**Program 8092 – Minneapolis Interceptor System Rehabilitation – Phase 2**

**Description**
This program includes facility planning and new projects to address aging infrastructure within or contributary to the City of Minneapolis. Potential projects include:
- Interceptor 1-MN-303 Pipe-in-Pipe Rehabilitation
- Interceptor 1-MN-320 Improvements

**Purpose and justification**
Interceptors in Minneapolis were constructed as early as 1891 and included tunnels constructed in the 1930s to intercept the old, combined sewers. Additional planning work is required to both identify projects needed to address capacity and to repair existing facilities. These projects will be prioritized into the future CIP.

**Program location**
The active projects within this program are in the following Council districts: 5, 6, 7, and 8

**Active projects in program**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>809200</td>
<td>Minneapolis Interceptor Rehabilitation Phase 2 (Parent Project) –Facility Planning</td>
</tr>
<tr>
<td>809205</td>
<td>Interceptor 1-MN-320 Improvements</td>
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<tr>
<td>809208</td>
<td>1-MN-345 Rehabilitation</td>
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<tr>
<td>809210</td>
<td>Minneapolis Sandstone Tunnel Evaluation</td>
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<tr>
<td>809211</td>
<td>1-MN-303 Pipe-in-Pipe Rehabilitation</td>
</tr>
<tr>
<td>809213</td>
<td>1-MN-310 Rehab between 23rd and 33rd Avenue North</td>
</tr>
<tr>
<td>809214</td>
<td>1-MN-310 Rehabilitation – Phase 1</td>
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<tr>
<td>8092XX</td>
<td>1-MN-346 Rehabilitation – Phase 2</td>
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</tbody>
</table>
Environmental Services 2024 through 2029 Capital Program

- Authorized Capital Program (ACP): $66,966,305
- Capital Improvement Plan (CIP): $28,000,000

Estimated program cash flow from 2024 through 2029
Note: the ACP is the total amount of all past and present authorizations including pre-2024 expenses.
Interceptor 1-MN-320 Improvements
Program family 8092

Project location: Council district #7, City of Minneapolis

Map of Project #809205 location south of Highway 55 and west of I-94 in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
A Draft Facility Plan recommends the construction of a lift station that serves flows coming into the Currie Avenue portion of 1-MN-320 and a realignment of the portion of 1-MN-320 along Dupont Avenue.

Project need
This interceptor, originally constructed in 1888, is in poor condition. In addition, the poor grades and likely settlement of the old interceptor causes solids accumulation in the pipe and results in odors.


Financial analysis
2024 cash flow: $300,000
Current ACP: $16,315,000
2024 through 2029 cash flow: $13,900,000
Total project cost: $16,315,000
Project location: Council district #5, City of Minneapolis, Crossing of Minnehaha Creek at Girard Avenue South

**Project type**
Interceptor Improvements

**Objectives**
Asset Preservation

**Scope**
ES will construct a temporary conveyance around the creek crossing and CIPP line the pipe.

**Project need**
Condition assessment showed an unlined section of Interceptor 1-MN-345 under the Minnehaha Creek in Minneapolis in poor condition. The project is needed to minimize the potential for pipe failure and the release of wastewater to the environment.

**Financial analysis**

<table>
<thead>
<tr>
<th>2024 cash flow:</th>
<th>$50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ACP:</td>
<td>$1,680,000</td>
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<tr>
<td>2024 through 2029 cash flow:</td>
<td>$1,600,000</td>
</tr>
<tr>
<td>Total project cost:</td>
<td>$1,680,000</td>
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</table>
Minneapolis Sandstone Tunnel Evaluation
Program family 8092
Project #809210

Project location: Council districts #6 and 7, City of Minneapolis, generally paralleling the Mississippi River

Map of Project #809210 location along the Mississippi River in Minneapolis

Project type
Condition Assessment

Objectives
Asset Preservation

Scope
Complete cave inspections on 1-MN-310 and 1-MN-340 and prepare inspection plans for 2024.

Project need
There is a risk of sandstone eroding over time from over the top of constructed tunnels through natural ground behavior. Condition assessments are needed to minimize the potential for pipe failure.

Planning: 2022 through 2023
Design: 2023
Construction: 2025 through 2026

Financial analysis
2024 cash flow: $350,000
Current ACP: $6,850,000
2024 through 2029 cash flow: $15,350,000
Total project cost: $15,850,000
**Project type**
Interceptor Improvements

**Objectives**
Asset Preservation

**Scope**
Repair pipe-in-pipe using removal and replacement and/or CIPP.

**Project need**
Interceptor 1-MN-303 was built in the early 1920s as a 102-inch reinforced concrete combined sanitary/storm sewer. The segment of 1-MN-303 on 31st Avenue NE between Randolph Street NE and Columbia Golf Course was converted to a PIP separated sewer in 1965 using inlaid deformed corrugated metal pipe (CMP). A walking inspection conducted in January 2022 identified severe damage and corrosion that is allowing significant inflow of stormwater into the sanitary sewer.

**Financial analysis**
- 2024 cash flow: $5,000,000
- Current ACP: $10,358,000
- 2024 through 2029 cash flow: $10,000,000
- Total project cost: $10,358,000
1-MN-310 Rehabilitation Between 23rd and 33rd Avenue North
Program family 8092
Project #809213

Project location: Council district #7, City of Minneapolis

Map of Project #809213 location south of Lowry Avenue and east of I-94 in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Line 5,000 feet of 1-MN-310 from 34th Avenue North to 22nd Avenue North and rehabilitate 20 maintenance holes.

Project need
Interceptor 1-MN-310 is adjacent to the proposed Upper Harbor Terminal project in Minneapolis. Recent CCTV inspection has identified Condition 4 deterioration between 34th and 22nd Avenues North. The project schedule will be coordinated to limit impacts on future development in the area.

Planning: 2020
Design: 2020 through 2023
Construction: 2023 through 2025

Financial analysis
2024 cash flow: $500,000
Current ACP: $12,700,000
2024 through 2029 cash flow: $12,550,000
Total project cost: $12,700,000
1-MN-346 Rehabilitation – Phase 1  
Program family 8092  
Project #809214

Project location: Council district #6, Cities of Minneapolis and Richfield, north side of the airport to the north side of Bossen Field

**Map of Project #809214 location north of Highway 62 in Richfield and Minneapolis**

**Project type**
Interceptor Improvements

**Objectives**
Asset Preservation

**Scope**
Rehabilitate the existing Condition 5 pipe between Bossen Field and 53rd Street East or replace it.

**Project need**
Methane gases are likely entering Interceptor 1-MN-346 through surrounding fill materials. High methane concentrations have been found at structures along Bossen Field park and upstream to Meter M130. The interceptor was identified as being in poor condition in previous assessment. Lining the interceptor will preserve the pipe and minimize gases from entering the sewer potentially causing hazardous conditions.

**Financial analysis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow</th>
<th>ACP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2024 cash flow</td>
<td>$1,850,000</td>
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<tr>
<td>Current ACP</td>
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<td>2024 through 2029 cash flow</td>
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<tr>
<td>Total project cost</td>
<td>$3,450,000</td>
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</tbody>
</table>

**Planning:** 2022  
**Design:** 2023  
**Construction:** 2024 through 2025
Project type
Interceptor Improvements

Objectives
Asset Preservation and System Expansion

Scope
A study is underway to determine whether a new interceptor pipe should replace the existing 1-MN-346 interceptor or divert flow through a parallel pipe to increase capacity and reduce maintenance.

Project need
Hydraulic modeling conducted by ES in partnership with Edina indicate future capacity issues. A sag between 54th and 56th Streets along 1-MN-346 has been problematic for maintenance with grease buildup and limits the capacity of the pipe.

Planning: 2023  
Design: 2024  
Construction: 2025 through 2026

Financial analysis
2024 cash flow: $250,000  
Current ACP: $3,820,000  
2024 through 2029 cash flow: $9,250,000  
Total project cost: $9,325,000