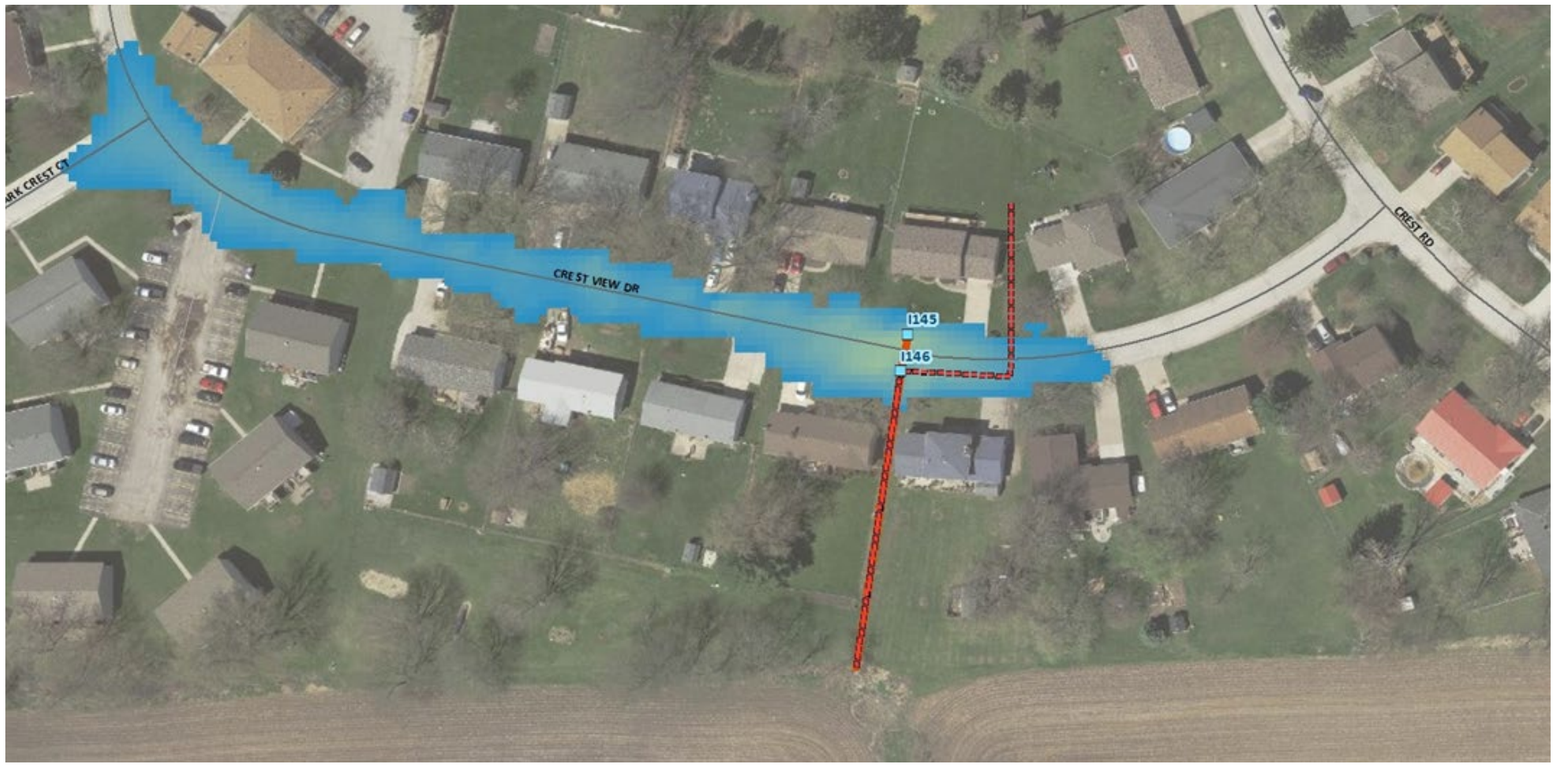
Item 3
3/29/2022

Scott County
Secondary Roads

Park View Stormwater Drainage System Analysis



Study Area

Figure 1
Park View Stormwater
Drainage System Analysis

Scott County, IA

Study Area
Park View
Parcel
Waterlines

Location within Scott County

Data Sources:
Roads: Scott County
Parcels: Scott County
Aerial: Scott County (2019)

MSA

0 300 600 Feet

N

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Print Date: 9/10/2021

Stormwater System

Figure 5
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Study Area
- Park View
- Parcel
- Building Footprint
- Waterbodies
- Waterlines
- Stormwater Pipe
- Stormwater Culvert
- Manhole
- Standard Inlet
- Double Inlet
- Triple Inlet
- Pipe Connection Not Found

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey

MSA

0 300 600 Feet

N

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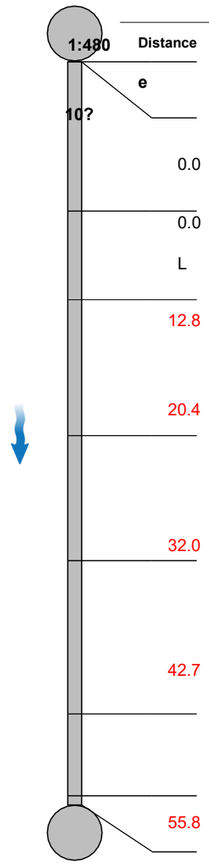
Hydro Klean

Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
3/29/2021			**James Head**	**217-07006890**	**10?_M159**
Year laid:	Pre-cleaning: **Light Cleaning**	Direction: **Downstream**	Pipe Joint Length:	Total Length: **63.6 '**	Length Surveyed: **63.6 '**

City:	**Eldridge**	Drainage Area:		Upstream MH:	**10?**
Street:	**Hillside Dr**	Media		t:	**0.0**
Location		Label: Flow		Up Rim to Inver :	**M1**
Code:		Control:		Downstream vert:	**59**
Location Details:		Sheet Number:		MH Down Rim to In	**0.0**
Pipe shape:	**Circular**	Sewer Use:	**Stormwater Pipe**	Total gallons us ed:	**0.0**
Pipe size:	**15 "**	Sewer Category:	**SEC**	Joints passed:	**0**
Pipe material:	**Vitrified Clay Pipe**	Purpo se:		Joints failed:	**0**
Lining Method:		Owne r:			

Additional Info:



Distance	Code	Observation	Counter	Photo	Grade
0.0	AMH	Manhole / 10?	00:00:03		
0.0	MWL	Water Level, 5% of the vertical dimension	00:00:06		
12.8	CM	Crack Multiple from 11 o'clock to 1 o'clock	00:00:48		S3
20.4	CM	Crack Multiple from 11 o'clock to 1 o'clock	00:01:25		S3
32.0	CM	Crack Multiple from 11 o'clock to 1 o'clock	00:01:56		S3
42.7	CM	Crack Multiple from 11 o'clock to 1 o'clock	00:02:28		S3
55.8	CM	Crack Multiple from 11 o'clock to 1 o'clock	00:03:41		S3
62.8	OBR	Obstruction Rocks, 15% of cross sectional area from 4 o'clock to 8 o'clock	00:03:55		M3
63.6	AMH	Manhole / M159	00:04:28		

M159

QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPRI	OPRI

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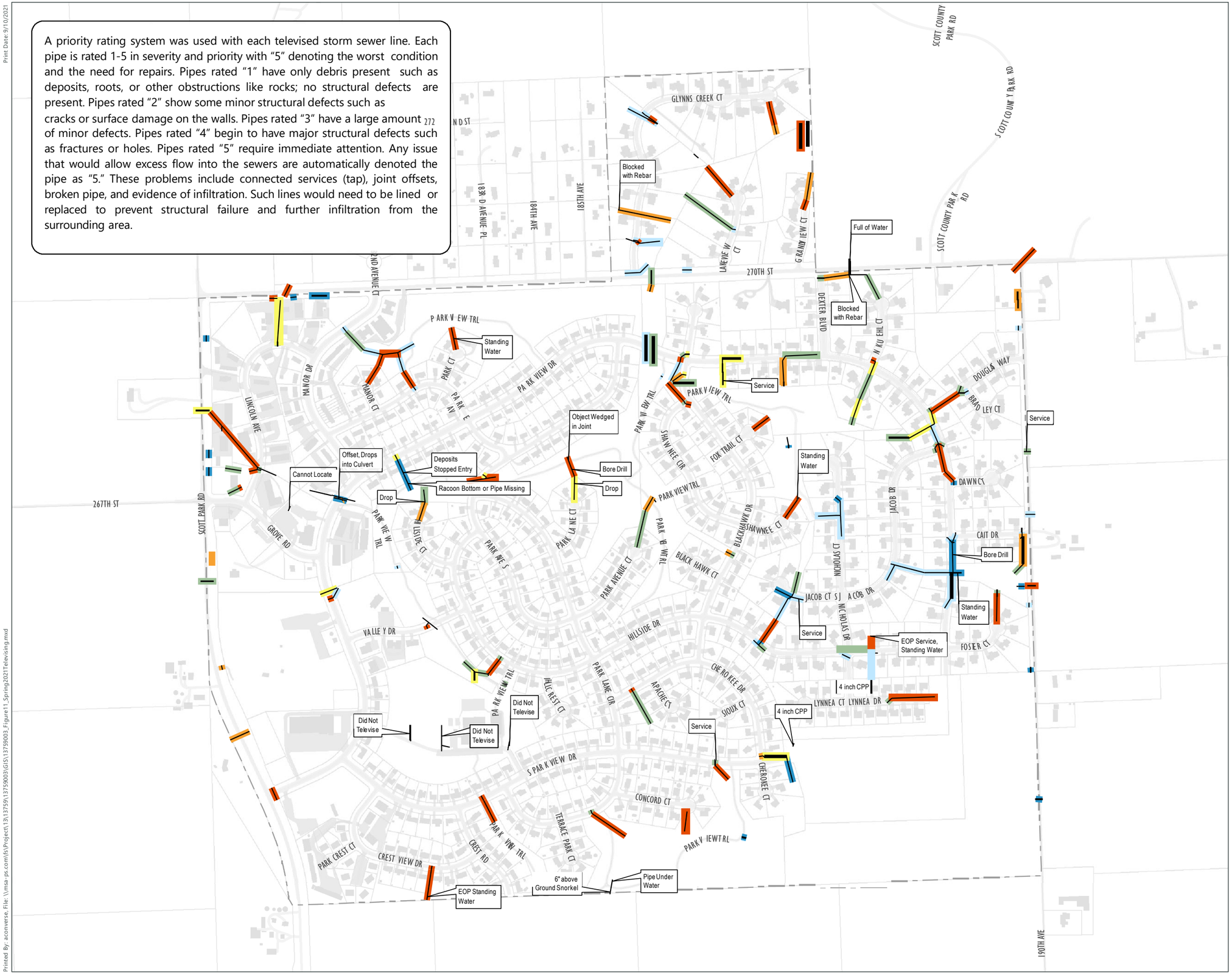
A priority rating system was used with each televised storm sewer line. Each pipe is rated 1-5 in severity and priority with "5" denoting the worst condition and the need for repairs. Pipes rated "1" have only debris present such as deposits, roots, or other obstructions like rocks; no structural defects are present. Pipes rated "2" show some minor structural defects such as cracks or surface damage on the walls. Pipes rated "3" have a large amount of minor defects. Pipes rated "4" begin to have major structural defects such as fractures or holes. Pipes rated "5" require immediate attention. Any issue that would allow excess flow into the sewers are automatically denoted the pipe as "5." These problems include connected services (tap), joint offsets, broken pipe, and evidence of infiltration. Such lines would need to be lined or replaced to prevent structural failure and further infiltration from the surrounding area.



Spring 2021 Televising

Figure 11
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Park View
- Parcel
- Stormwater Pipe/Culvert

Pipe/Culvert Televising Rating

- 0 - No Issues Identified
- 1 - Debris Present
- 2 - Few Minor Structural Defects
- 3- Many Minor Structural Defects
- 4 - Major Structural Defects
- 5 - Requires Immediate Attention

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
Televising Rating: MSA, based on televising completed by Hydro Klean in April 2021.

MSA

0 300 600 Feet

N

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Existing Conditions Inundation 5-year Event

Figure 6
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Park View
- Parcel
- Subwatershed
- Waterlines
- Stormwater Pipe
- Stormwater Culvert
- Manhole
- Standard Inlet
- Double Inlet
- Triple Inlet
- Updated Topography Required*

Inundation Depth (ft)

- 0.1 - 0.5
- 0.6 - 1
- 1.1 - 2
- 2.1 - 5
- 5.1 - 7
- 7.1+
- Problem Location

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
**LiDAR Data used for flood modeling is older than recent development. Since surface grading affects overland flow patterns, updated elevation information is required. Flood modeling in these areas will be inaccurate.*

Iowa Department of Homeland Security and Emergency Management, Iowa State Univerity GIS Facility.

MSA

0 300 600 Feet

N

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Existing Conditions Inundation 100-year Event

Figure 7
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Park View
- Parcel
- Subwatershed
- Waterlines
- Stormwater Pipe
- Stormwater Culvert
- Manhole
- Standard Inlet
- Double Inlet
- Triple Inlet
- Updated Topography Required*

Inundation Depth (ft)

- 0.1 - 0.5
- 0.6 - 1
- 1.1 - 2
- 2.1 - 5
- 5.1 - 7
- 7.1+
- Problem Location

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
**LiDAR Data used for flood modeling is older than recent development. Since surface grading affects overland flow patterns, updated elevation information is required. Flood modeling in these areas will be inaccurate.*

Iowa Department of Homeland Security and Emergency Management, Iowa State Univerity GIS Facility.

MSA

0 300 600 Feet

N

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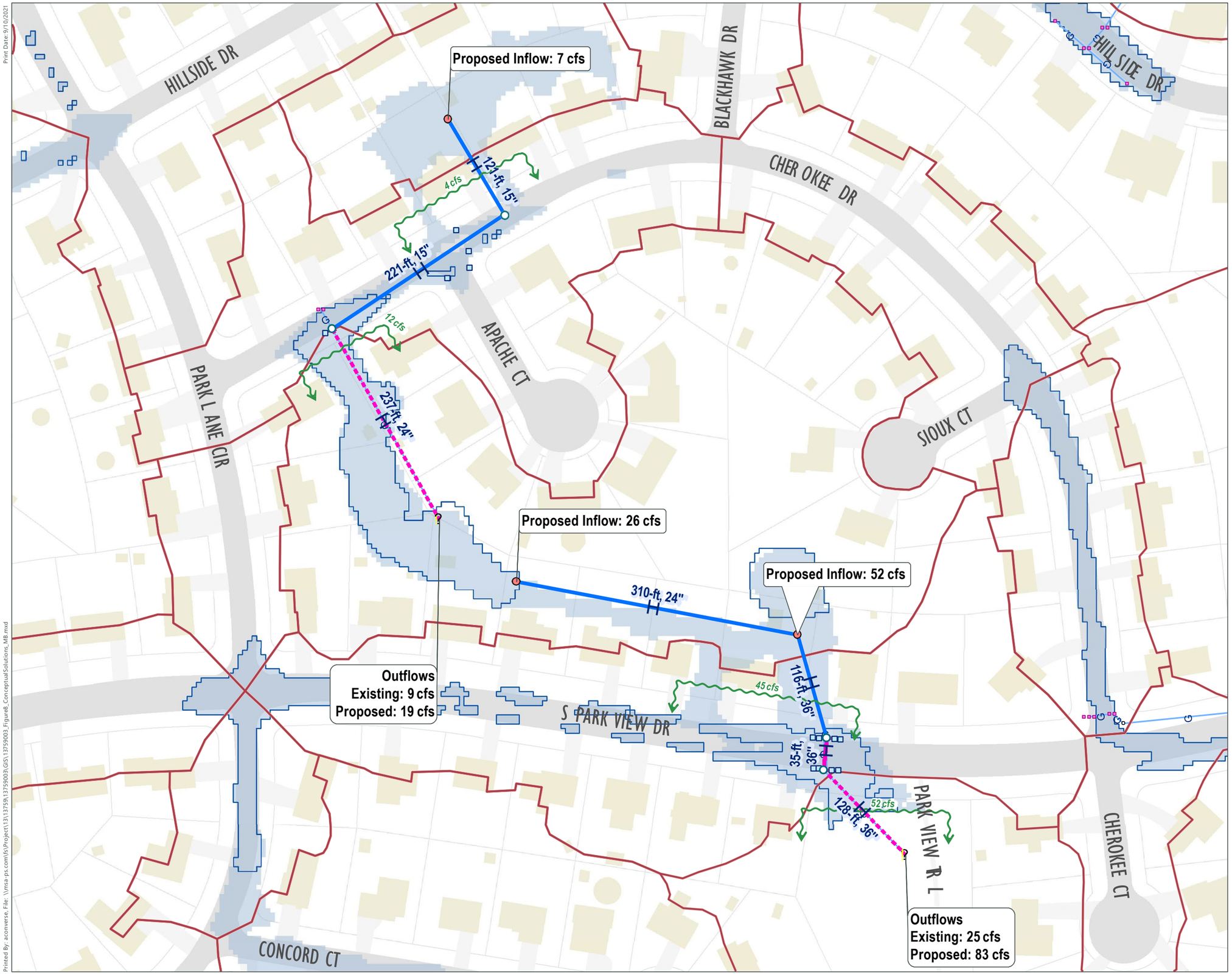
Conceptual Solutions Area A

Figure 8-1
Park View Stormwater
Drainage System Analysis

Scott County, IA



- Watershed
- Existing 100-yr Event Inundation
- Proposed 100-yr Event Inundation
- Existing Stormwater Pipe
- Existing Stormwater Culvert
- Existing Manhole
- Standard Inlet
- Double Inlet
- Triple Inlet
- Existing Overland Flows

Proposed Improvements

- Proposed Pipe, New
- Proposed Pipe, Replace Existing
- Proposed Access Structure (4)
- Proposed Inlet (13)
- Proposed Area Inlet (3)
- Proposed Outlet (2)

INSET MAP

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
Existing and Proposed Inundation: MSA. Proposed inundation assumes that all proposed projects are constructed.

MSA

0 40 80 Feet

N

Print Date: 9/10/2021

Proposed Conditions Inundation 5-year Event

Figure 9
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Park View
- Parcel
- Subwatershed
- Waterlines
- Existing Stormwater Pipe
- Existing Stormwater Culvert
- Updated Topography Required*

Inundation Depth (ft)

- 0.1 - 0.5
- 0.6 - 1
- 1.1 - 2
- 2.1 - 5
- 5.1 - 7
- 7.1+

- Proposed Pipe, New
- Proposed Pipe, Replace Existing
- Proposed Culvert, Replace Existing
- Problem Location

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
**LiDAR Data used for flood modeling is older than recent development. Since surface grading affects overland flow patterns, updated elevation information is required. Flood modeling in these areas will be inaccurate.*

Iowa Department of Homeland Security and Emergency Management, Iowa State Univerity GIS Facility.

MSA

0 300 600 Feet

N

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Print Date: 9/10/2021

Proposed Conditions Inundation 100-year Event

Figure 10
Park View Stormwater
Drainage System Analysis

Scott County, IA

- Park View
- Parcel
- Subwatershed
- Waterlines
- Existing Stormwater Pipe
- Existing Stormwater Culvert
- Updated Topography Required*

Inundation Depth (ft)

- 0.1 - 0.5
- 0.6 - 1
- 1.1 - 2
- 2.1 - 5
- 5.1 - 7
- 7.1+

- Proposed Pipe, New
- Proposed Pipe, Replace Existing
- Proposed Culvert, Replace Existing
- Problem Location

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
**LiDAR Data used for flood modeling is older than recent development. Since surface grading affects overland flow patterns, updated elevation information is required. Flood modeling in these areas will be inaccurate.*

Iowa Department of Homeland Security and Emergency Management, Iowa State Univerity GIS Facility.

MSA

0 300 600 Feet

N

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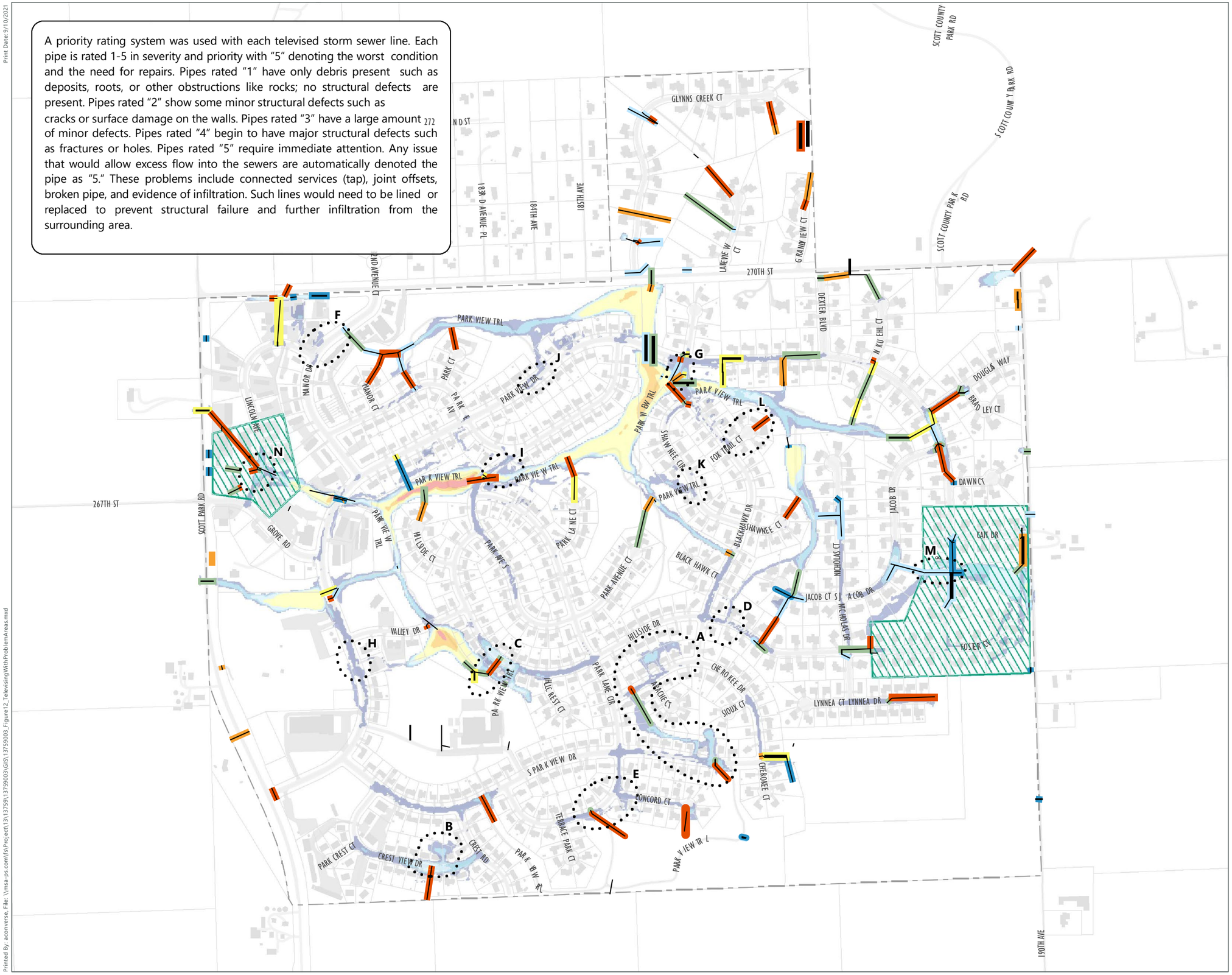
Print Date: 9/10/2021

A priority rating system was used with each televised storm sewer line. Each pipe is rated 1-5 in severity and priority with "5" denoting the worst condition and the need for repairs. Pipes rated "1" have only debris present such as deposits, roots, or other obstructions like rocks; no structural defects are present. Pipes rated "2" show some minor structural defects such as cracks or surface damage on the walls. Pipes rated "3" have a large amount of minor defects. Pipes rated "4" begin to have major structural defects such as fractures or holes. Pipes rated "5" require immediate attention. Any issue that would allow excess flow into the sewers are automatically denoted the pipe as "5." These problems include connected services (tap), joint offsets, broken pipe, and evidence of infiltration. Such lines would need to be lined or replaced to prevent structural failure and further infiltration from the surrounding area.



Spring 2021 Televising and Problem Areas

Figure 12
Park View Stormwater
Drainage System Analysis

Scott County, IA

Park View

Stormwater Pipe/Culvert

Updated Topography Required*

Pipe/Culvert Televising Rating

0 - No Issues Identified

1 - Debris Present

2 - Few Minor Structural Defects

3- Many Minor Structural Defects

4 - Major Structural Defects

5 - Requires Immediate Attention

100-Year Event

Existing Conditions Inundation Depth (ft)

0.1 - 0.5

0.6 - 1

1.1 - 2

2.1 - 5

5.1 - 7

7.1+

Problem Location

Data Sources:
Roads: Scott County
Parcels: Scott County
Stormwater System: MSA Survey
Televising Rating: MSA, based on televising completed by Hydro Klean in April 2021.

**LiDAR Data used for flood modeling is older than recent development. Since surface grading affects overland flow patterns, updated elevation information is required. Flood modeling in these areas will be inaccurate.*

MSA

0 300 600 Feet

N

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