### STRUCTURAL:

- Designed to withstand extreme events
- Forces calculated with computational fluid dynamics

### PERFORMANCE:

- Sediment removal & retention functions determined with lab testing
- Field verified

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**THE PRESERVER™ SPECIFY WITH CONFIDENCE**

**Plan View**

Refer to manhole sizing chart to ensure project specific design feasibility.

**CROSS SECTION AA**

**Note 1:** The PRESERVER™ energy dissipator was designed and tested to function with or without skimmer. Dissipators & skimmers can be utilized together or independently.

**Note 2:** Maximize elevation difference between inlet and outlet inverts for the PRESERVER™ to function as designed.

**Note 3:** Stock skimmers have a minimum freeboard depth of 18". For greater freeboard depth, designers can utilize the skimmer, or use a customized skimmer for custom designs, and/or project specific details, contact momentum.

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**Technical Specifications**

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>Allowable Peak Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;-15&quot;</td>
<td>20 GFS</td>
</tr>
<tr>
<td>18&quot;-24&quot;</td>
<td>36 GFS</td>
</tr>
<tr>
<td>22&quot;-27&quot;</td>
<td>60 GFS</td>
</tr>
<tr>
<td>28&quot;-36&quot;</td>
<td>100 GFS</td>
</tr>
<tr>
<td>37&quot;-48&quot;</td>
<td>175 GFS</td>
</tr>
</tbody>
</table>

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**Preservation Case Study**

County State Aid Highway 23 Reconstruction - Oak Park Heights, MN

**Background**

- The Preserver was specified to provide performance prior to challenge due to extensive local events.
- Drainage area: 1.5 mi², residential
- 0.6 mi² impervious (27%)
- Minimum tree canopy
- Waterbodies:
  - 3' diameter
  - 3' water depth
  - Bi-weekly, up to skimmer
  - 40° surface, with skimmer

**Observations**

- Noise level testing resulted in some accumulation on the inlets, which ceased following larger storm events.
- Device performed as intended, capturing & retaining material in the structures.
- Low specific gravity of retained materials (tightly packed, high-negative solids).

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**Preserver Case Study**

Preserver Case Study

Preserver Case Study

Preserver Case Study