

# STORMVAULT BIOFILTRATION (SVBF)

## CONFIGURATION: TREE WELL (-TW)

### MODEL: SVBF-TW 8X10

#### HYDRAULICS

STORM WATER QUALITY DESIGN FLOW (SQDF)	≤ XX.X-CFS
STORM DRAIN DESIGN CONVEYANCE FLOW	XX.X-CFS
RETURN REQUENCY / PERIOD OF PEAK DESIGN CONVEYANCE FLOW	XX-YRS

#### TREATMENT

BIO SOILS FILTRATION MEDIA	PUBLIC DOMAIN BIO SOIL MEDIA*	JENSEN'S SIERRA BLEND **
BIO SOIL MEDIA UNITIZED	10-IN/HR	193-IN/HR
TREATMENT FLUX RATE		
HYDRAULIC SURFACE	0.1-GPM/FT <sup>2</sup>	2-GPM/FT <sup>2</sup>
LOADING RATE (HSLR)		
MODEL SVBF-TW 8X10 PEAK	0.018-CFS	0.357-CFS
TREATMENT FLOW RATE	8.0-GPM	160-GPM

\*JENSEN BIORETENTION & INFILTRATION TREE/PLANTER **STORMVAULT BIOFILTRATION** SIZED TO TREAT THE ENTIRE SQDF AT A RATE OF 10-INCHES/HR WHEN USING SPECIFIED PUBLIC DOMAIN BIO SOIL MEDIA.

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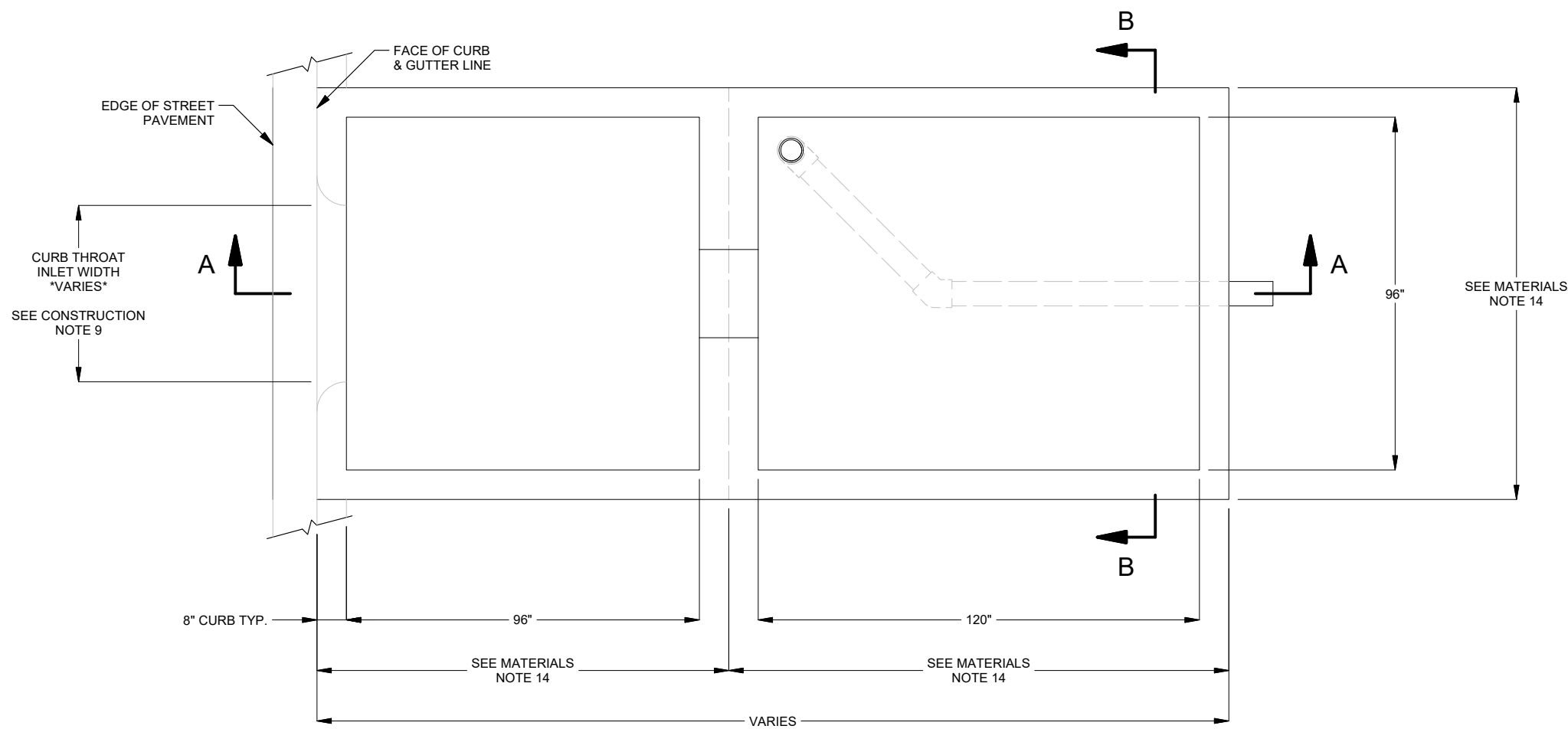
- JENSEN'S STORMVAULT BIOFILTRATION (SVBF) DESIGNED AND SIZED TO TREAT THE ENTIRE SQDF.
- CAPTURED WATER QUALITY CONSTITUENTS:
  - TOTAL SUSPENDED SOLIDS (TSS)
  - PHOSPHORUS
  - TOTAL AND DISSOLVED COPPER
  - TOTAL AND DISSOLVED ZINC
  - OIL & GREASE
  - FECAL COLIFORM

#### CONSTRUCTION & INSTALLATION NOTES

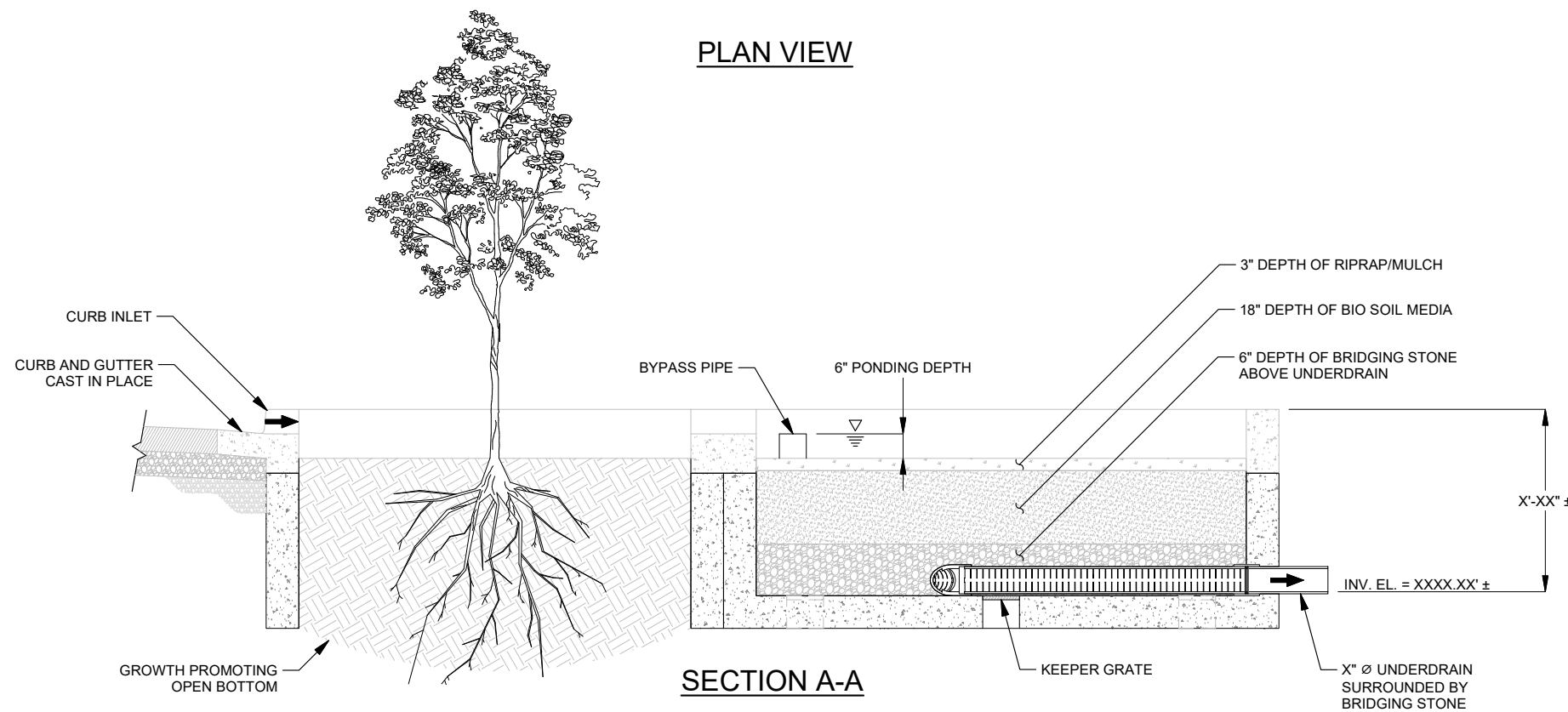
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS IN FIELD PRIOR TO INSTALLATION.
- THE CONNECTION BETWEEN THE INTERNAL DRAIN PIPING OF THE SVBF SHALL BE MADE USING CONNECTORS CONFORMING TO ASTM C923, AS MADE BY KOR-N-SEAL, A-LOK, OR APPROVED EQUAL AND SHALL BE WATERTIGHT.
- CONTRACTOR MAY ALSO GROUT ALL PIPE PENETRATIONS IN PRECAST CONCRETE OPENINGS IN FIELD AS NECESSARY.
- CONTRACTOR TO PROVIDE FIELD POUR OF CURB TO THE ELEVATIONS SHOWN ON THE SITE DRAWINGS AS NECESSARY.
- THE CONNECTION BETWEEN THE STORM DRAIN LINE AND THE SVBF SHALL BE MADE USING A RESILIENT CONNECTOR CONFORMING TO ASTM C923, AS MADE BY KOR-N-SEAL, A-LOK, OR APPROVED EQUAL AND SHALL BE WATERTIGHT.
- VEGETATION, FOUNDATION, SUBGRADE, AND BACKFILL TO BE DESIGNED BY OTHERS.
- SVBF CAN READILY BE RECONFIGURED AS AN OPEN TOP SWALE SYSTEM TO RECEIVE SURFACE FLOW FROM ALL SIDES, ELIMINATING TOP SLAB AND TREE GRATE.
- SVBF MAY BE DEPLOYED WITH UNFINISHED TOP OF WALLS TO BE POURED IN FIELD ALLOWING FOR CONSTRUCTION OF CONTINUOUS STREETScape AND LANDSCAPE FEATURES.
- INLETS THROUGH CURB CAN BE LOCATED ON ANY SIDE OF THE BOX AND THEIR DIMENSIONS VARY PER DESIGN.

#### MATERIALS & DESIGN PARAMETERS

- ALL DIMENSIONS ARE IN DECIMAL INCHES.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH F<sub>c</sub> = 5,000-psi AT 28-DAYS.
- THE PORTLAND CEMENT USED IN THE PRECAST SECTION SHALL MEET THE REQUIREMENTS OF TYPE II/V HIGH SULFATE RESISTANT CEMENT IN ACCORDANCE WITH ASTM CLASS M C-150.
- VAULT SECTIONS DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ASTM C857 & C858
- ALL PRECAST CONCRETE COMPONENTS TO BE MANUFACTURED IN AN NPCA CERTIFIED PLANT.
- IF REQUIRED, JENSEN WILL FURNISH VAULT WITH FLUID-APPLIED WATERPROOFING COATING AROUND ENTIRE INSIDE SURFACE OF SVBF.
- BRIDGING STONE SHALL BE CLEAN, WASHED.
- ALL PVC PIPE SHALL CONFORM TO ASTM D 3034 (SDR-35) PIPE.
- GROUNDWATER ELEVATION IS ASSUMED TO BE BELOW THE BOTTOM OF PRECAST STRUCTURE. CONTACT JENSEN STORMWATER SYSTEMS FOR HIGH GROUNDWATER CONDITIONS.
- STANDARD CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE READILY AVAILABLE. CONTACT JENSEN STORMWATER SYSTEMS FOR CUSTOM DESIGNS, [www.jensenengineeredsystems.com](http://www.jensenengineeredsystems.com).
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PLAN VIEW



SECTION A-A

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[www.jensenwaterresources.com](http://www.jensenwaterresources.com)  
 (855) 468-5600

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STORMVAULT BIOFILTRATION  
 TREE WELL  
 MODEL: SVBF-TW 8X10

PROJECT:

PROJECT NAME  
 CITY, STATE

PART NUMBER:

SVBF-TW 8x10

DRAWN BY:

T. Schmaling

CREATED:

MODIFIED:

5/28/2020

REV:

SHEET:

1 of 2

SVBF-TW 8X10.dwg

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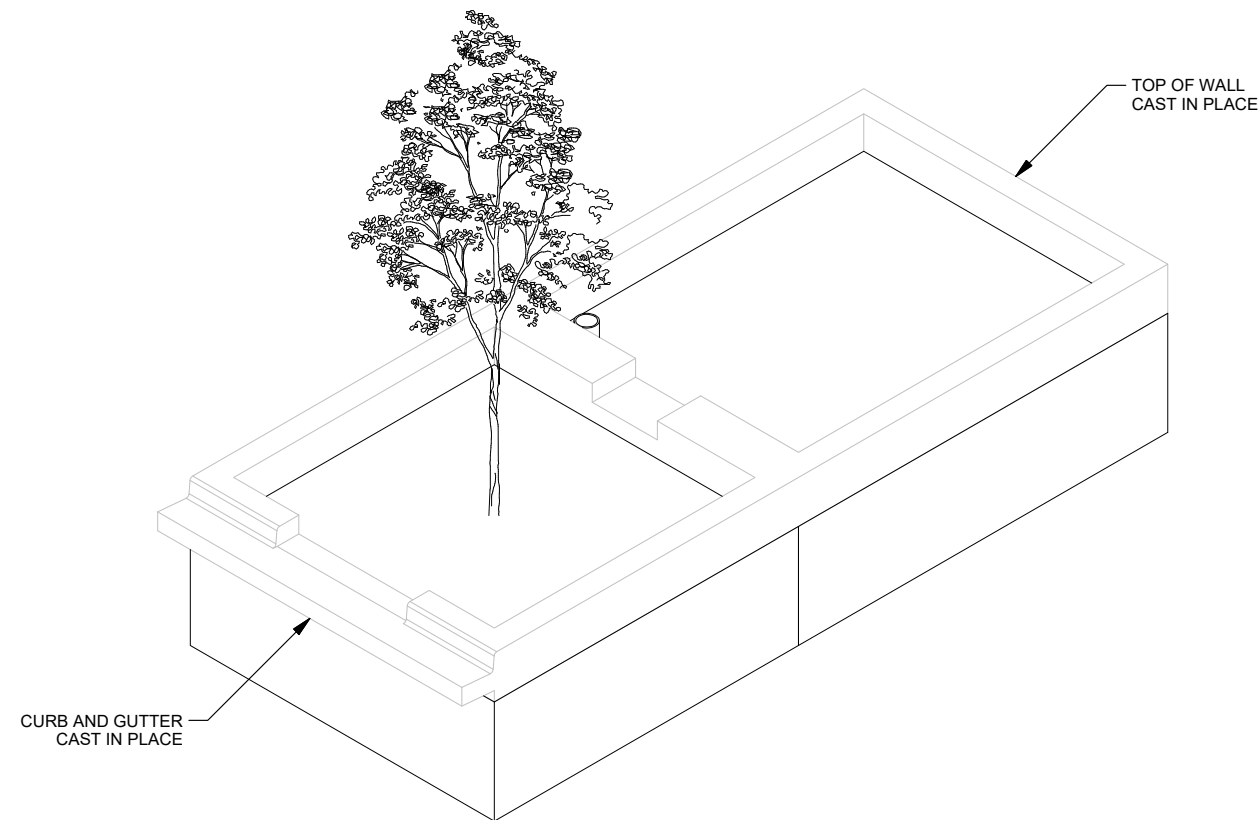
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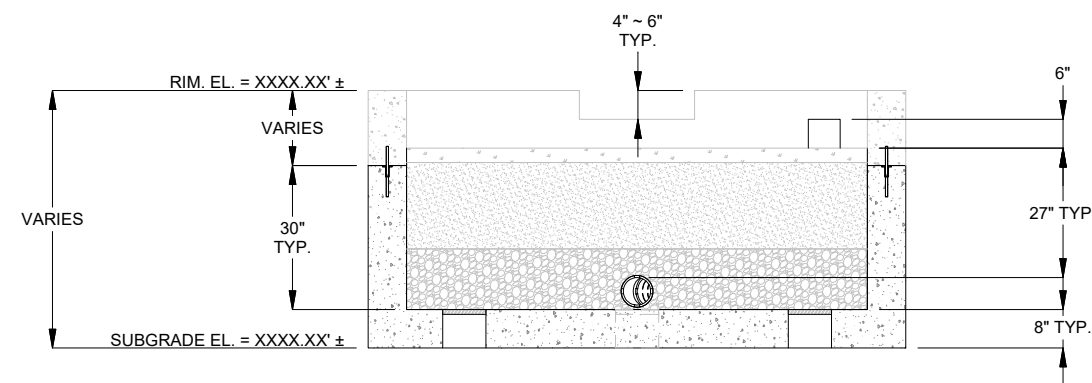
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**ISOMETRIC VIEW**



**SECTION B-B**

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SVBF-TW 8X10.dwg