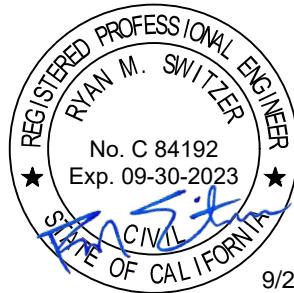




Prepared for: Route 49 Partners, LLC
92400 Highway 70
Vinton, CA 96135



9/26/2024

Prepared by: Sierra Vista Engineering, Professional LLC
Ryan Switzer, PE
PO Box 1452
Reno, NV 89505

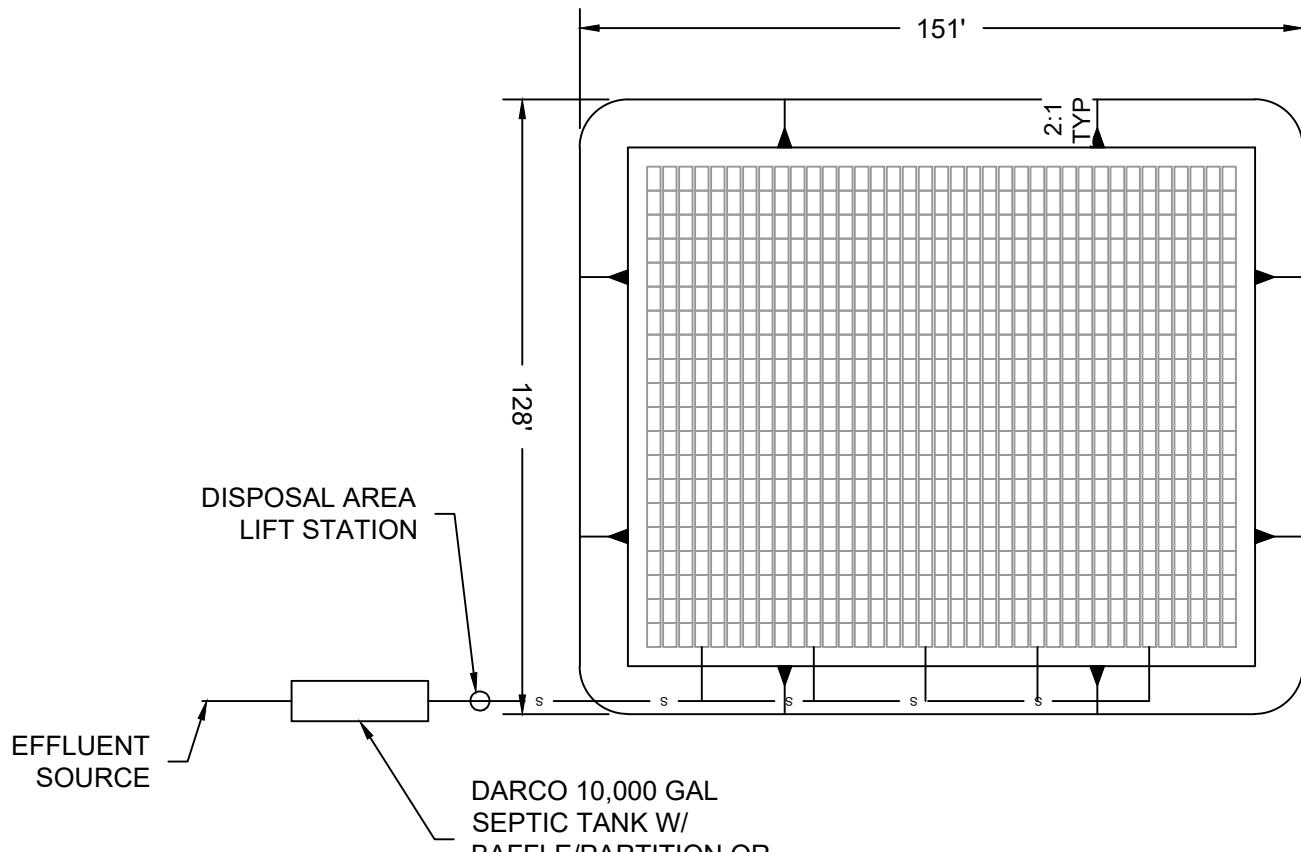
Design Criteria:
Regulations PLUMAS COUNTY LOCAL AGENCY MANAGEMENT PLAN (LAMP)
FOR ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS)
MAY 2016

<u>System Type</u>	Small Domestic WTS	<u>Notes</u>
<u>Lot Size</u>	21	acres
<u>Existing Manufactured Homes / Units</u>	53	ea
<u>Design Flow Rate, Q</u>	200	gpd
<u>Design Percolation Rate, P</u>	32	min/in
<u>Depth to Groundwater</u>	1.5	ft

Septic and Mounded Chamber Calculations:

<u>Design Volume, V</u>	9,075	gal	Flow x 0.75 +1125 (where, Flow = # homes x Q) per CPC Appendix H Table H 201.1(4)
<u>Tank Size, T</u>	10,000	gal	
<u>Max Sewage Application Rate, R</u>	0.88	gal/sf/d	5 / √P per Manual of Septic-Tank Practice Table 11/Figure 19

<u>System Selection</u>	Mounded Chambers		
<u>Required Sidewall Absorption Area, A</u>	7,920	sf	T / R *0.7
<u>Design Number of Chambers, C</u>	741	ea	80 gal (10.6944 cf) per ADS Arc 36 HC Septic Leaching Chamber
<u>Chamber Trench Width, W</u>	2.83	ft	
<u>Chamber Trench Depth, D</u>	1.33	ft	
<u>Chamber Length, CL</u>	5	ft	
<u>Design Trench Spacing, S</u>	0.5	ft	Per manufacturer
<u>Design Trench Length, L</u>	100	ft	100' max per LAMP Sec 6-6.12(d)(3)
<u>Design Number of Trenches, NT</u>	37	ea	
<u>Chamber Cover, CC</u>	1	ft	Min per LAMP Sec 6-6.12(d)(3)
<u>Fill above EG, F</u>	2.5	ft	Min 4' to GW per LAMP Sec 6-6.13(c)(2)
<u>Mound Total Height, MTH</u>	4.83	ft	Round to 5'
<u>Total Area Required for Disposal</u>	19,205	sf	Per attached Exhibit A



MOUNDED DISPOSAL AREA W/ ADVANCED DRAINAGE SYSTEMS (ADS)
ARC36 HC CHAMBERS
37 ROWS x 20 CHAMBERS EA
740 TOTAL CHAMBERS
19,205 SF TOTAL MOUND AREA
151'L x 128'W x 5'H
19,205 SF TOTAL AREA
1' COVER (MIN), 2.5' FILL DEPTH (MIN)
TO MAINTAIN 4' SEPARATION
FROM GROUNDWATER
2:1 SIDE SLOPES (MAX)

**PRELIMINARY
NOT FOR
CONSTRUCTION**

EXHIBIT A
**CONCEPTUAL WASTEWATER
REPAIR SYSTEM DETAIL**

ROUTE 49 PARTNERS, LLC
MEADOW EDGE PARK
LOT LINE ADJUSTMENT - WASTEWATER CONCEPT

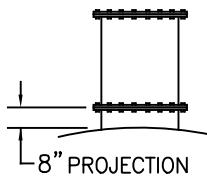
92400 HIGHWAY 70
VINTON, CA 96135
PLUMAS COUNTY APNs 010-200-002 & -003

0 20 40 FT
SCALE: 1" = 40'

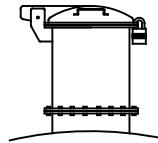


**SIERRA VISTA
ENGINEERING**
GENERAL/BILLING: admin@sierravistaengineering.com
PROJECT RELATED: rswitzer@sierravistaengineering.com
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RENO, NV 89505

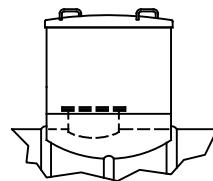
MANWAY ACCESSORIES



FLANGED MANWAY
EXTENSION WITH
BOLTED COVER
24"-30"-36" DIA.
UP TO 60" TALL



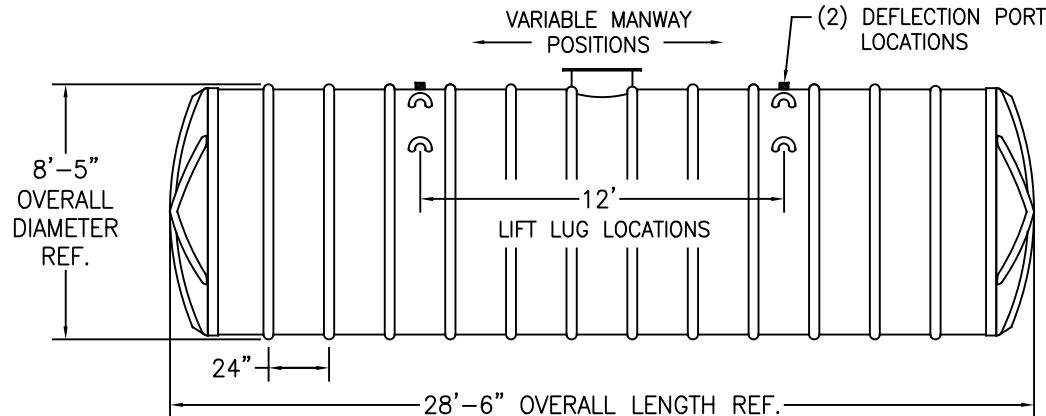
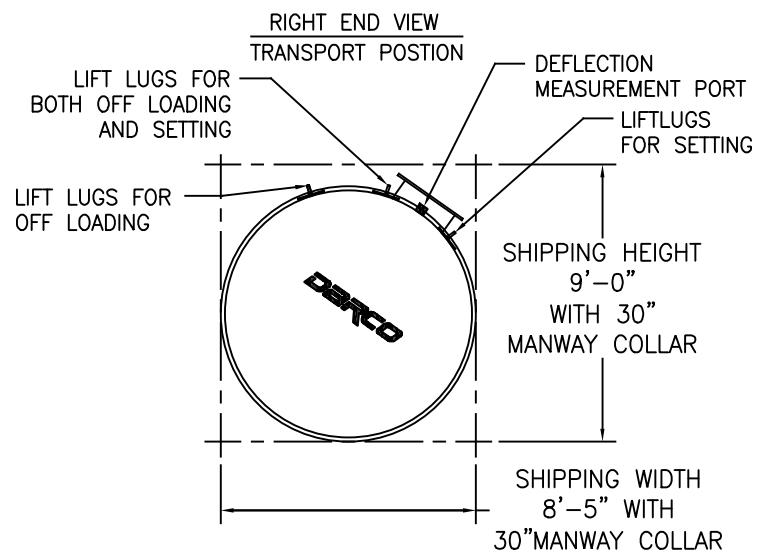
LOCKABLE HINGED
MANWAY COVER
AVAILABLE FOR 30" DIA.
EXTENSIONS ONLY



MANWAY ENCLOSURE
48" DIAMETER
UP TO 60" TALL
USING 20" I.D.
INTERNAL MANWAY

NOMINAL SHIPPING
WEIGHT: 4,480 POUNDS

KEY	
LIFT LUG	Ⓐ
ANCHOR STRAP	▼
DEFLECTION PORT	■
DEADMAN	▨



WARNING
MINIMUM SOIL DEPTH ABOVE TANK WHEN USING DEADMAN ANCHORS IS 2 FEET.

NOTE:

THE DECISION TO USE AN ANCHORING SYSTEM IS THE RESPONSIBILITY OF THE OWNER OR HIS REPRESENTATIVE. NOT EVERY TANK WILL REQUIRE ANCHORING.

DARCO
INC.
FRP UNDERGROUND TANKAGE

Rev Date 8/31/20	8'-0" I.D. 10,000 GAL. FIBERGLASS HORIZONTAL TANK	Sheet 1 of 1
Rev Let INT. REL.		Darco Incorporated Post Office Box 68 Cottonwood, AZ 86326 800-232-8660 - www.darcoinc.com

ADS Arc 36 HC Septic Leaching Chamber Specification

Scope

This specification describes the Arc 36 HC chamber units for use in onsite wastewater disposal applications.

Chamber Requirements

Arc chambers are manufactured from high-density polyethylene with an open bottom, solid top and louvered sidewalls. Sidewall louvers shall be designed to minimize soil intrusion.

Chamber shall meet the load rating of H-10 (16,000 lb per axle) with a minimum of 12" (300 mm) of cover when tested in accordance with IAPMO PS 63 and installed in accordance with manufacturer's installation procedures.

Chamber Connection

Each chamber shall interlock with an integral articulating joint. Articulating joints shall have a free range of horizontal rotation of 20°, with a maximum of 10° in either direction. Articulating joint shall be constructed by placing the dome with engaging knuckle of the incoming chamber over the post end of the previously-installed chamber.

Material Properties

Each chamber shall be manufactured from high-density polyethylene as defined and described in IAPMO PS 63.

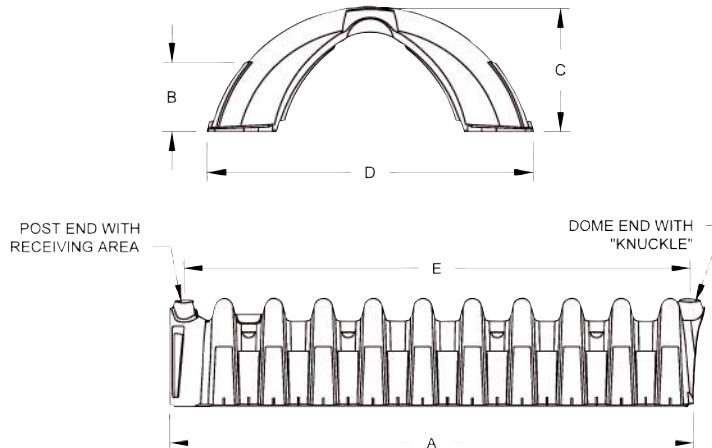
Installation

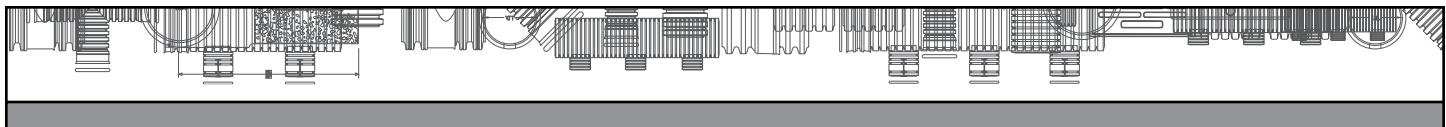
Installation shall be in accordance with ADS installation procedures as well as all state and local health department regulations.

Chamber Dimensions*

	in (mm)
Length (A)	63 (1,600)
Repeat Length (E)	60 (1,524)
Side Wall Height (B)	10.75 (273)
Overall Height (C)	16 (406)
Overall Width (D)	34 (863)
Capacity	80 gal (363 liter)
Pallet Quantity	60 chambers
Truck Load Quantity*	24 pallets

*End caps may reduce truck load pallet quantity.

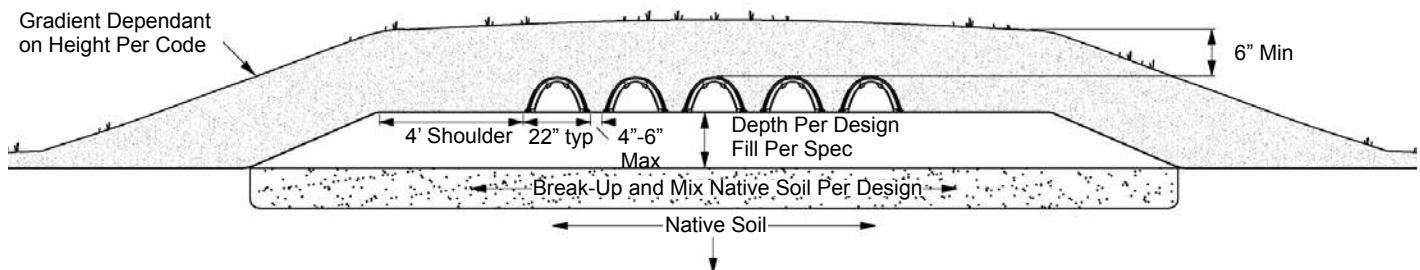




Installation Configurations:

II. Bed Configuration Continued

Typical Bed: Mound/Fill Cross Section



Notes:

- The existing organic horizon must be removed before beginning installation.
- The top of the installation should be contoured to divert water away from the drainfield.
- Cover material shall be slightly to moderately limited soil.
- The rise:run ratio can be calculated at 1:2, 1:3, or 1:5, depending on the overall height and the material used to stabilize the system.
- 4' shoulder is required on all sides of the chamber field.
- 6" minimum cover required per code, not including sod/grass cover.
- For additional vegetation requirements refer to FLA code 64E-6.
- Note: Per Florida code, chamber leachfield systems cannot be installed in areas that will carry vehicular traffic.