Feasibility Report

DOWNTOWN VILLAGE IMPROVEMENT PROJECT

April 15, 2014

City of Afton

Feasibility Report

- Authorize Feasibility Report
- Accept Feasibility
- Order Plans and Spec's
- Accept Plans & Spec's & Authorize Ad for Bid
- Bid Project
- Prepare Assessment
- Improvement & Assessment Hearing
- Award Bid
- Construct Project

Background

- Roadways – Local & CSAH 21
  - Approx. 50 yrs old
  - Pavement in Poor condition
  - Maintenance and patching
  - Need Stormwater Collection and treatment

City of Afton

Background

- Sanitary Waste
  - SSTS/201 limitations
    - Groundwater and Surface Water
    - Lot size
    - Wells
    - Existing locations
      - Floodplain
      - Right of way
      - Levee
  - Compliance determination
    - Current standards
    - Updated Facility Plan

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Background

- Flood Levee
  - Constructed in 1969
  - Not accredited
    - 50% limitation
  - Properties in flood plain
    - Insurance costs
  - Re-occurring flooding costs
  - SSTS within levee
    - Not permitted
    - USCOE - NFIP
  - Lake St. Croix TMDL

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Background

- Drainage
  - Urban area with no collection
  - 4 County Roads
  - Flooding & Ponding
  - Erosion and sediment
  - Lack Stormwater
    - Treatment
    - Volume control

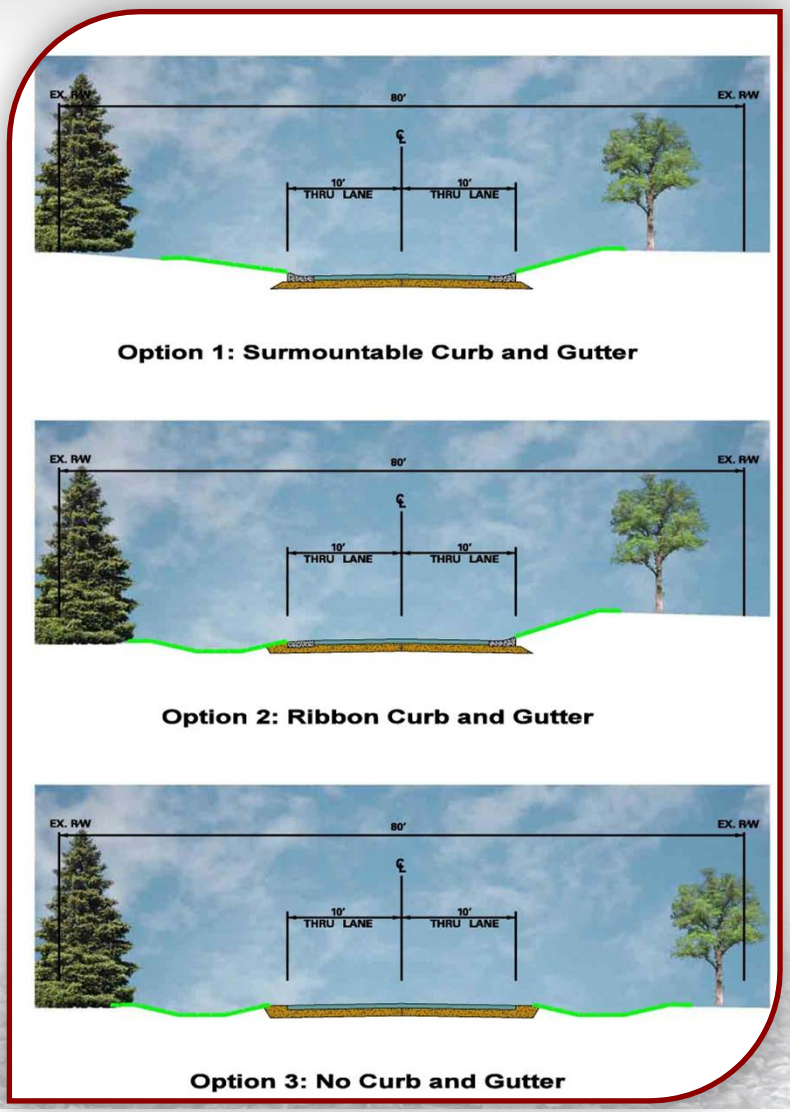
City of Afton

Public Engagement

- Citizen Task Force 2010
  - Identified
    - Issues
    - Needs
    - Solutions
- Sanitary Process
  - Public Hearings
  - Multiple community mtgs
- Individual Property Owner Impact
- CSAH 21 Improvements
- 429 process public hearings

Proposed Improvements

- Roadway
  - 20’ wide (4’-6’ of widening)
    - Sanitary Excavation
  - No barrier edge
    - Surmountable curb and gutter
    - Ribbon curb and gutter
- CSAH 21
  - Washington County lead
  - 34’ to 55’ wide (prelim)
  - City cost share beyond roadway



Option 1: Surmountable Curb and Gutter

Option 2: Ribbon Curb and Gutter

Option 3: No Curb and Gutter

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Proposed Improvements

- Sanitary Waste
- Reduce nutrient loading to Lake St. Croix
  - 200 lb/yr phosphorus-significant
  - 2,800 lb/yr BOD
- Collection System
  - Gravity Collection System
    - 8 inch mainline
    - const'n limits
    - 4 to 6 inch services to R/W
    - Lift Station
  - Forcemain to treatment site
    - 6 inch HDPE pipe
    - Directional drilling under creek requires DNR permit
- Ordinance Update
  - Connections
    - 2015 to 2023
    - Operation and Maintenance

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Proposed Improvements Sanitary Waste Cont'

- Treatment Site/System
  - Recirculating Gravel Filter w/ denitrification-significant improv't
  - Outside the St. Croix Bluff Land and Floodplain
  - Large enough to buffer & small as to limit future expansion
  - Soils and Proximity
- Studies completed – MPCA approved
  - Community Assessment Report
  - Facility Plan
  - Environmental Information Worksheet
  - Hydrogeologic Study
  - MPCA State Dispersal Permit
    - Submitted

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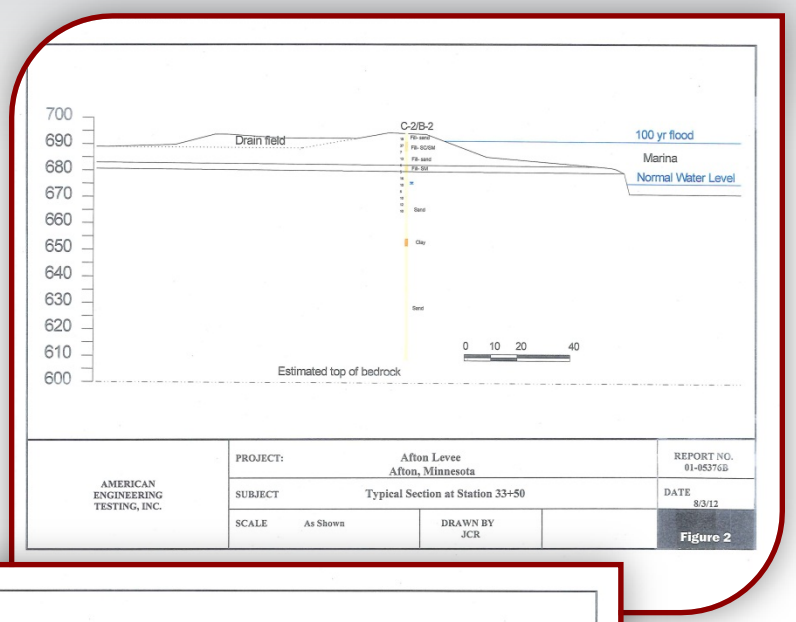
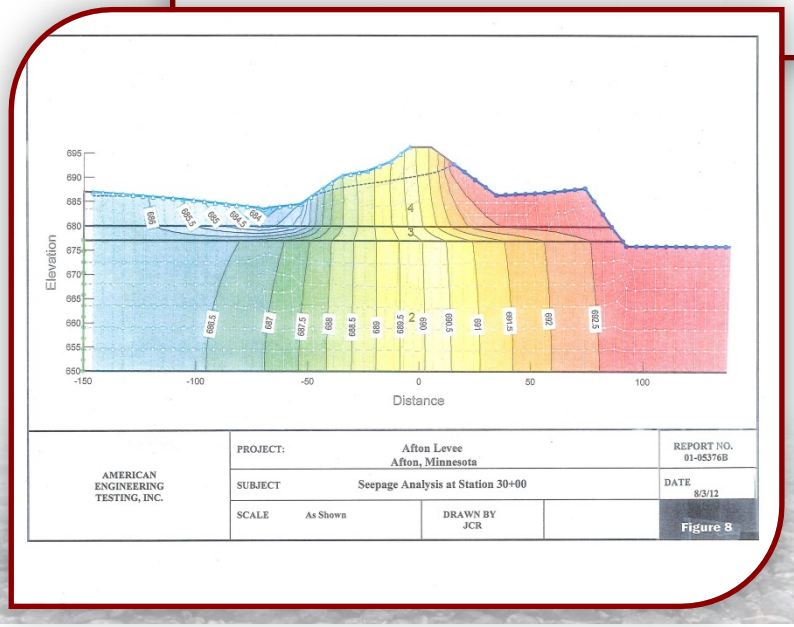
Proposed Improvements

- Levee
  - FEMA accreditation
  - Base flood + 3 feet
    - Earth
    - Flood wall
  - Seepage System
    - Lift Station & Generator
  - Kelle's Creek
    - Protect adjacent property
  - CSAH 21 elevation





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Proposed Improvements

- Drainage
  - Rural/Urban Areas
  - Collection and Conveyance
    - Local Drainage
    - CSAH 21
  - Stormwater treatment
    - North end of town
    - Middle of town
    - South end of town
  - Infiltration
    - BMP – Grants
    - PPL 18-57 score

City of Afton

Project Costs

Table 1 – Downtown Village Improvement Project Summary of Cost	
	Total
Schedule A – Roadway and Drainage Improvements	$1,875,000
Schedule B – Sanitary Sewer Improvements	$3,415,000
Schedule C – Sanitary Sewer Septic Removals	$199,000
Schedule D – Levee Improvements	$3,497,000
TOTAL	**$8,986,000***

*Does not include $6 Million for CR 21 Improvements

Includes 15% contingency and 25% overhead

City of Afton

Project Costs

- Sanitary Sewer Project = $3.5M + $.5M (restoration road & drainage)
  - Local Match $2M
  - City secured $2M, from State Facilities Authority
- Levee $5.2M
  - Commercial
  - Flood insurance
  - $3.2M DNR
  - $2M Local Match

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Project Funding

Table 2 - Afton Downtown Village Project Funding							
		State Funds / Grants			Local Funds	Washington County (CSAH 21)	Total
		DNR	BWSR	PFA			
Street and Drainage	City of Afton	$110,000	$60,000	$545,000	$1,159,000		$1,874,000
	Washington Co.				TBD	$6,000,000	$6,000,000
Levee		$1,749,000			$1,749,000		$3,498,000
Sanitary		$725,000	$199,000	$1,699,000	$991,000		$3,614,000
Adjustment PFA*				-$259,000	$259,000		
Adjustment DNR**		$584,000			-$584,000		
Total		$3,168,000	$259,000	$1,985,000	$3,574,000	$6,000,000	$14,986,000

*PFA grant agreement outlines maximum allowable contribution from the PFA toward sanitary related improvements of $1,985,000.

**DNR grant agreement outlines maximum allowable contribution from the City toward levee related improvements of $2,000,000.

Potential local funding sources for this project include:

Assessments to Benefited Properties	$2.16 Million
CIP Fund	$1.0 Million
General Fund	$1.0 Million
Total Potential Local Funds	$4.16 Million

Grant funding cross over between Levee and Sanitary

City of Afton

Project Funding

State funding (DNR, PFA, BWSR)	$ 5,412,000
Washington County Road Fund	$ 6,000,000*
City Funds and Assessments	$ 3,574,000**
The total project is estimated to be	$14,986,000

*Estimated cost shown in the County's budget – design has yet to be completed
**Does not include City contribution to County Road 21 Project – City contribution to be determined once design is completed by the County

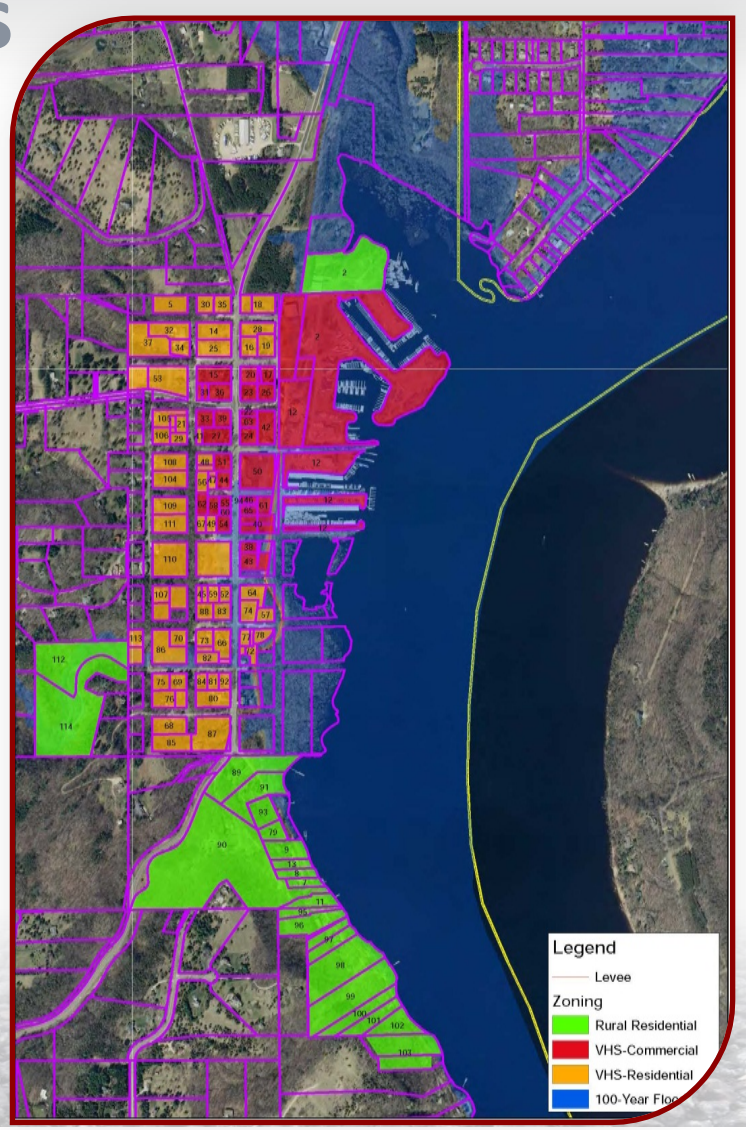
$1 local dollars = $3.75 project dollars

Assessments

- Based on Benefit
- Considered Improvements
  - Zoning & Shore Land Bluff Land
  - Highest and Best Use
  - Relative locations
  - Onsite improvements
  - Land Value and Size
- Did not consider
  - How business operates
  - If a business is not operating at capacity for the site

Preliminary Assessments

- Residential Assessments
  - Total Assessments: $11,500- $13,900
  - Average Assessment: $12,600
  - Amortization (20 years @ 5%)
    - Annual Cost: $960- $1,120
    - Average Annual Cost: $1,010
- Assessment Comparison for Sanitary Sewer
  - New subdivision $25k to $30k / unit
  - Un-serviced area $12k to $30k / unit
- Deferrals age 65+ with income qualifications



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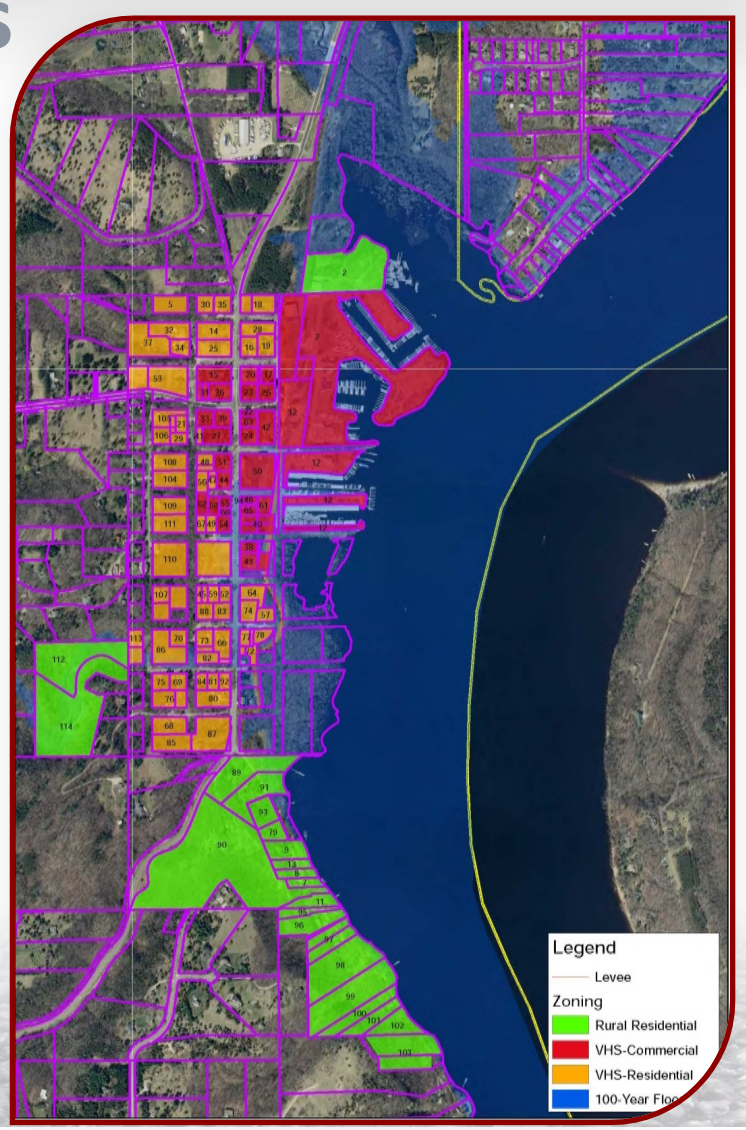
Preliminary Assessments

- Small Commercial Assessments
  - Total Assessments: $13,900–$55,900
  - Average Assessment: $23,600
  - Amortization (20 years @ 5%)
    - Annual Cost: $1,120 - $4,490
    - Average Annual Cost: $1,890
- Large Commercial Assessments
  - Total Assessments: $67,800-263,100
  - Average Assessment: $138,440
  - Amortization (20 years @ 5%)
    - Annual Cost: $5,440 - $21,120
    - Average Annual Cost: $11,110



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Schedule

Task	Completion Date
Accept Feasibility/Authorize Plans and Specs	April 15, 2013
Public Information Meeting	May 13, 2014
Sanitary Improvements:	
Approve Plans and Specs Authorize Ad for Bid	May 20, 2014
Receive Bids/Order Preparation of Assessments	June 16, 2014
Public Information Meeting	July, 2014
Hold Public Hearing/Hold Assessment Hearing/Order Project & Award Contract	August, 2014
Begin Construction of the Sanitary Treatment Site	September, 2014
Begin Construction of the Sanitary Collection System	September, 2015
Completion of Sanitary Collection System	December 31, 2015
Roadways, Levee, and Drainage Improvements:	
Bidding (to be coordinated with Washington County)	2015/2016
Construction	May - November, 2016
Final Completion of Construction	June, 2017

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