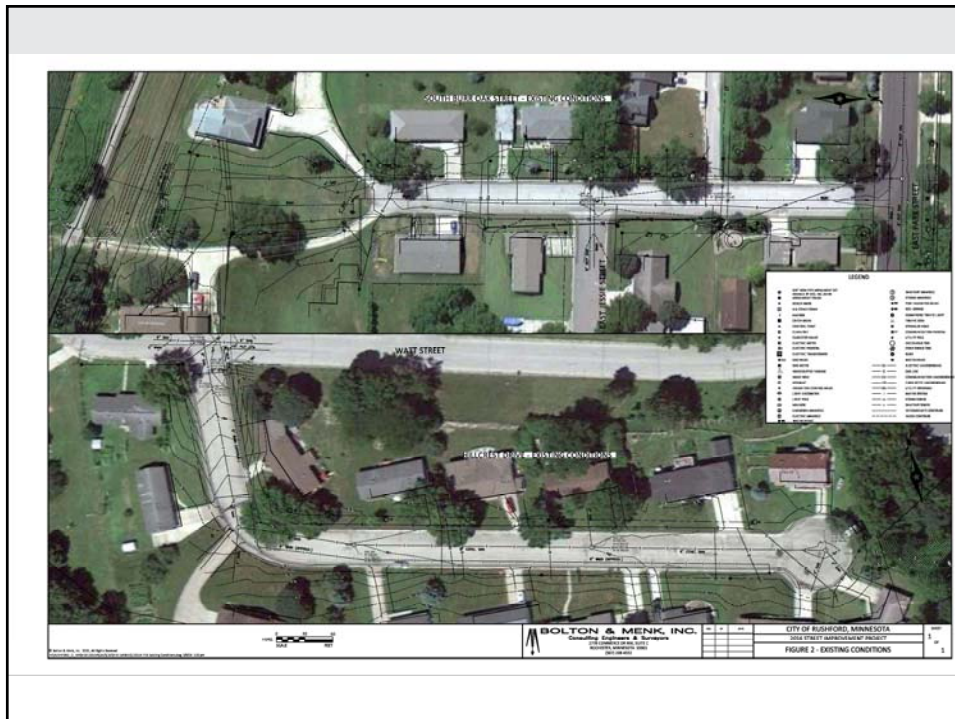
Existing Conditions-Storm Drainage

- South Burr Oak Street
 - No storm sewer present
 - Surface drainage ponds at the end of the street, flows to levee interior drainage system
- Hillcrest Drive
 - Two catch basins at intersection of Watt Street
 - Drainage conveyed to TH 43 ditch



Existing Conditions-Sanitary Sewer

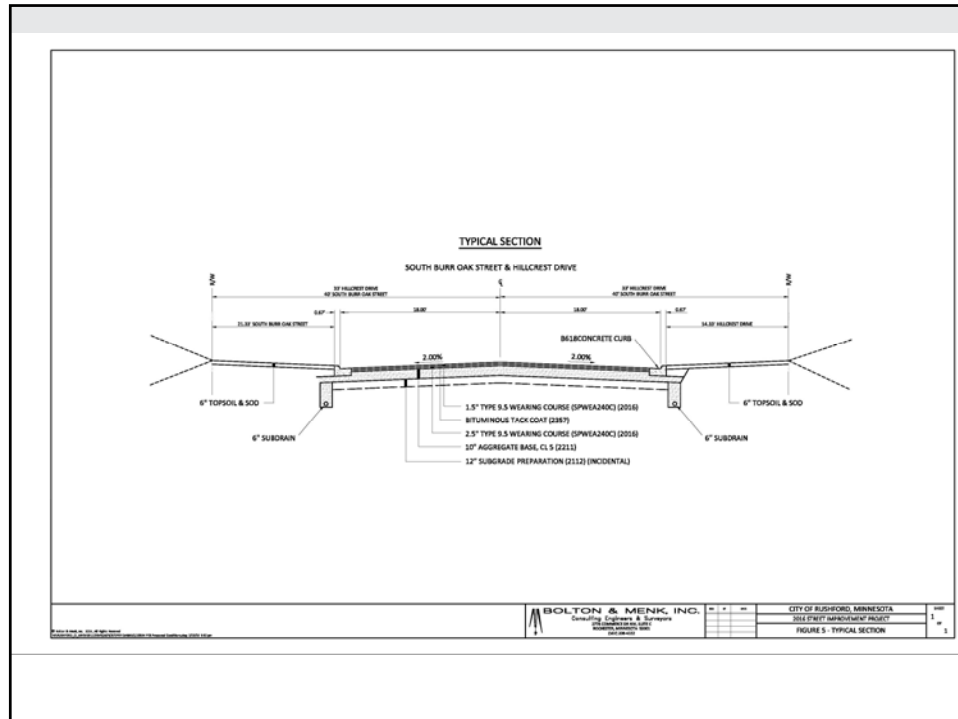
- South Burr Oak Street
 - 6-inch concrete pipe
 - Wet well lift station – single pump
 - Does not meet MPCA requirements (redundancy)
 - Video inspection shows fair to poor condition
 - Age assumed to be 40-50 years old
- Hillcrest Drive
 - 8-inch concrete pipe
 - Video inspection shows poor condition
 - Age assumed to be 40-50 years old



Proposed Improvements-Street

- South Burr Oak Street
 - 36-ft wide, bituminous, curb & gutter
 - Concrete driveway aprons
 - Small cul-de-sac at south end
 - Pave shared driveway to levee/bike trail
- Hillcrest Drive
 - -36-ft wide, bituminous, curb & gutter
 - Concrete driveway aprons





Proposed Improvements-Storm Drainage

- South Burr Oak Street
 - Outlet is not low enough to install storm sewer
 - Major rainfall events will continue to flow overland to levee drainage system
 - Small rainfall events/ponding issue
 - Install shallow outlet with perforated tile discharge to levee system
 - Tile will convey small flows, help keep overland drainage swale dry
 - Subdrain beneath curb, sump pump services

Proposed Improvements-Storm Drainage

- Hillcrest Drive
 - Replace existing storm sewer, extend up the cul-de-sac
 - Reduce bypass flows at intersection catch basins
 - Subdrain beneath curb, sump pump services



Proposed Improvements-Sanitary Sewer

- South Burr Oak Street
 - 8-inch PVC pipe, concrete manholes
 - PVC services to property line
 - Watertight system
 - New duplex pump submersible lift station
 - Locate at end of cul-de-sac
 - New 4-inch PVC forcemain discharge

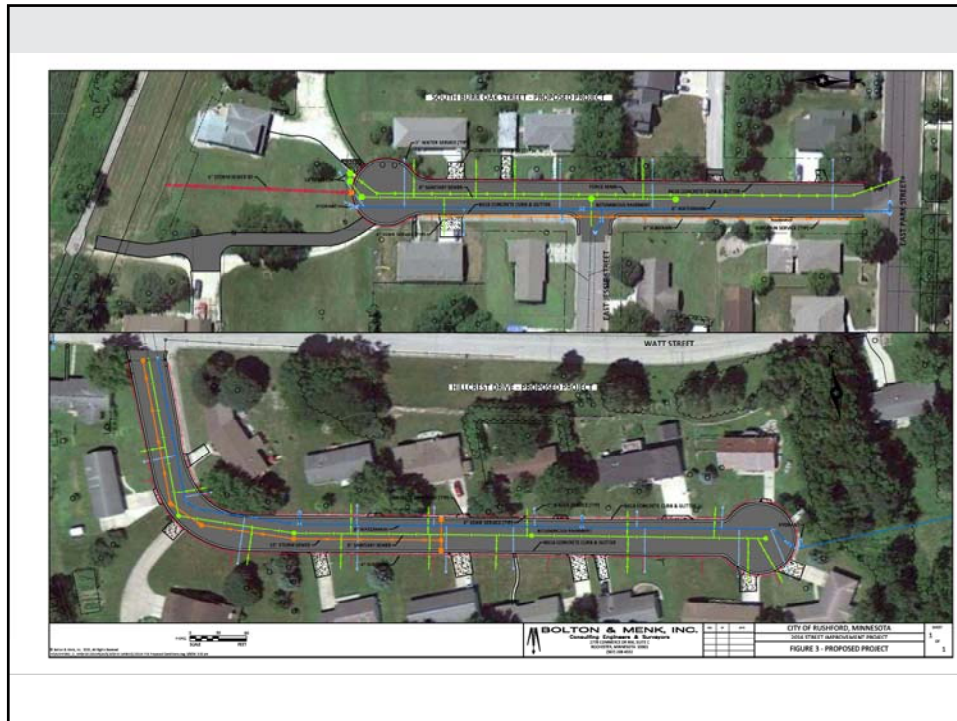
Proposed Improvements-Sanitary Sewer

- Hillcrest Drive
 - 8-inch PVC pipe, PVC services, concrete manholes
 - PVC services to property line
 - Watertight system



Proposed Improvements-Watermain

- South Burr Oak Street
 - 8-inch watermain (PVC or Ductile Iron), valves, hydrants
 - 1-inch copper water services to property line
- Hillcrest Drive
 - 8-inch watermain (PVC or Ductile Iron), valves, hydrants
 - 1-inch copper water services to property line
 - Alternate watermain loop to First Street, improve circulation



Other Utilities

- Communications (cable, phone, internet)
- Natural Gas
- Electric
- Design will be coordinated with any improvements necessary for these systems

Estimated Costs

- Updated numbers from hard copy report

Item	Estimated Construction Cost	Estimated Engineering, Administration and Financing Cost	Total Estimated Project Cost
Assessable Costs			
Removals, Street & Surface, Misc.	\$524,958.00	\$120,740.34	\$645,698.34
Sanitary Sewer	\$200,487.50	\$46,112.13	\$246,599.63
Watermain	\$231,894.00	\$53,335.62	\$285,229.62
Total Assessable Costs	\$957,339.50	\$220,188.09	\$1,177,527.59
Non-Assessable Costs			
Storm Sewer	\$78,087.50	\$17,960.13	\$96,047.63
Lift Station	\$125,200.00	\$28,796.00	\$153,996.00
Watermain Loop	\$61,800.00	\$14,214.00	\$76,014.00
Total Non-Assessable Costs	\$265,087.50	\$60,970.13	\$326,057.63
Total Estimated Project Costs	\$1,222,427.00	\$281,158.21	\$1,503,585.21

- Reduction from hard copy report of \$198,000

Financing

- Original estimate, prior to report - \$1,150,000
 - Did not include lift station, storm sewer, and watermain loop
- Without lift station, storm sewer, and watermain loop, estimated cost is \$1,177,527

Financing

- We understand project will be financed using:
 - Bond Sale
 - Utility Funds
 - Special Assessments

Assessments

- City's Special Assessment Policy
 - Street Improvements – 30% Assessable, 70% City
 - Water and Sanitary Improvements – 30% Assessable, 70% City
 - Storm Sewer Improvements – 0% Assessable, 100% City Cost
 - Sidewalks – 100% Assessable, 0% City Cost
 - Corner Lots – 100% frontage, 50% side

Assessments

- Street Assessment Rate - \$76.53/lf
- Sewer and Water Assessment Rate - \$6,937/each
- Estimated Assessment for 100-ft lot = \$14,590

Assessments

- Comparison to Previous Projects

Project	Street Assessment (\$/ft)	Sewer and Water Assessment (\$/unit)	Total Assessment for a 100-ft Lot	Total Assessment for a 100-ft Lot- Adjusted for Inflation
TH 43 Project	\$26.54 (maximum)	\$6,170	\$8,824	\$9,265
2011 Project	\$30.79	\$3,073	\$6,152	\$7,851
2009 Project	\$29.28	\$3,490	\$6,418	\$9,030

Assessments

- Reduce assessable rate from 30% to 20%
 - Street Assessment Rate - \$51/ft
 - Sewer and Water Assessment Rate - \$4,624/each
 - 100-ft Lot Assessment = \$9,724

Proposed Schedule

Steps Required	Date
Resolution Ordering Preparation of Report	2/8/16
Prepare Feasibility Report	2/9/16 - 3/11/16
Resolution Receiving Report and Calling for Hearing on Improvement	3/14/16
Published Notice of Hearing on Improvement	3/24/16 and 3/31/16
Mailed Notice of Hearing on Improvement	3/24/16
Neighborhood Informational Meeting	4/7/16
Improvement Hearing	4/11/16
Resolution Ordering Improvement and Preparation of Plans and Specifications	4/11/16
Prepare Plans and Specifications	4/12/16 - 5/6/16
Resolution Approving Plans and Specifications and Ordering Advertisement for Bids	5/9/16
Advertise for Bids	5/19/16
	5/26/16
	6/2/16
Open Bids	6/9/16
Resolution Awarding Contract	6/13/16
Begin Construction	July 2016
End Construction	June 2017
Prepare Assessment Roll	7/3/17 - 8/28/17
Resolution Declaring Cost to Be Assessed and Ordering Preparation of Proposed Assessment	8/14/17
Resolution for Hearing on Proposed Assessment	8/14/17
Published Notice of Hearing on Proposed Assessment	8/24/17
Mailed Notice of Hearing on Proposed Assessment	8/24/17
Assessment Hearing	9/11/17
Resolution Adopting Assessment	9/11/17

Conclusion and Recommendation

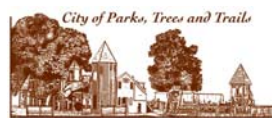
- Proposed improvements are necessary, cost-effective, and feasible
- Feasibility is contingent on City Council findings with respect to financing
- Recommend City Council accept this report, call for a hearing on the proposed improvements

Questions?



Preliminary Engineering Report

2016 Street & Utility Improvement Project



City of Rushford

March 14, 2016