STORMVAULT BIOFILTRATION (SVBF)

**Configuration:** TREE WELL (TW)  
**Model:** SVBF-TW 8X10

**Hydraulics**
- **STORMWATER QUALITY DESIGN FLOW (SQDF):** xx.xx-CFS
- **STORM DRAIN DESIGN CONVEYANCE FLOW:** xx-CFS

**Treatmen**
- **JENSEN'S SIERRA BLEND**
  - *Varies*
- **BIO SOIL MEDIA**
  - Jensen's Engineered Sierra Blend
  - Designed to treat the entire SQDF.
- **2. CAPTURED QUALITY CONSTITUENTS:**
  - Suspended solids
  - Copper
  - Oil & grease
  - Fecal coliform

**Construction & Installation Notes**
1. **Contractor to verify all dimensions and elevations in field prior to installation.**
2. **The Contractor is responsible for all connections to the storm drain.**
3. **Contractor may also install all PVC penetrations in field concrete openings in field as necessary.**
4. **The Contractor shall provide field-pour of curb to the elevations shown on the site drawings as necessary.**
5. **The connections between the storm drain line and the SVBF shall be made using a resilient connector conforming to ASTM C133, as made by VCR in seal A, or approved GDL, and shall be watertight.**
6. **The storm drain system shall be designed and fabricated by others.**
7. **The storm drain system shall be designed and fabricated by others.**
8. **The storm drain system shall be designed and fabricated by others.**
9. **Inlet treatments shall be located on any side of the box and their dimensions vary for design.**

**Materials & Design Parameters**
1. **All dimensions are in decimal inches.**
2. **Concrete shall have a minimum compressive strength f’c = f’c-36 or at 28 days.**
3. **The Portland cement used in the precast section shall meet the requirements of Type I/II/III/IV/III/V with Class GO/C/DS.**
4. **Valve sections designed and manufactured in accordance with ASTM C65 & C365.**
5. **All precast concrete components to be manufactured using high-quality materials and meet standards for durability and performance.**
6. **Bridges and other concrete components to be manufactured using high-quality materials and meet standards for durability and performance.**
7. **Concrete produced in accordance with ASTM C150 and other relevant standards.**
8. **For complete design and product information, contact Jensen Precast Systems.**
9. **All concrete component thicknesses, dimensions, and joint orientations may vary across Jensen Precast manufacturing facilities.**

**JENSEN'S SIERRA BLEND**
- Bioretention infiltration
- Biofiltration
- Treatment
- Hydraulics
**STORMVAULT BIOFILTRATION (SVBF) CONFIGURATION: TREE WELL (TW) MODEL: SVBF-TW 8X10**

**HYDRAULICS**

| Stormwater Quality Design Flow (SQDF) | X X X A-CFS |
| Storm Drain Design Conveyance Flow | X X A-CFS |
| Return Frequency / Period of Peak Design Conveyance Flow | XX-YRS |

**TREATMENT**

<table>
<thead>
<tr>
<th>Bio Solid Filtration Media</th>
<th>Public Domain Bio Solid Media*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio Solid Media (Unitized)</td>
<td>10-RBA150</td>
</tr>
<tr>
<td>Treatment Filter Rate - Underdrain Surface Loading On 13 (HR/FT²)</td>
<td>0.5-GPM/FT² 2-GPM/FT²</td>
</tr>
<tr>
<td>Model SVBF-TW 8X10 Peak Treatment Flow</td>
<td>0.318-CFS 0.20-CFS</td>
</tr>
</tbody>
</table>

* Jensen Stormwater & Infiltration Technology Tree Planting Stormvault Biofiltration Used to Treat the Entire Area at Rates of 30-Minutes When Using Public Domain-Bio Solid Media.

**Jensen Stormwater & Infiltration Technology Tree Planting Stormvault Biofiltration Used to Treat the Entire Area at Rates of 28-Days When Using Public Domain-Bio Solid Media.**

**Jensen Stormwater & Infiltration Technology Tree Planting Stormvault Biofiltration Used to Treat the Entire Area at Rates of 55-Hours When Using Public Domain-Bio Solid Media.**

1. Jensen’s Stormvault Biofiltration (SVBF) designed and used to treat the entire SQDF.
2. Captured Water Quality Constituents:
   - Suspended Solids (TSS)
   - Particulate Matter
   - Total and Dissolved Copper
   - Total and Dissolved Zinc
   - Oil & Grease
   - Total Coliform

**CONSTRUCTION & INSTALLATION NOTES**

1. Contractor to Verify all Dimensions and Elevations in Field Prior to Installation.
2. The connection between the internal drain pipes of the SVBF shall be made using gooseneck connectors conforming to ASTM C121, as made by R&B in Gilac, A-Lor, or approved equal and shall be watertight.
3. Contractor may also grout all pipe penetrations in Precast concrete openings in Field as necessary.
4. Contractor to provide field pour of curb to the elevations shown on the site drawings as necessary.
5. The connection between the storm drain line and the SVBF shall be made using a resilient connector conforming to ASTM C121, as made by R&B in Gilac, A-Lor, or approved equal and shall be watertight.
6. Vegetation, Foundation, Subgrade, and Backfill to be designed by others.
7. SVBF Can Easily Be Reconfigured as an Open Top Vault System to Receive Surface Flow Within the Storm Drain System.
8. SVBF May Be Employed Unmodified as Of Walls To Be Poured In Field Allow Big For Construction of Continuous Stabilized And Landscaped Features.

**MATERIALS & DESIGN PARAMETERS**

1. All dimensions are in decimal inches.
2. Concretes shall have a minimum compressive strength f′c = 5,000 psi at 28 days.
3. The Portland cement used in the Precast sections shall meet the requirements of ASTM C150 Type II/V high sulfate resistant cement in accordance with ASTM C150, Type II-V.
4. Vault Sections Designed and Manufactured in accordance with ASTM C857 C858.
5. All Precast Concrete Components to be manufactured in an NRC Certified Plant.
6. If required, all vaults will be furnished with fluid applied waterproofing coating around internal surfaces of SVBF.
7. Vault Sections Can Be Manufactured to Sizes spawn to meet Size.
8. All PVC Pipes shall conform to A1559 Size 25 (OD) 30 (ID).
9. Documentation is required, or to inspect, to determine the bottom of Precast Structure.
10. Complete Stormwater System for high groundwater conditions.
11. Standard configurations are shown, alternate configurations are readily Available.
13. For Complete Design and Product Information, Contact JENSEN STORMWATER SYSTEMS, 521 Dunn Circle, Sparks, NV 89431, (855) 468-5600.
14. All Components are designed for use in Manufacturing facilities.

**STORMVAULT BIOFILTRATION TREE WELL MODEL: SVBF-TW 8X10**

**PROJECT NAME: CITY, STATE**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>City, State</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVBF-TW 8X10</td>
<td>T. Schramling</td>
</tr>
</tbody>
</table>

**COMPANY NAME**

JENSEN

521 Dunn Circle, Sparks, NV 89431

www.jensenengineeredsystems.com

(855) 468-5600

**SIGNATURE**

T. Schramling

5/28/2020

2 of 2