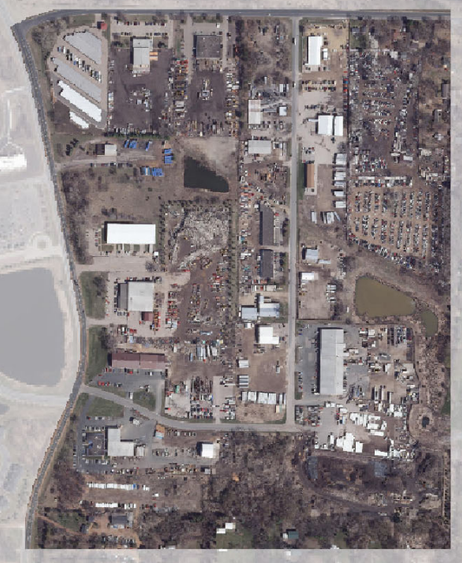
Utility Extension-
Maras Street, 13th Avenue, and Hansen Avenue

Sewer-21-001

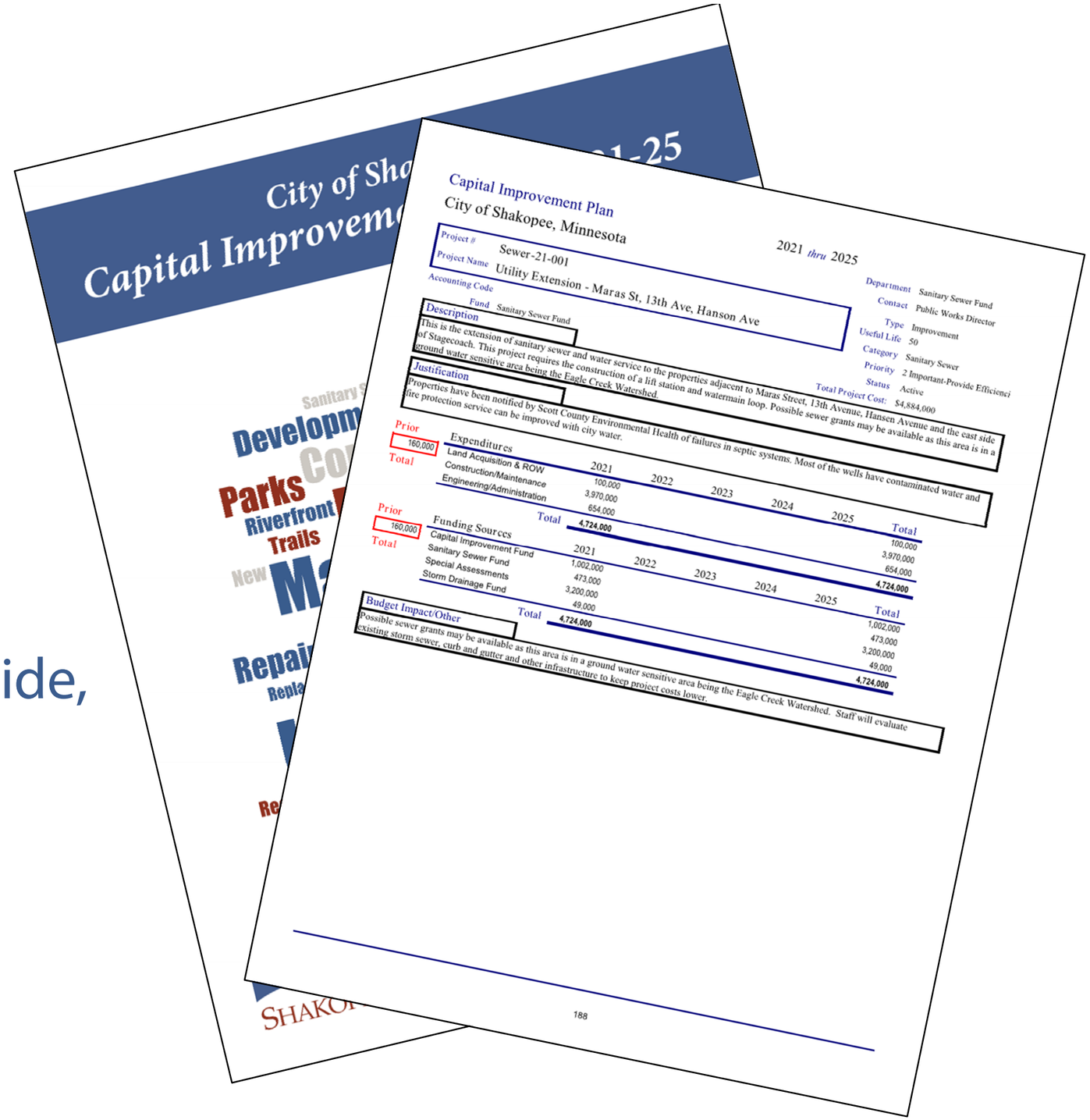


Public Hearing
April 20, 2021

Scott County GIS

Capital Improvement Program

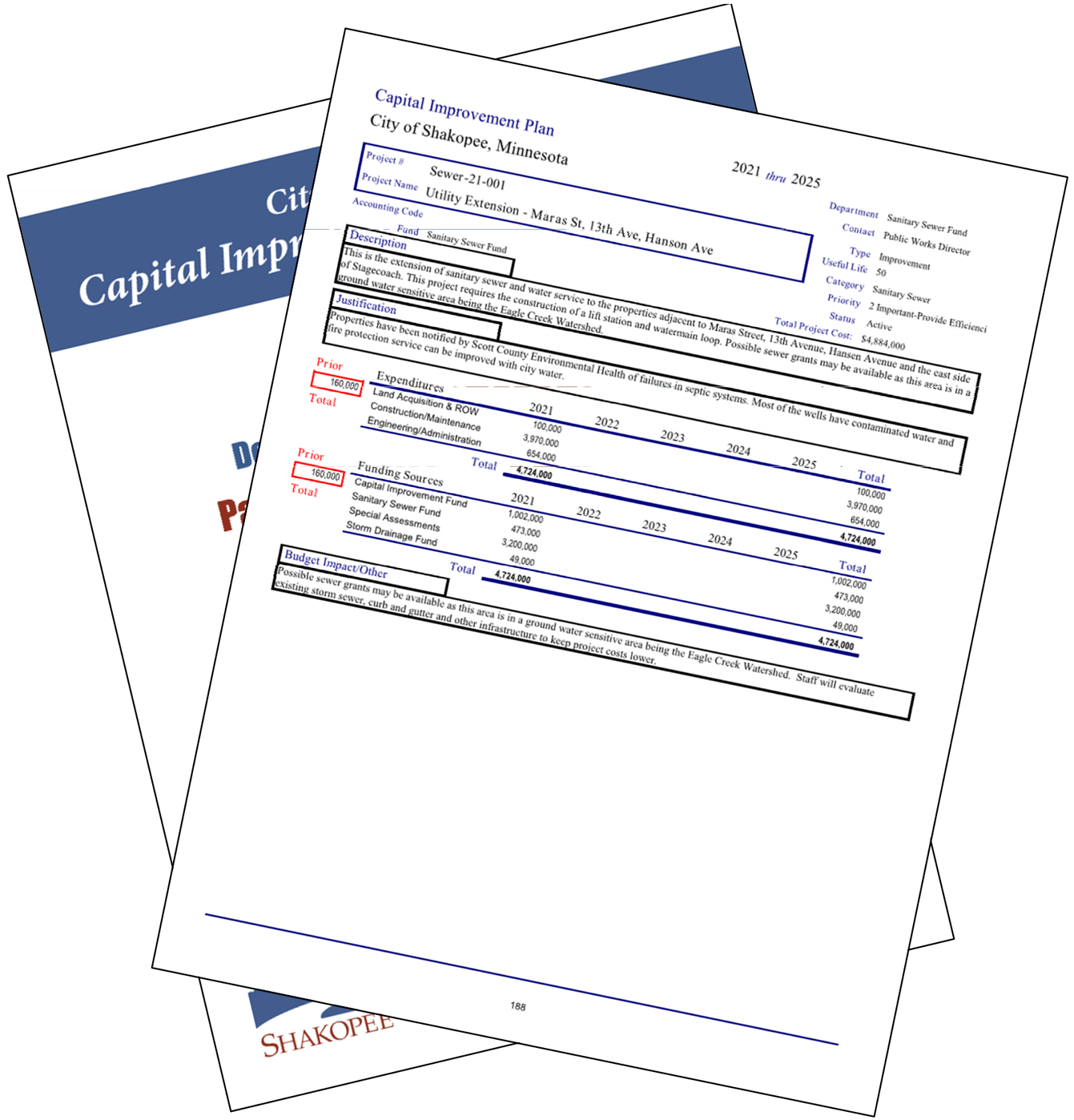
- City initiated program
- Extend sanitary sewer and watermain within:
  - Maras Street
  - 13th Avenue
  - Hansen Avenue
  - Stagecoach Avenue (East side, between 13th Avenue and Hansen Avenue)



Capital Improvement Program

- Full-Depth Pavement Reconstruction of the following streets:
  - Maras Street
  - 13th Avenue
  - Hansen Avenue

Funding for a portion of the public improvements to the city's infrastructure based on Minnesota Statute 429



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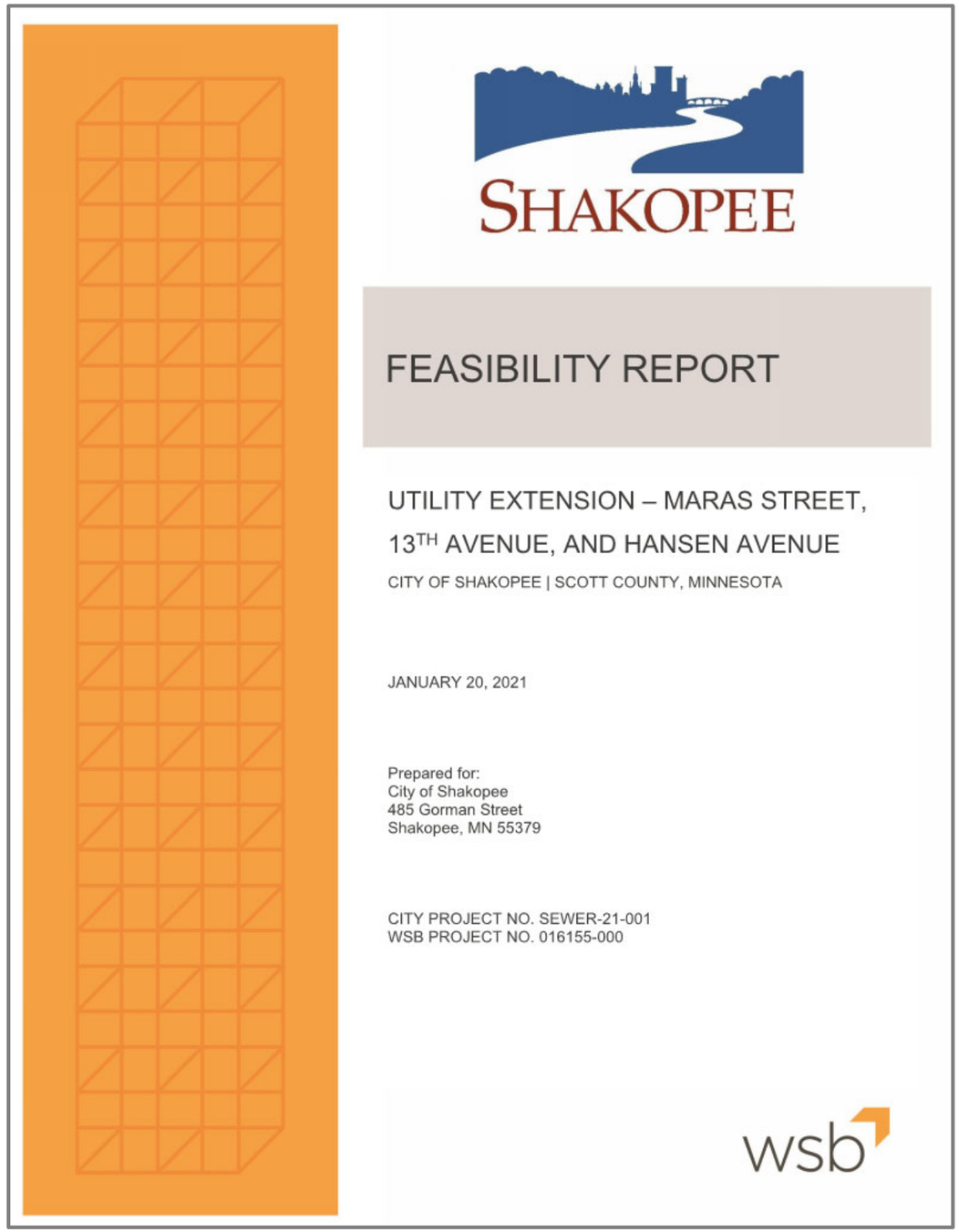
Proposed Project Location



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Background

- Concerns with non-compliant septic systems and groundwater contamination
- Preparation of the Feasibility Report was authorized on May 8, 2020
- A Special Benefit Consultation was completed by Patchin and Messner in December 2020



Existing Conditions

- No sanitary sewer or watermain within the project area
- Properties currently served by well and septic systems
- Majority of the streets showing signs of aging and deterioration
- Storm sewer facilities throughout the project area



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Concerns with Non-Compliant Septic Systems

There are **29 septic systems** in the project area

12 noted as "Failure to protect groundwater"

3 are "Imminent Threat to Public Health or Safety

2 are of unknown condition

1 septic system with "Setback issues"

---

11 septic systems with no known issues

55% of septic systems are known to have issues

Concerns with Groundwater Contamination

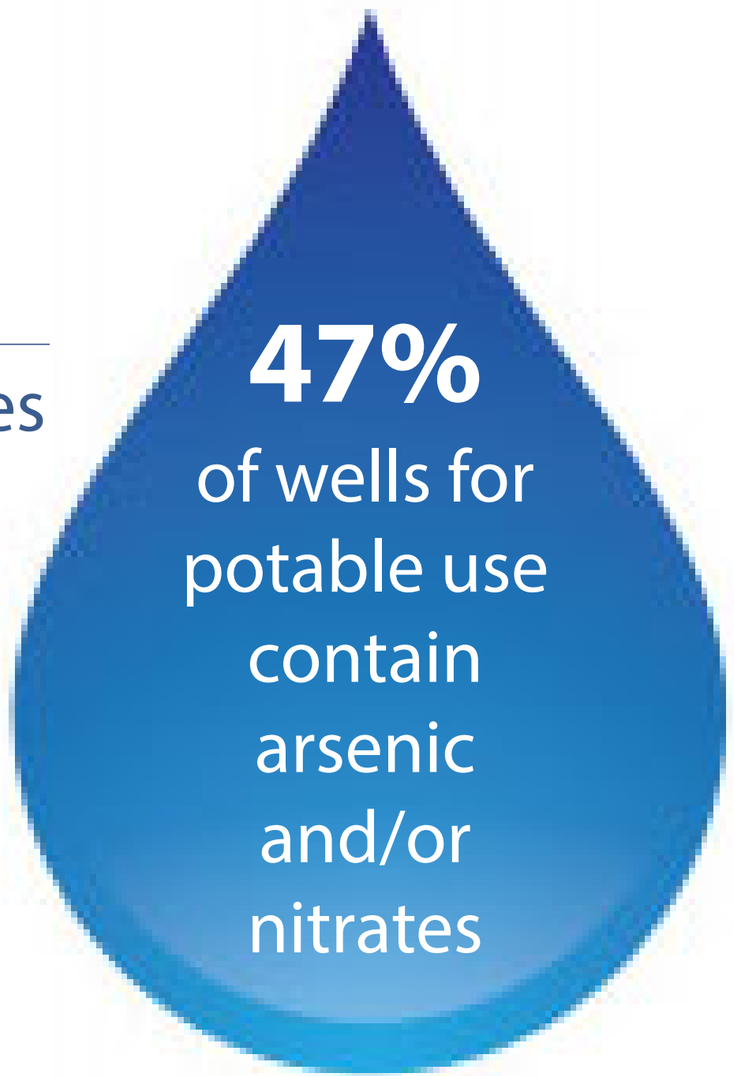
There are **18 active wells** in the project area

8 with arsenic and/or nitrates

1 used for dewatering

---

9 wells for potable use with no known issues



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Phase I Environmental Site Assessment

Eight sights identified for Recognized Environmental Conditions (REC)

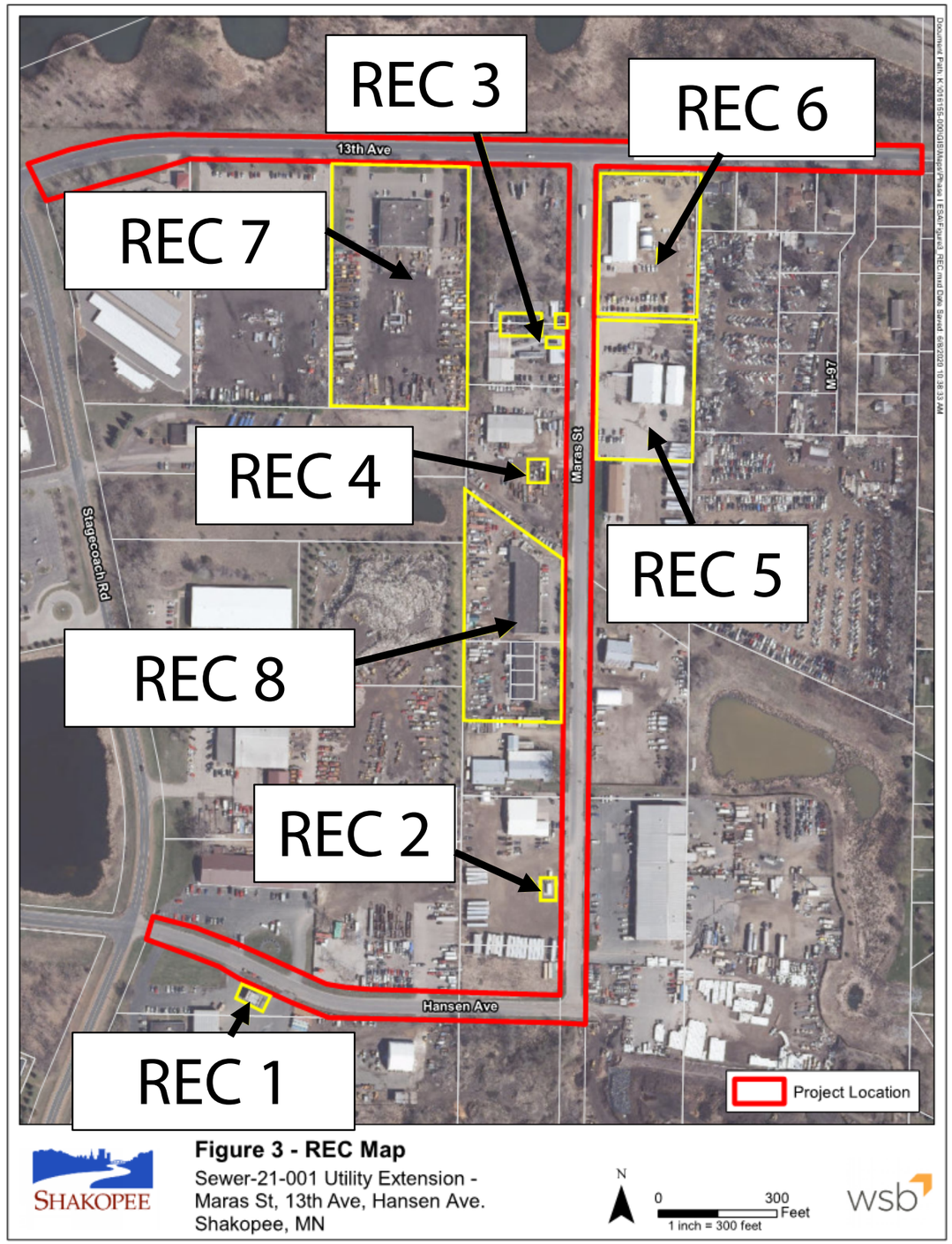


Figure 3 - REC Map
Sewer-21-001 Utility Extension -
Maras St, 13th Ave, Hansen Ave.
Shakopee, MN

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Phase II Environmental Site Assessment

Appendix E: Groundwater Analysis Test Results

WSB																		
Sample ID	**CAS #**	**GW-2**	**GW-3**	**GW-4**	**GW-5**	**GW-6**	**GW-7**	**GW-8**	**GW-9**	**GW-10**	**GW-11**	**GW-12**	**GW-13**	**GW-14**	**Trip Blank 1**	**Trip Blank 2**	**Health Based Risk Guidance Value (µg/L)**	**Limits for Contaminated Groundwater Discharges (µg/L)**
Water Level (ft. below grade)		12.25	15.25	12.53	5.4	4.47	4.03	3.46	5.18	9.9	4.81	4.19	4.18	4.96	–	–		
Sample Date		**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**	**8/4/2020**		
Volatile Organic Compounds (VOCs)																		
All Analyzed VOCs	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
RCRA 8 Metals																		
Arsenic [1]	7440-38-2	NA	**121**	NA	**85.8**	NA	**147**	NA	**352**	NA	**67.1**	NA	**683**	NA	NA	NA	NE	NE
Barium [1]	7440-39-3	NA	**17500**	NA	**5660**	NA	**5750**	NA	**26700**	NA	**5630**	NA	**17700**	NA	NA	NA	2,000 HRL 93	NE
Cadmium [1]	7440-43-9	NA	**45.8**	NA	**35.7**	NA	**58.7**	NA	**74.8**	NA	**48.5**	NA	**33.6**	NA	NA	NA	0.5 HRL 15	NE
Chromium [1]	7440-47-3	NA	**2670**	NA	**1600**	NA	**2310**	NA	**4200**	NA	**2370**	NA	**6040**	NA	NA	NA	20,000 HRL 94 / 100 HRL 93 **	NE
Lead [1]	7439-92-1	NA	**1390**	NA	**1360**	NA	**2020**	NA	**2190**	NA	**1880**	NA	**2060**	NA	NA	NA	NE	NE
Mercury [1]	7439-97-6	NA	**4.06**	NA	**2.32**	NA	**3.32**	NA	**6.53**	NA	**2.64**	NA	**3.38**	NA	NA	NA	NE	NE
Selenium [1]	7782-49-2	NA	<100	NA	<100	NA	**105**	NA	**174**	NA	**111**	NA	**186**	NA	NA	NA	30 HRL 93	NE
Silver [1]	7440-22-4	NA	<20.0	NA	<20.0	NA	<20.0	NA	<20.0	NA	<20.0	NA	<20.0	NA	NA	NA	30 HRL 93	NE
Diesel Range Organics (DRO)																		
Diesel Range Organics (DRO)	STL00143	<109	**179**	<110	**149**	**125**	<109	**151**	**172**	<109	<110	**152**	**124**	**181**	NA	NA	1,000 *	200
Gasoline Range Organics (GRO)																		
Gasoline Range Organics (GRO)	STL01887	**108**	<500	**107**	<100	<100	<100	<100	<500	<100	<100	<100	<100	<100	<100	<100	1,000 *	200

Notes:
All values reported in micrograms per liter (µg/L)

The Minnesota Department of Health (MDH) has established health based guidance to evaluate drinking water exposure risks. Values are shown with the types of guidance and the year established. HRL = Health Risk Limit, HBV = Health Based Value, and RAA = Risk Assessment Advice

Discharge Limits shown are the most stringent values indicated in the Minnesota Pollution Control Agency (MPCA) National Pollutant Dishcharge Elimination Sysytem (NPDES)/State Disposal System document wq-wwprm9-25 dated 2/2/2017

Blue = Value exceeds established MDH guidance value
BOLD = Concentration is greater than or equal to laboratory reporting limit
< = Analyte not detected greater than or equal to laboratory reporting limit shown
ND = Analyte not detected above laboratory reporting limits
NA = Not Applicable
NE = Not Established
* = MPCA criteria for remedial investigation
** = Values shown are for Chromium III and Chromium VI

Blue = Value exceeds established MDH guidance value

46% of the samples exceed guidance levels for Barium and Cadmium

30% of the samples exceed guidance levels for Selenium

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Phase II Environmental Site Assessment

Appendix E: Soil Analytical Results

100% of the samples exceed guidance levels for Barium and Chromium

28% of the samples exceed guidance levels for lead

1 sample (7%) exceeds the guidance level for diesel range organics

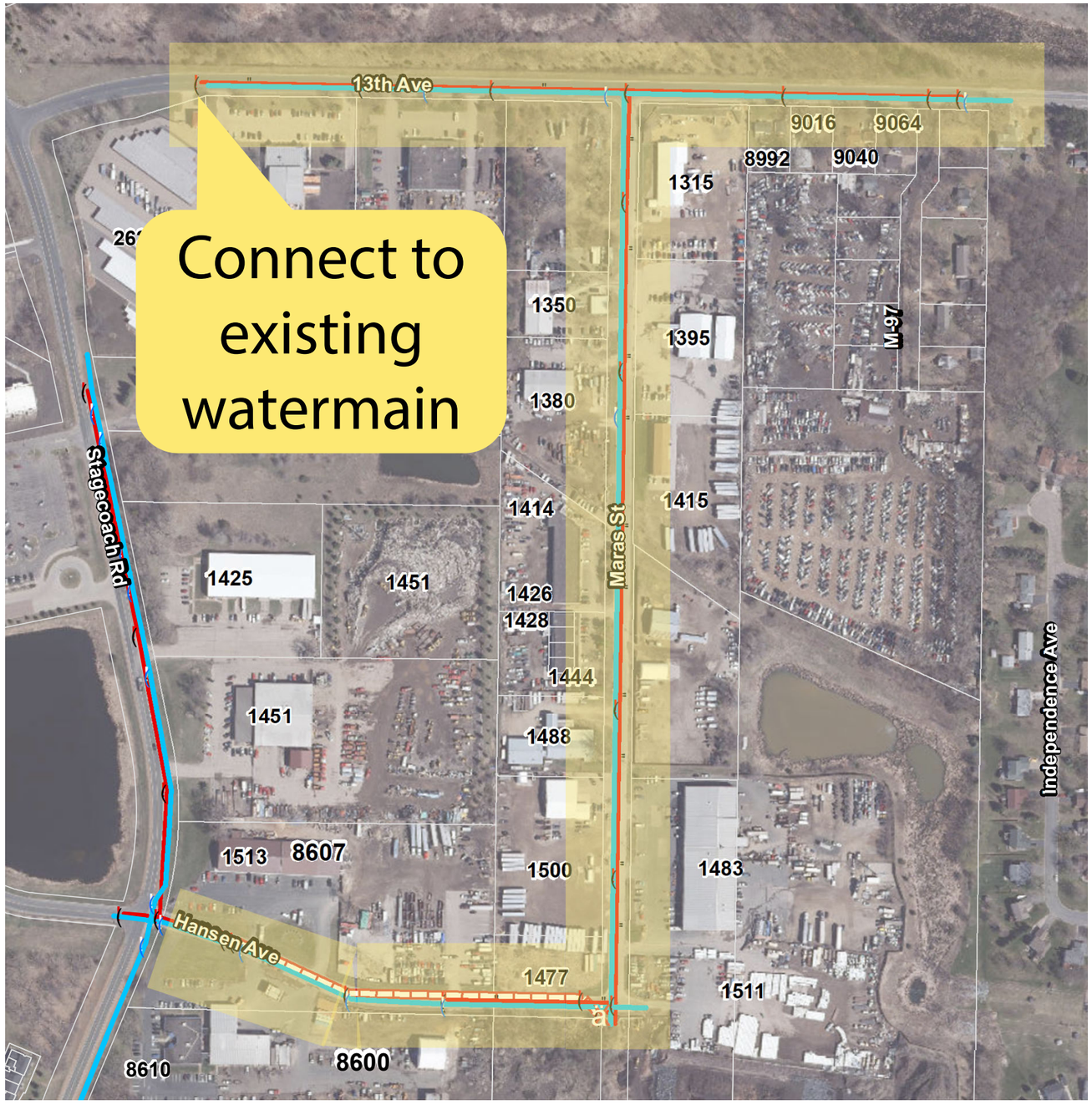
1 sample (7%) exceeds the guidance level for toluene

When Is It the "Right Time" to Install Sewer and Water?

- 55% of septic systems are known to have issues
- 47% of wells for potable use contain arsenic and/or nitrates
- Guidance levels exceeded in:
    - 46% of groundwater samples for barium and cadmium
    - 30% of groundwater samples for selenium
    - 100% of soil samples for barium and chromium
    - 28% of soil samples for lead
    - 1 soil sample for diesel range organics
    - 1 soil sample for toluene

Proposed Improvements- Sanitary Sewer and Watermain

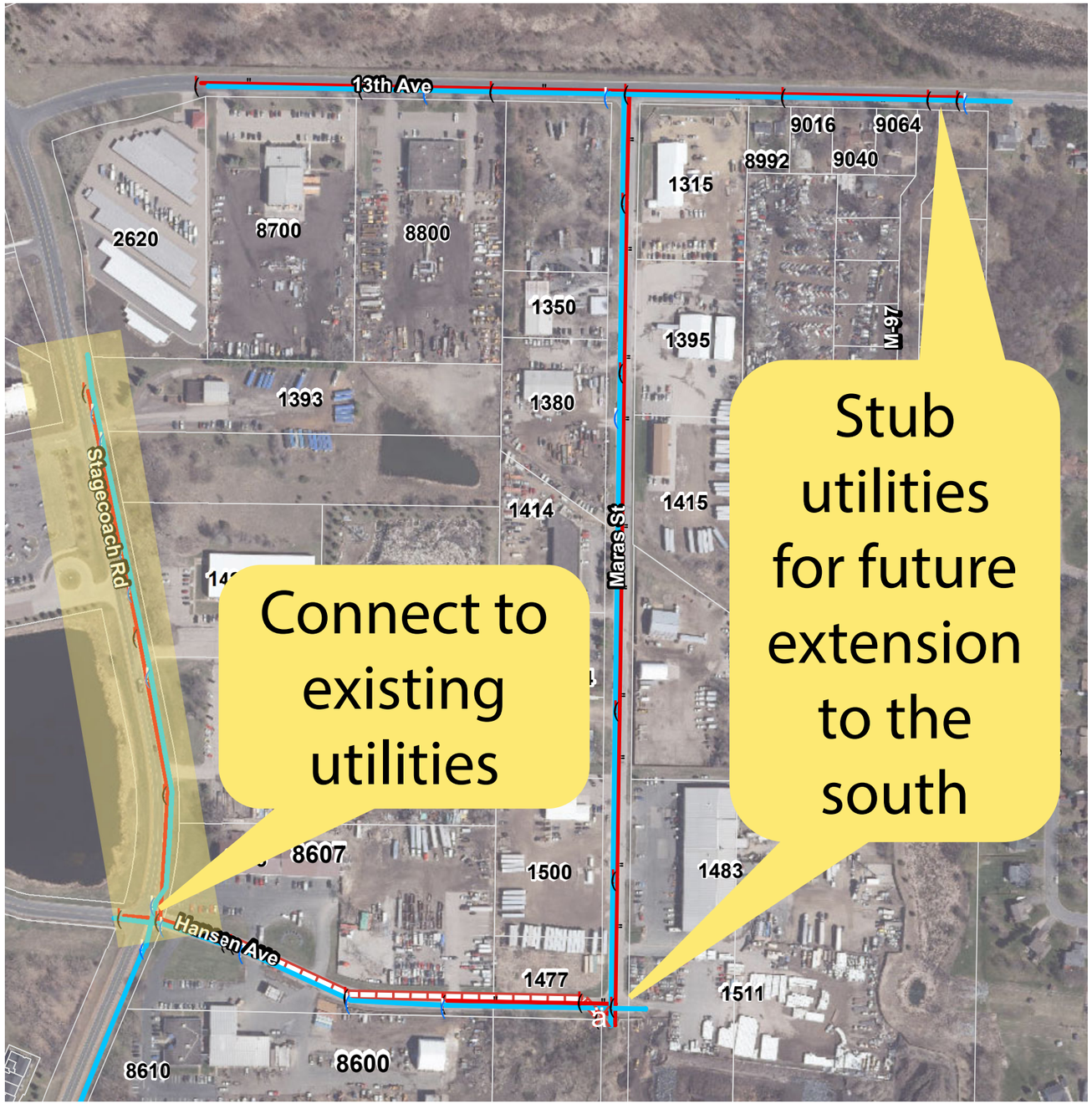
- Open cut installation of watermain and sanitary sewer in 13th Avenue, Maras Street and Hansen Avenue
- Installation of a sanitary sewer lift station near the intersection of Maras Street and Hansen Avenue



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Proposed Improvements- Sanitary Sewer and Watermain

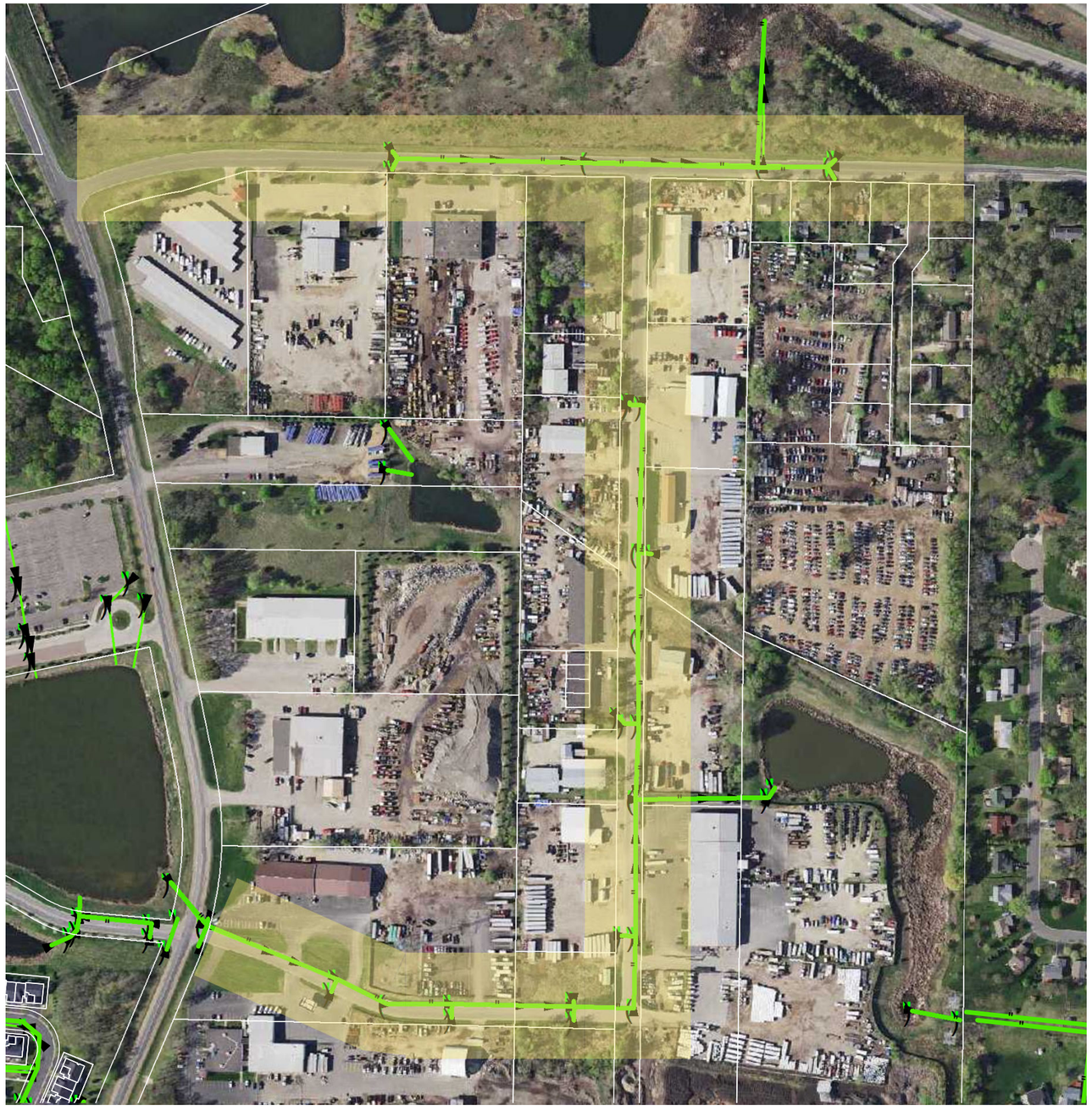
- Extension of watermain and sanitary sewer along the east side of Stagecoach Road
  - Sanitary sewer is designed to accommodate future redevelopment of the project area as well as the existing residential area to the south



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Proposed Improvements- Streets and Storm Sewer

- Storm sewer repairs and minor drainage improvements
- Reconstruction of 13th Avenue, Maras Street and Hansen Avenue to existing widths



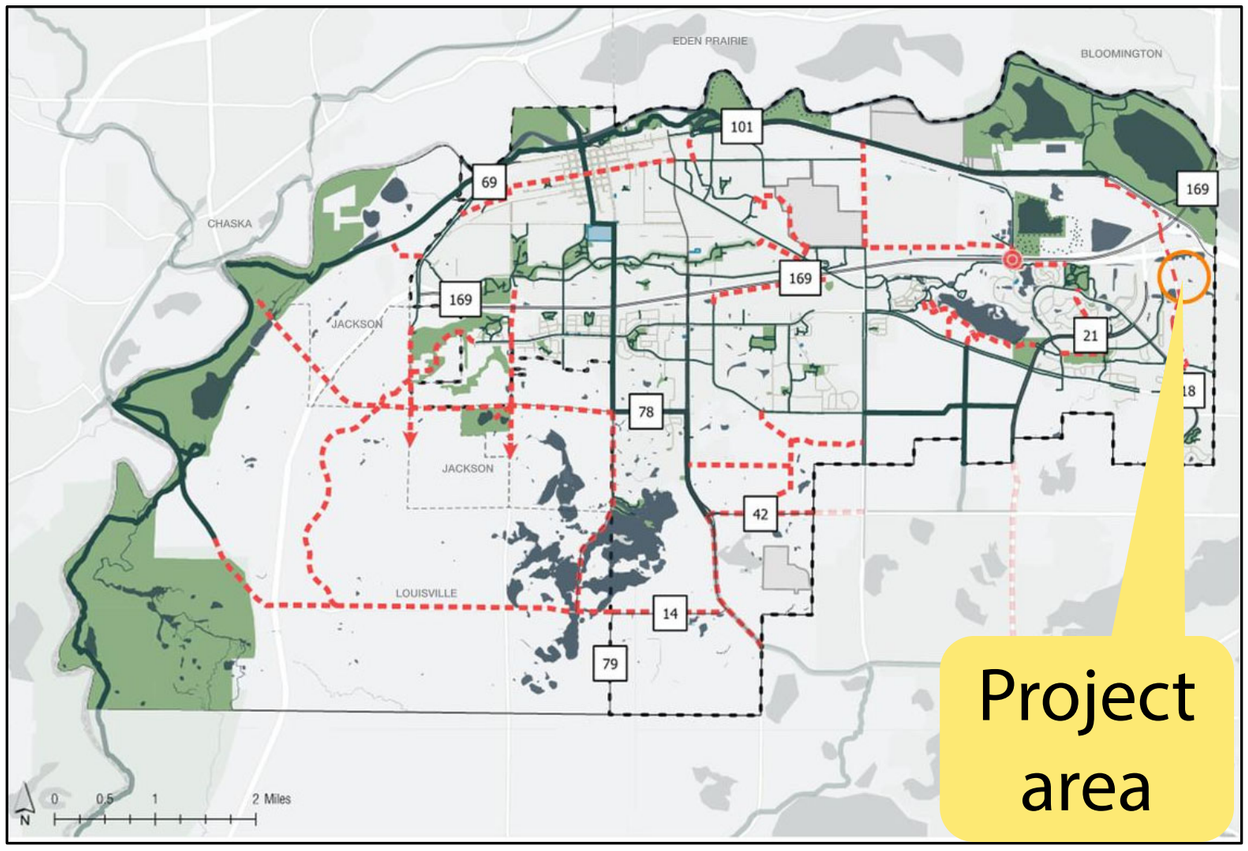
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Proposed Improvements- Street Lights



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Proposed Improvements- Sidewalks





Existing Sidewalk

Existing Trail

Proposed Concrete Sidewalk

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Project Inconveniences







Restoration

- Driveway aprons disturbed by the project will be restored
- Disturbed boulevard areas will be reseeded







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Estimated Project Costs

	Construction	Contingencies	Indirects	Total
Streets	$2,230,000	$223,000	$490,000	$2,943,000
Storm Sewer	$49,000	$5,000	$11,000	$65,000
Watermain	$1,088,000	$109,000	$239,000	$1,436,000
Sanitary Sewer	$305,000	$30,000	$67,000	$402,000
Sanitary Sewer Forcemain	$37,000	$4,000	$8,000	$49,000
Lift Station	$358,000	$36,000	$79,000	$473,000
Total Costs	$4,067,000	$407,000	$894,000	**$5,368,000**

Proposed Project Funding

$1,927,800	Capital Improvements Fund (Surface Imp.- 13th, Maras, Hansen)
$826,200	Special Assessments (Surface Imp.- 13th, Maras, Hansen)
$1,530,000	SPUC Water Fund (Watermain*)
$497,000	Sanitary Sewer Fund** (Gravity Sanitary Sewer*)
$473,000	Sanitary Sewer Fund (Lift Station)
$49,000	Sanitary Sewer Fund (Sanitary Sewer Forcemain)
$65,000	Storm Sewer Fund (Storm Sewer)

$5,368,000 Total estimated project cost

* Stagecoach Road surface costs are included in the sanitary sewer and watermain fees

** Sanitary sewer fund used for short-term cash flow; eventually 100% of the costs are recovered through the established fees

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Project Fees

Type of Fee		Current Fee
Street Assessment- All streets		$10,329.90/developable acre
Lateral Sanitary Sewer Connection Charge	Gravity Sewer	$4,625.41/developable acre
	Forcemain	$5,076.56/developable acre
Lateral Watermain Connection Fee		$14,802.63/developable acre*
Trunk Sanitary Sewer Charge		$3,012.00/developable acre
City Sewer Availability Charge		$520.00/SAC unit
MCES Sewer Access Charge		$2,485.00/SAC unit
Trunk Water Charge		$4,662.00/acre*
Water Capacity Charge		$5,526.00/SAC unit*

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*SPUC charges

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*SPUC charges

Estimated Fees and Estimated Benefit *

	Estimated Project Fee (per Developable Acre)	Indicated Benefit (per Buildable Acre)
Maras Street and Hansen Avenue Reconstruction and Extension of Sewer and Water	$42,267.50	$40,000 to $50,000
13th Avenue Reconstruction and Extension of Sewer and Water	$42,267.50	At or below $40,000
Sewer and Water Only	$31,937.60	$26,000 to $32,000
13th Avenue Reconstruction	$10,329.90	At or below $14,000

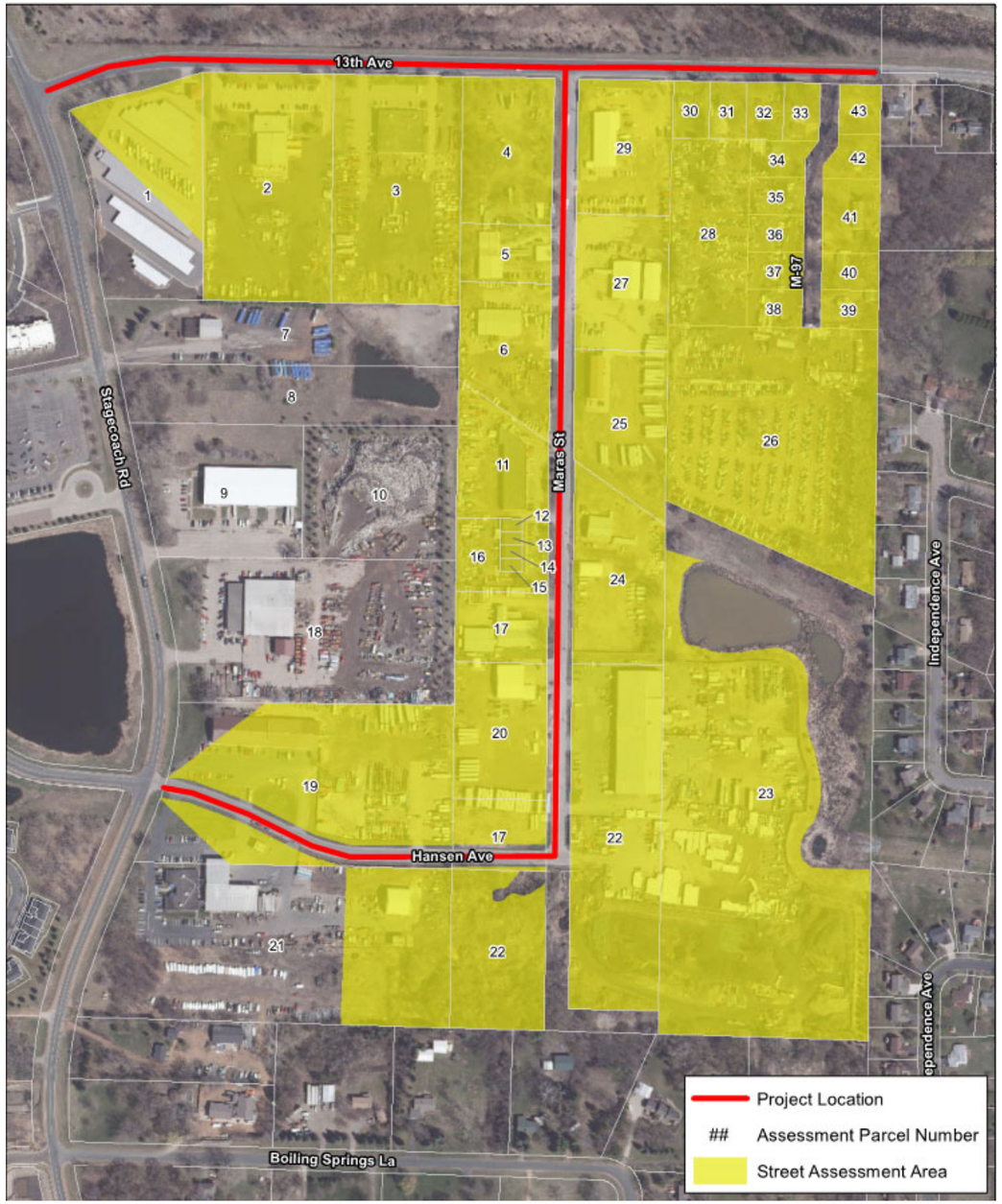
Note: This is a council-initiated project that requires **4/5ths** vote to proceed

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*Based on estimated construction costs

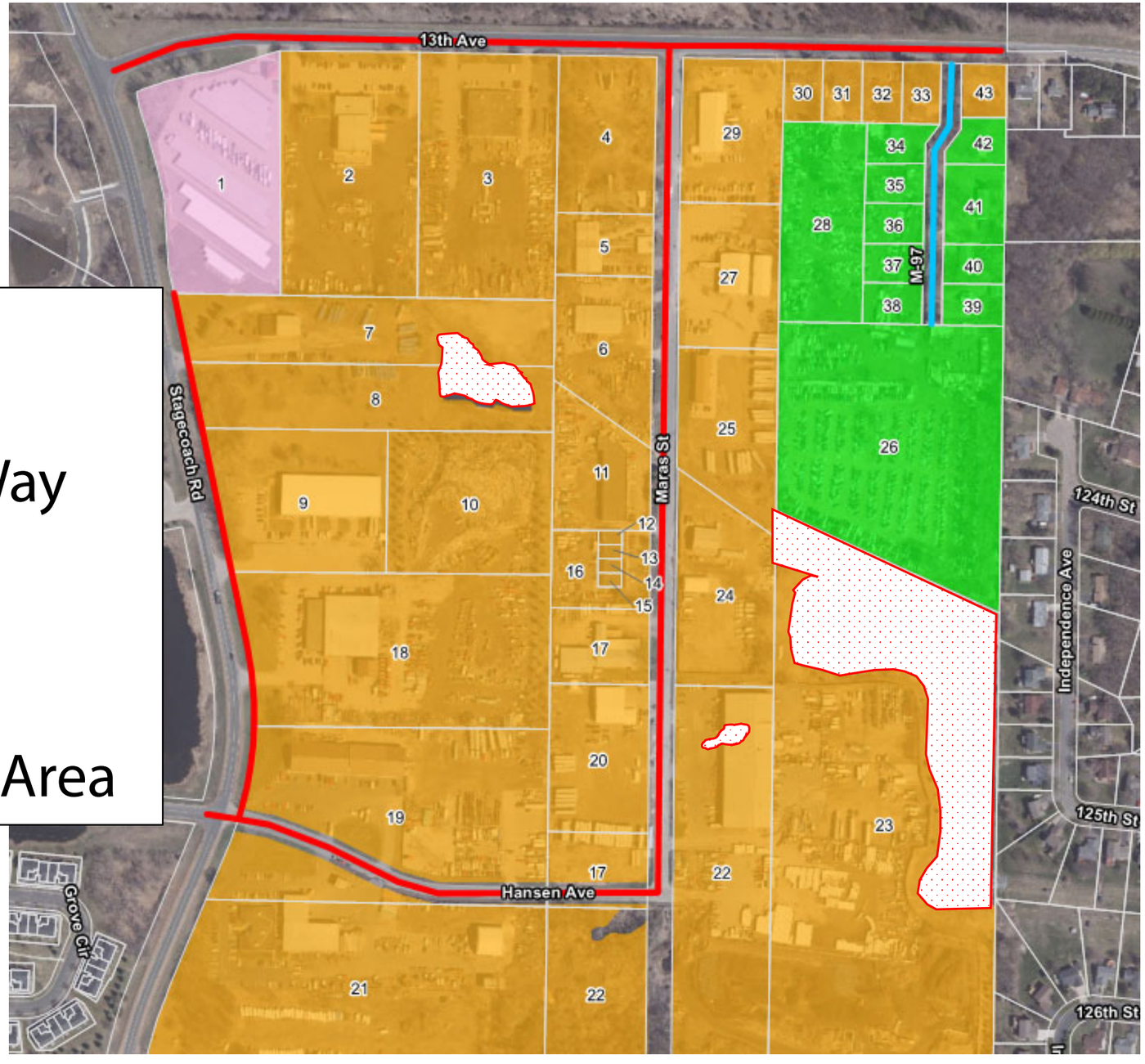
Street Assessment Map

———	Project location
##	Assessment Parcel Number
	Street Assessment Area



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Sanitary Sewer and Water Fee Map



- Project location
- Future Sewer & Water
- Excluded Wetland/Right of Way
- ## Parcel Number
- Sewer Fee Area
- Sewer and Water Fee Area
- Deferred Sanitary Sewer Fee Area

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Deferred Fee Map





- Project location
- ## Parcel Number
- Preliminary Deferred Fee Area (Future Project)
- Deferred Fee Area

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Preliminary Project Schedule

Authorize Feasibility Report……..……..May 8, 2020

Public Engagement Meeting……July 21, 2020

Second Public Engagement Meeting……...August 28, 2020

City Council Accepts Feasibility Report……March 16, 2021

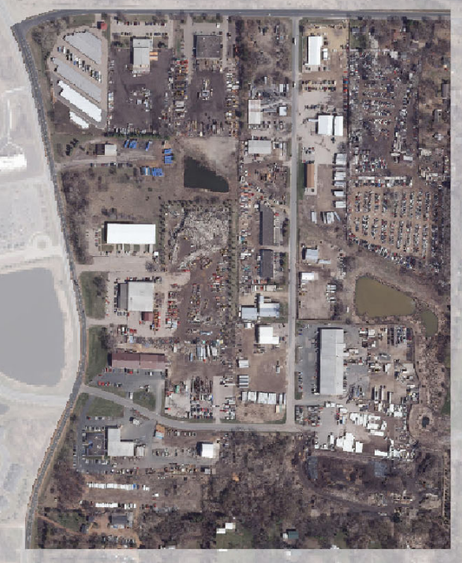
Public Hearing……...……April 20, 2021

Final Design……..Summer/Fall, 2021

Begin Construction……...……Spring, 2022

Substantial Completion……Fall, 2022

Questions?



Scott County GIS

Property Owner Payback/Funding Options
(Sanitary Sewer Only)

- Project Costs would be 100% recovered from property owners under all Scenarios.
- 4 Options Evaluated

1. Direct assessment (upon project completion)
2. Connection fee based:
   a) Connected and paid within 3-yrs or immediately if private system becomes defective (per city ordinance).
   b) Connected and paid within 5 years. Similar to Hilldale Drive (residential area), March 2015.
   c) Connected and paid upon property development OR at time of connection OR immediately after private system becomes defective (RECOMMENDED).