

# STORMVAULT COALESCING PLATE SEPARATOR

## MODEL: SVCPS-3/8-165

### SYSTEM AND TREATMENT FLOW DESIGN:

WATER QUALITY TREATMENT FLOWRATE (WQTF)	165-GPM (0.37-CFS)
TARGET EFFLUENT CONCENTRATION	15-MG/L
TARGET MINIMUM OIL DROPLET SIZE TO BE REMOVED	41.85- $\mu$ m (MICRONS)
SPACING BETWEEN COALESCING PLATE	3/8"
NUMBER OF 14" WIDE x 28.8" LONG ALUMINUM PLATES	600
NUMBER OF COALESCING PLATES STACK	5
NUMBER OF COALESCING PLATES PER STACK	120

### LAMELLA PLATES TREATMENT PERFORMANCE NOTES:

1. THE STORMVAULT COALESCING PLATE SEPARATOR SYSTEM (LAMELLA) IS EFFECTIVE IN REDUCING OIL DROPLETS DOWN TO 15 MG/L AND TSS CONCENTRATION DOWN TO 50 MG/L IN THE EFFLUENT FLOW

### LAMELLA PLATE DESIGN ASSUMPTIONS:

MEAN OIL DROPLET SIZE	130- $\mu$ m
INFLUENT CONCENTRATION	200-MG/L
SPECIFIC GRAVITY OF OIL DROPLETS	0.85
TEMPERATURE OF OPERATION	60°F
SEDIMENT PARTICLE SIZE DISTRIBUTION	LOG-NORMAL DISTRIBUTION WITH STANDARD DEVIATION 2.0

1. THE STORMVAULT COALESCING PLATE SEPARATOR SYSTEM (LAMELLA) IS MANUFACTURED USING HIGH GRADE ALUMINUM.
2. FOR WATER QUALITY DISCHARGE TO STORM SYSTEM UNIT REQUIRING DIVERSION/BYPASS VAULT/MANHOLE, SEE JENSEN DIVERTER STRUCTURE.

### GENERAL NOTES:

1. SOME INTERNAL COMPONENTS NOT SHOWN FOR CLARITY
2. EACH VAULT SECTION HAS AN ACCESS LID UNLESS SHOWN OTHERWISE
3. ALL INTERNAL COMPONENTS INSTALLED BY JENSEN UNLESS OTHERWISE SPECIFIED.
4. FOR UNITS REQUIRING WATER QUALITY DIVERSION/BYPASS SYSTEM, SEE JENSEN DIVERTER STRUCTURE
5. PANEL DETAILS AND PANEL WIRING DRAWINGS AVAILABLE TO SUPPORT OPTIONAL LEVEL ALARM SENSOR SYSTEM INSTALLATION.

### CONSTRUCTION NOTES:

1. ALL DIMENSIONS ARE IN FRACTIONAL INCHES.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS OF ALL PRECAST PIECES IN FIELD.
3. VERIFY DIMENSION AND CONDITION OF REMOVABLE ALUMINUM FRAME AND MEDIA-PACKS BEFORE INSTALLATION.
4. VERIFY SUBBASE/SUBGRADE ELEVATION BEFORE PLACING PRECAST COMPONENTS OR BACKFILLING.
5. APPLY BUTYL MASTIC AND/OR GROUT TO SEAL JOINTS OF STRUCTURE.
6. APPLY LOAD TO MASTIC SEAL IN JOINTS OF VAULT TO COMPRESS SEALANT IF NECESSARY. UNIT MUST BE WATER TIGHT, HOLDING WATER UP TO FLOWLINE INVERT (MINIMUM).
7. CONTRACTOR TO GROUT SEAL INLET AND DISCHARGE PIPES TO VAULT/MANHOLE WALL IF NO BOOT CONNECTION SPECIFIED.
8. BLOCK AND/OR GROUT PACK BENEATH FRAMES AND COVERS TO MATCH FINISHED GRADE.
9. TOP & BOTTOM SLABS AND WALL THICKNESS SHALL BE DESIGNED FOR SPECIFIC PROJECT INSTALLATION DEPTHS.

### MATERIALS:

1. PRECAST VAULT MATERIALS AND MANUFACTURING METHODS SHALL CONFORM TO ALL APPLICABLE ASTM AND ASSHTO SPECIFICATIONS.

### MATERIAL LIST - PROVIDED WITH UNIT:

QTY	COMPONENT DESCRIPTION	MATERIAL PROVIDER	RESPONSIBLE INSTALLER
1	6" $\phi$ INLET AND OUTLET STUB PIPES	JENSEN	CONTRACTOR
1	6" $\phi$ INLET 45° ELBOW	JENSEN	CONTRACTOR
2	6" $\phi$ INLET AND OUTLET VERTICAL PIPE AND TEE	JENSEN	CONTRACTOR
1	REMOVABLE COALESCING FRAMEWORK ASSEMBLY	JENSEN	CONTRACTOR
1	FIXED COALESCING FRAMEWORK ASSEMBLY	JENSEN	JENSEN
3	OIL & GREASE SORBENT MATS OR PADS	JENSEN	CONTRACTOR
2	24" $\phi$ CAST IRON FRAME AND COVER	JENSEN	CONTRACTOR
1	84" X 72" ACCESS HATCH,	JENSEN	CONTRACTOR
AS RQD.	24" $\phi$ GRADE RINGS	JENSEN	CONTRACTOR
AS RQD.	84" X 72" ACCESS RISER	JENSEN	CONTRACTOR

TITLE SHEET:

SVCPS-3/8-200  
PLAN AND PROFILE

ENHANCED GRAVITY SEPARATION

ORIG. DWG. DATE:  
8/16/2019

REV. DWG. DATE:  
XX/XX/XXXX

PROJECT:

PROJECT NAME  
CITY, STATE

SCALE:  
1 : 40

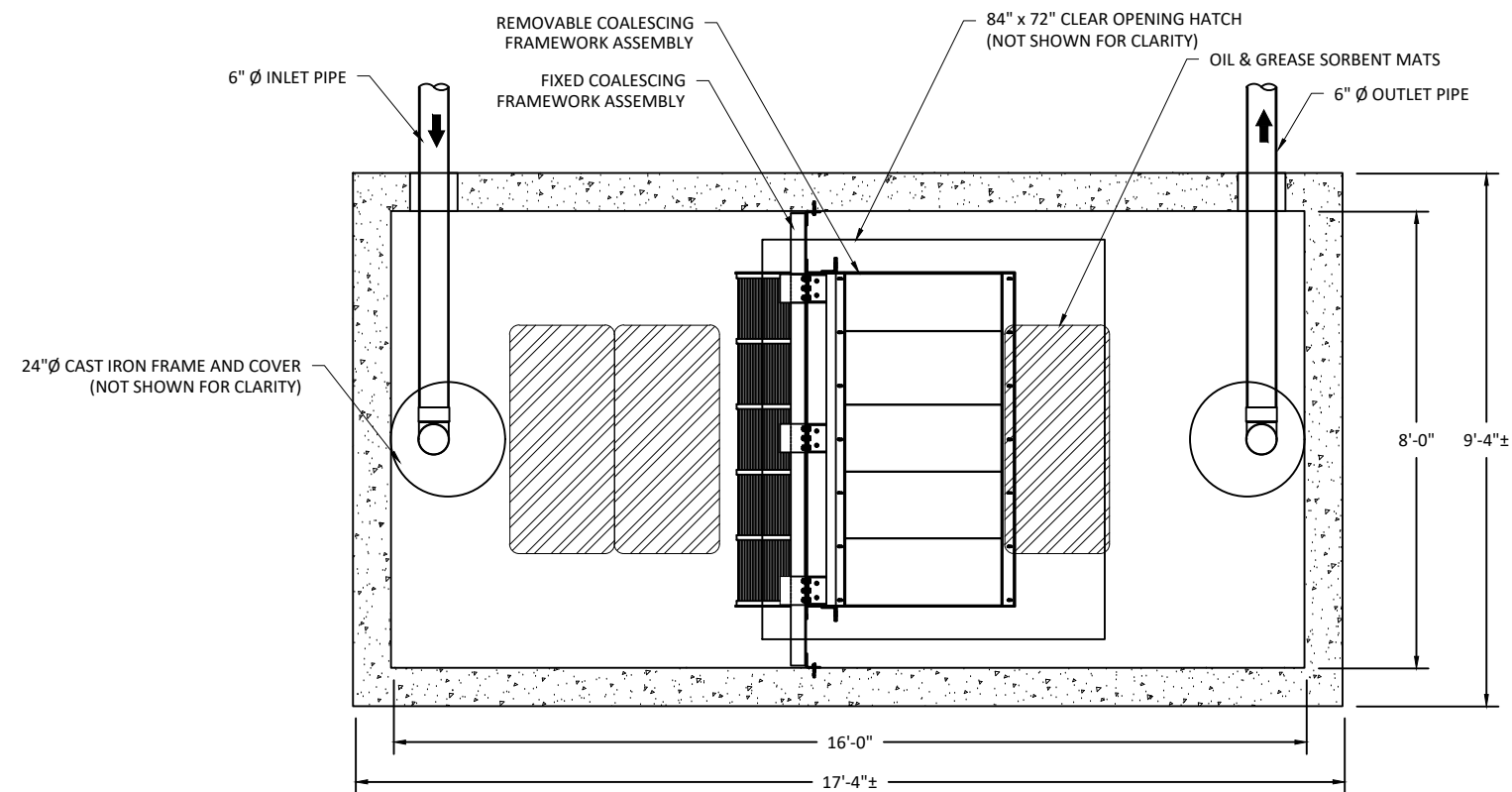
SHEET SIZE:  
11 X 17

DRAWN BY:  
S.T.

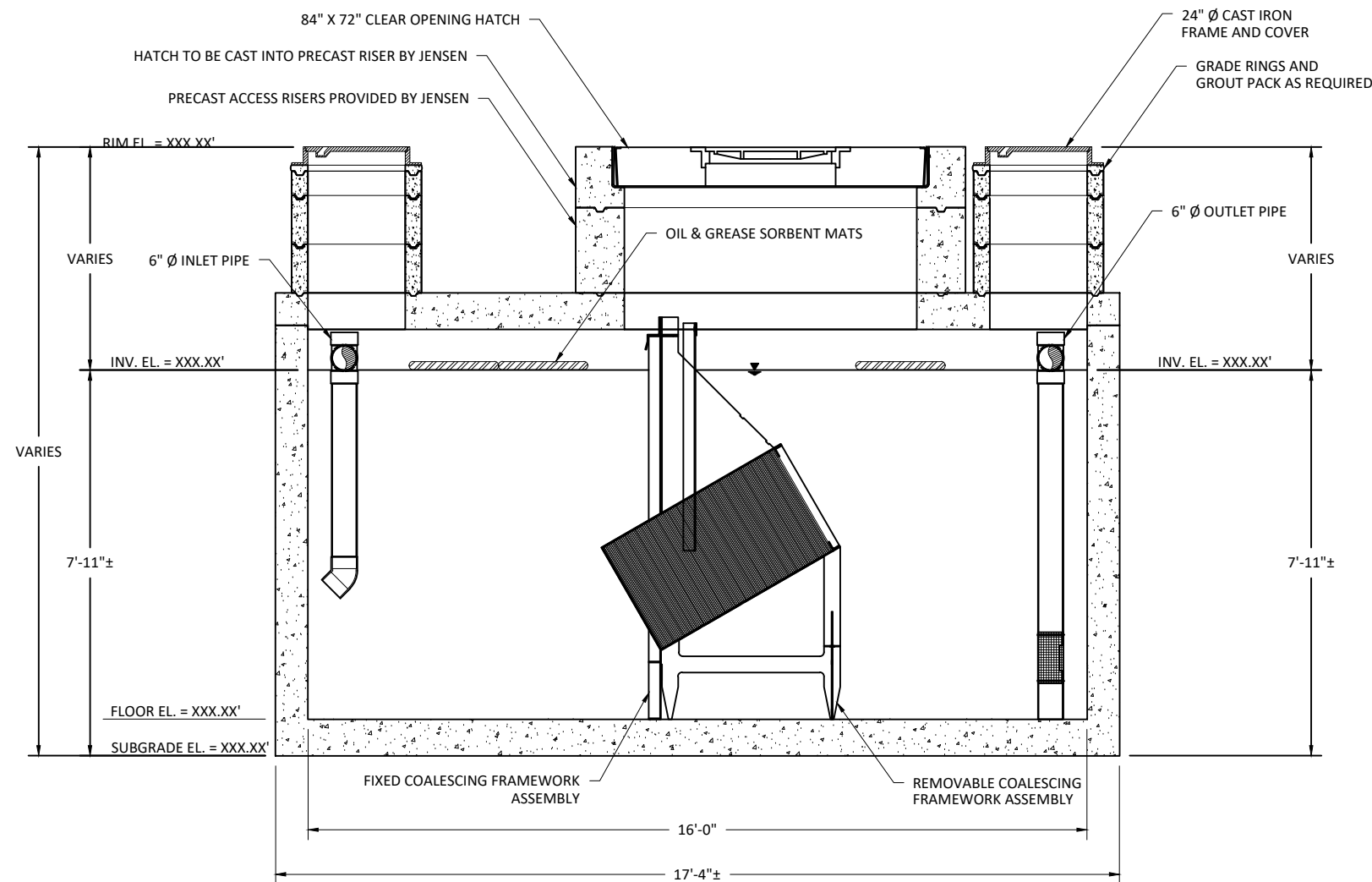
SHEET NUMBER:  
SHEET NO. 3 OF 4

**JENSEN** STORMWATER SYSTEMS  
521 DUNN CIRCLE, SPARKS, NV 89431-6312  
(877) 649-0095 FAX (775) 440-2013  
www.jensenengineeredsystems.com

Copyright Information © 2011 Jensen Precast All Rights Reserved. All materials appearing as Jensen Precast documents and the like are proprietary work product and are protected under U.S. copyright and other laws. Unless in conjunction with business conducted with Jensen Precast, any use of Jensen Precast work product without express, written consent is prohibited and recipient is prohibited from distributing any and all work product to non-approved third parties under penalty of civil action.



PLAN VIEW  
SCALE: 1" = 40'



PROFILE VIEW  
SCALE: 1" = 40'