

EXCAVATION

1. Install unit(s) as close as possible to fixtures being serviced.
2. Width and length of excavation shall be minimum 18" greater than the tank on all sides.
3. Depth of excavation shall be 12" deeper than tank bottom.
4. Set the tank in well-packed crushed aggregate material approximately 3/4" size rock, or sand, with no fines.

UNIT INSTALLATION

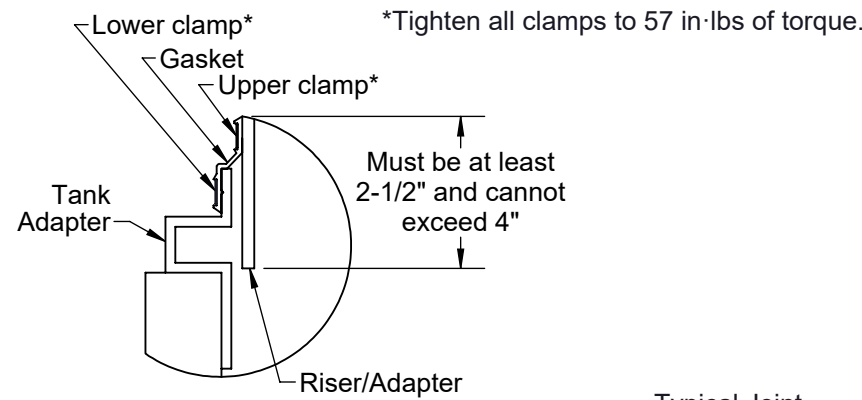
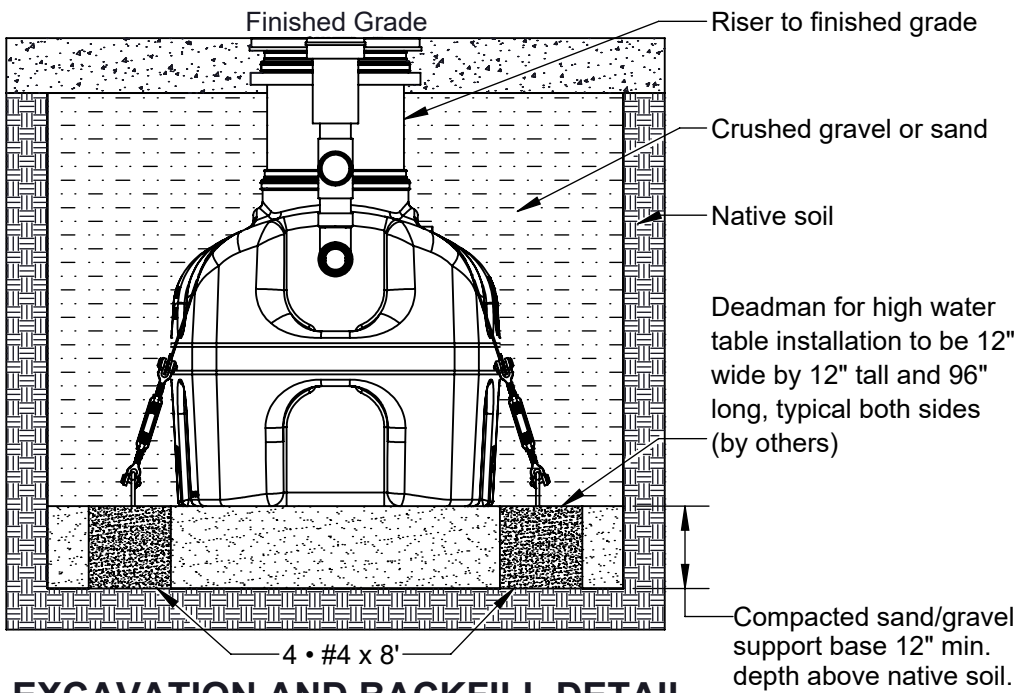
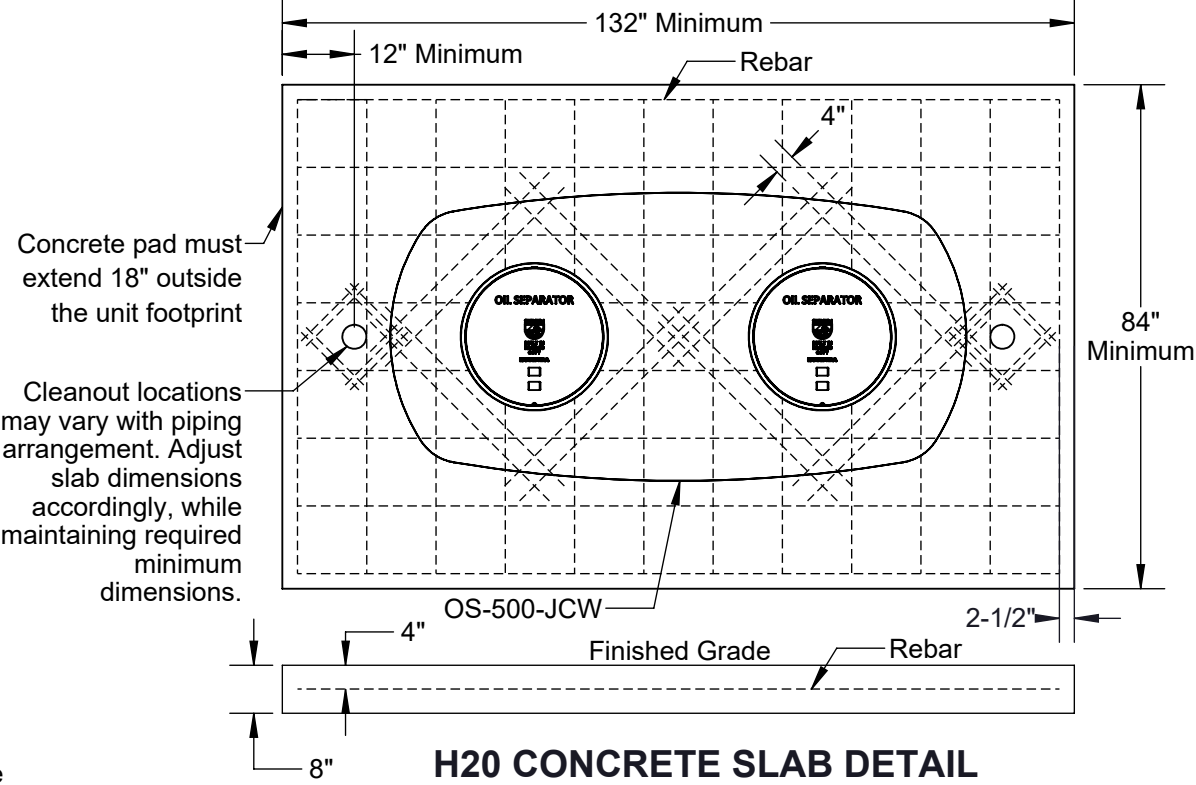
1. Lower and center the unit into hole.
2. Ensure the top of riser is level with finished grade.
3. Connect waste piping to the unit.
4. Connect vent piping to vent connection on sidewall of tank. If auxiliary vent is used, remove cap and install on inlet side vent.
5. Fill unit with water before backfilling to stabilize unit, check for leaks, and prevent float out during backfilling.

BACKFILLING & FINISHED H2O CONCRETE SLAB

1. Preparation of sub grade per geotech recommendations.
2. Stabilize and compact sub grade to 95% proctor.
3. Fill tank with water before backfilling to prevent float out during piping installation.
4. Before backfilling and pouring of slab secure covers and risers (if necessary) to the unit.
5. Refer to JCW INSPECTION REQUIREMENTS below for additional sequencing information.
6. Backfill using crushed aggregate material approximately 3/4" size rock, or sand, with no fines.
7. Place 6" aggregate base under slab. Aggregate should be 3/4" size rock, or sand, with no fines.
8. Concrete to be 28 day compressive strength to 4000 PSI with 6%±1% air entrainment.
9. NO. 4 rebar (Ø 1/2") grade 60 steel per ASTM A615: connected with tie wire.
10. Rebar to be 2-1/2" from edge of concrete.
11. Rebar spacing 12" grid. 4" spacing around access openings.

DEADMAN ANCHORING

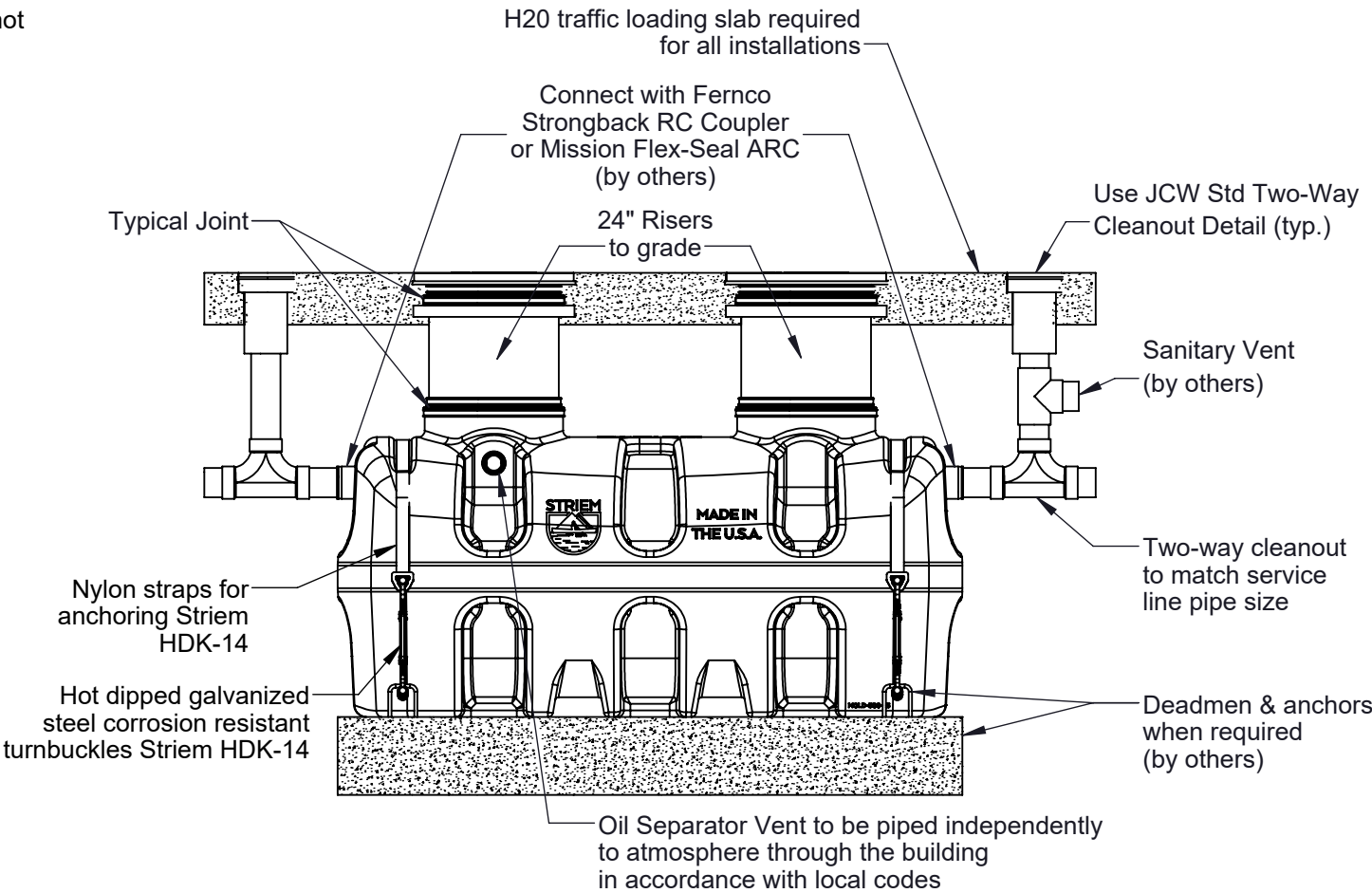
1. Deadmen should be constructed as noted on Excavation and Backfill detail.
2. Deadmen should be 12" wide x 12" tall and equal to the length of the entire unit.
3. Each deadman should have 2 anchor points that each connect to a 3,500 lbs. rated turnbuckle.
4. Lay the deadmen parallel with the unit and ensure that they are outside the shadow of the tank.
5. Nylon straps rated to 3,333 lbs. each should be connected to a turnbuckle on each side. Turnbuckles should be secured to the deadmen anchor points on each side of the tank such that the tank is held down.



!!! JCW INSPECTION REQUIREMENTS!!!

1. Interior Sand/Oil Plumbing Inspection
- The sand/oil plumbing and fixtures inside the building shall be inspected prior to pouring the interior slab
2. Sand/Oil Separator Inspection
- Partial Inspection #1: Excavation, separator, riser(s) and anchor kit (if applicable) shall be inspected prior to backfill.
- Partial Inspection #2: Haunched pipe, backfill, cleanout and sampling port shall be inspected prior to pipe backfill.
3. Sand/Oil Separator Leak Test Inspection
- Step 1: All pipes entering/exiting the separator shall be plugged.
- Step 2: The separator shall be filled to the top of the riser with water.
- Step 3: The JCW inspector shall mark the water level and start the 30 min test to confirm the separator is not leaking. Test will pass with no change in the water level after 30 min.
- NOTE: Filling the tank and allowing to sit for an hour with a check for leaks before backfill and JCW Leak Test Inspection is suggested (not required).
4. Sand/Oil Separator Concrete Slab Rebar Inspection
- The rebar configuration shall be inspected prior to pouring the concrete slab.

!!! ALL JCW INSPECTIONS SHALL BE REQUESTED ONLINE THROUGH THE WWW.MYGOVERNMENTONLINE.ORG PORTAL !!!



[ALL PIPE EMBEDMENT IN ACCORDANCE WITH JCW STANDARDS]

PROPRIETARY AND CONFIDENTIAL

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SPECIFICATIONS

1. 4" Plain End inlet/outlet, 3" Plain End vents, C24-HP covers standard.
2. Certified max flow rate: 100 GPM.
3. Liquid capacity: 500 Gallons (66.8 cu. ft.).
4. Oil capacity: 125 Gallons.
5. Solids capacity: 164 Gallons.
6. Unit weight: 456 lbs.
7. Maximum operating temperature 140°F continuous.

NOTES

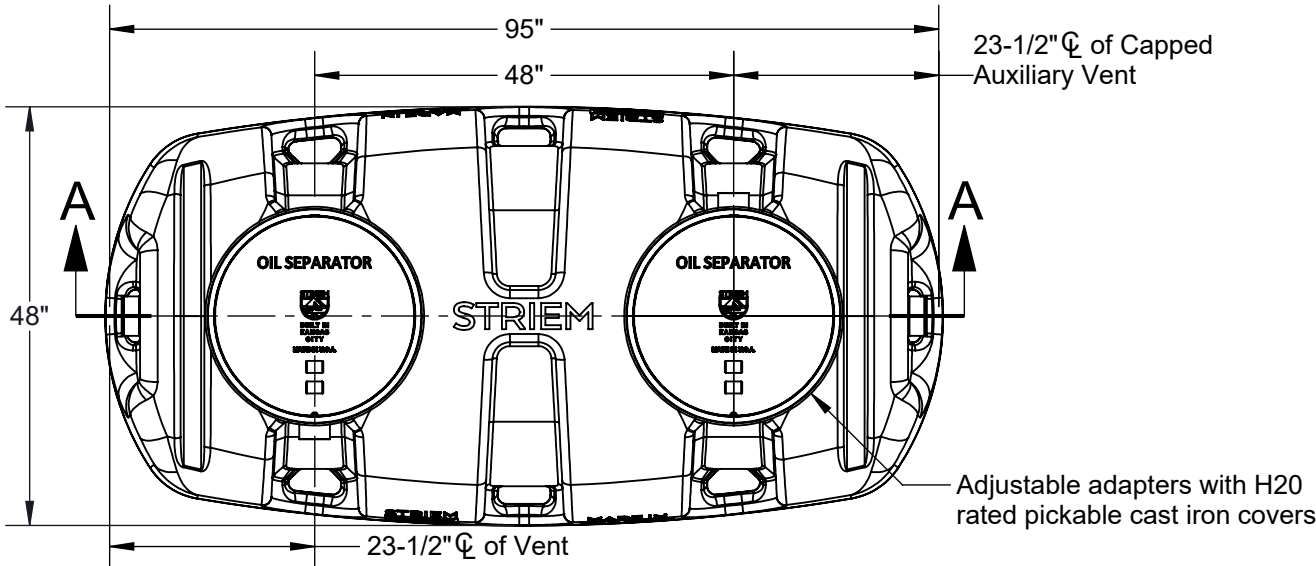
1. Engineered inlet diffuser efficiently separates oil from water.
2. Capped auxiliary vent provided to allow flexibility with vent piping and design. Provided cap can be moved to unused vent location, or discarded if two chamber vents are required per local code.
3. For gravity drainage applications only.
4. Do not use for pressure applications.
5. Cover placement allows full access to tank for proper maintenance.
6. Maximum burial depth: 101" from the crown of the inlet.

ENGINEER SPECIFICATION GUIDE

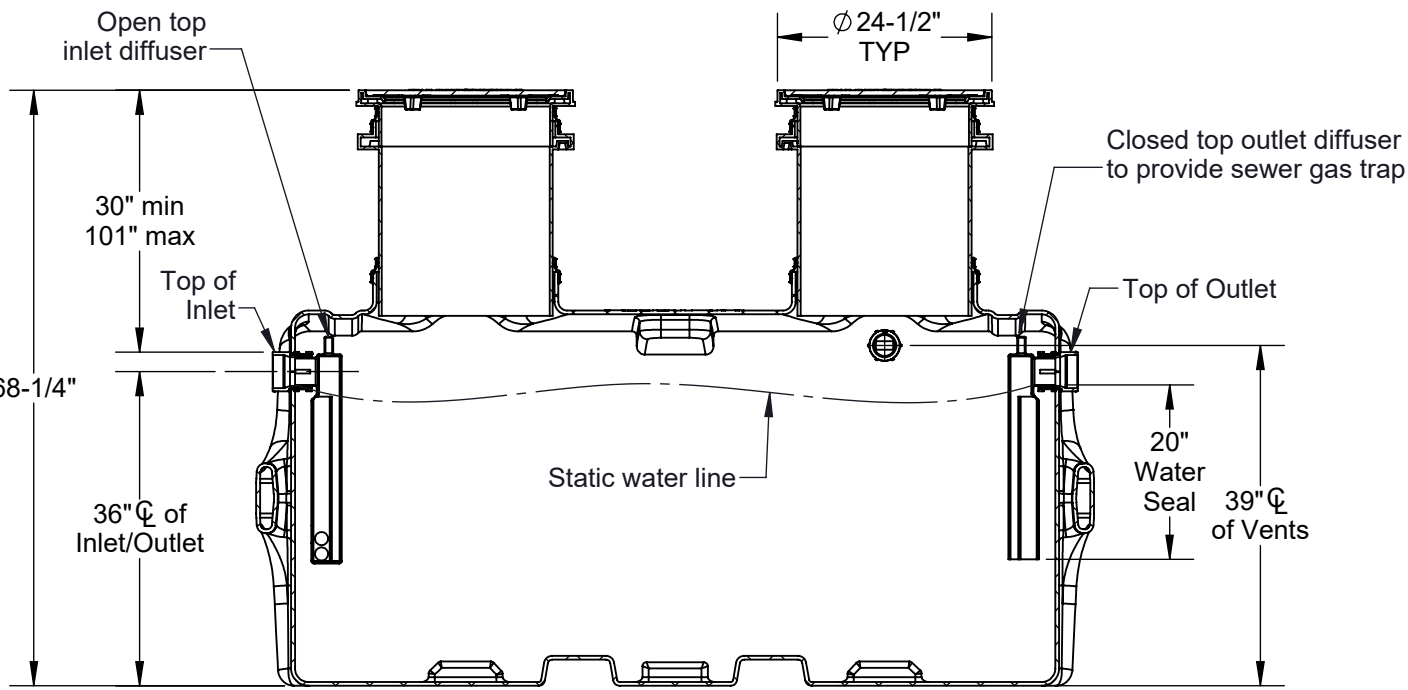
Striem high efficiency oil/water separator model OS-500-JCW shall be lifetime guaranteed and made in the USA. Separator shall be certified to IAPMO IGC 325 and carry a UPC listing. Separator shall be constructed of polyethylene. Separator shall be manufactured for above- or below-grade installation. Field-adjustable riser system is available as an option to bring manhole covers to grade. Separator flow rate shall be 100 GPM. Separator liquid holding capacity shall be 500 gallons and oil capacity shall be 125 gallons. Solids capacity shall be 164 gallons. Covers shall be H2O rated pickable cast iron.

IAPMO IGC 325 CERTIFICATION

The OS-500-JCW has been third party certified by IAPMO to the IGC 325 standard. The OS-500-JCW achieved an average 99% efficiency rating with 3.7 mg/L at 100 GPM up to the maximum oil capacity of 125 gallons. The structural design has been approved and stamped by a licensed structural engineer for direct burial in accordance with Striem's installation instructions.



TOP VIEW



SECTION A-A

OPTIONS

Connection Options (Plain End Only)

Inlet / Outlet

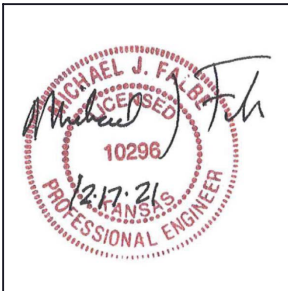
- ☐ 4"
- ☐ 6"

Riser Options

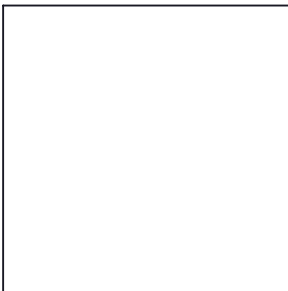
- ☐ 30" to 35": **SR24** (2)
- ☐ Up to 50": **LR24** (2)
- ☐ Up to 54": **SR24** (4)
- ☐ Up to 69": **SR24** (2) + **LR24** (2)
- ☐ Up to 83": **LR24** (4)
- ☐ Up to 101": **SR24** (2) + **LR24** (4)

Additional Options

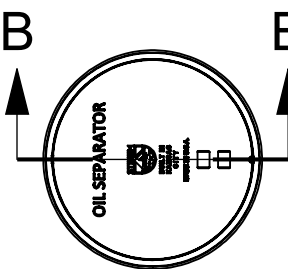
- ☐ **HDK-14:** High Water Table Hold Down Kit
- ☐ **SS:** Slick Stick™ Oil Level Monitoring System*
- *Monitoring system will raise covers by 3".



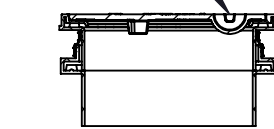
PE STAMP
(For H2O Slab Design Only)



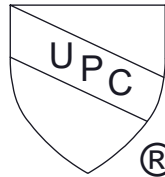
Hold Down Kit Required
Unless Sealed by Kansas
Professional Engineer



Pickable cast iron cover



SECTION B-B



MODEL NUMBER: OS-500-JCW

DESCRIPTION:

POLYETHYLENE OIL SEPARATOR
100 GPM
500 GALLON CAPACITY
JOHNSON COUNTY WASTEWATER DETAIL

DWG BY: ENG DATE: 4/7/2026 REV: 0

SPECIFICATION SHEET

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Made in the U.S.A

