



**Prepared for:**

Route 49 Partners, LLC  
92400 Highway 70  
Vinton, CA 96135

**Prepared by:**

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



9/26/2024

**Design Criteria:**

Regulations

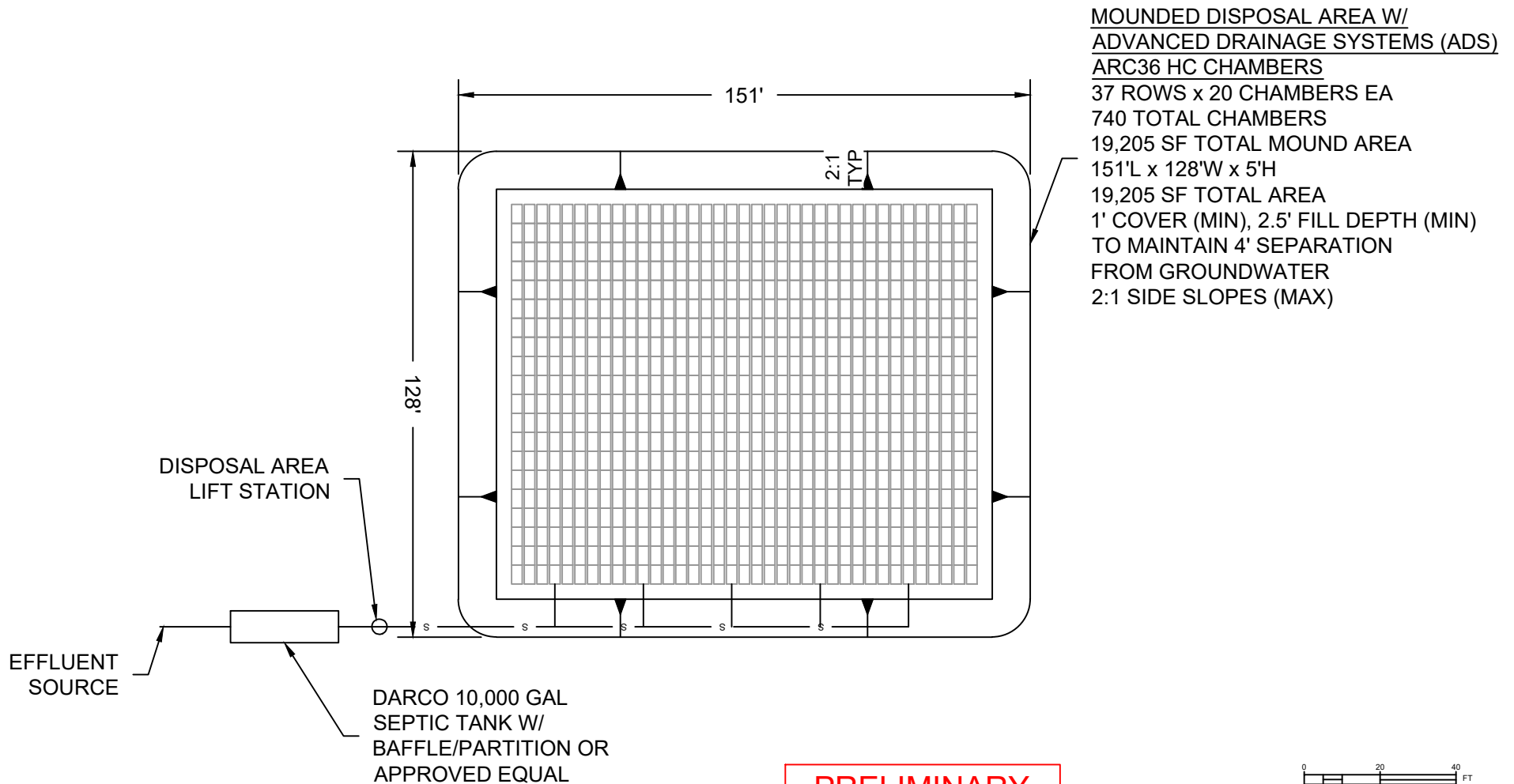
PLUMAS COUNTY LOCAL AGENCY MANAGEMENT PLAN (LAMP)  
FOR ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS)  
MAY 2016

<u>System Type</u>	Small Domestic WTS	<u>Notes</u>
<u>Lot Size</u>	21 acres	Assumed from conceptual BLA
<u>Existing Manufactured Homes / Units</u>	53 ea	
<u>Design Flow Rate, Q</u>	200 gpd	Assumed per 2024 water monitoring
<u>Design Percolation Rate, P</u>	32 min/in	Per Hinds Engineering percolation test results
<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



**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

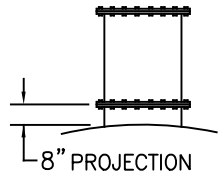
0 20 40 FT  
SCALE: 1" = 40'



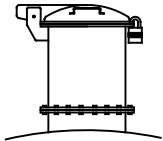
**SIERRA VISTA  
ENGINEERING**

GENERAL/BILLING: admin@sierravistaengineering.com  
 PROJECT RELATED: rswitzer@sierravistaengineering.com  
 CALL OR TEXT: 775-266-8863 OR 805-305-6046  
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 RENO, NV 89505

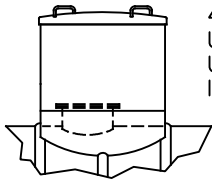
# MANWAY ACCESSORIES



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



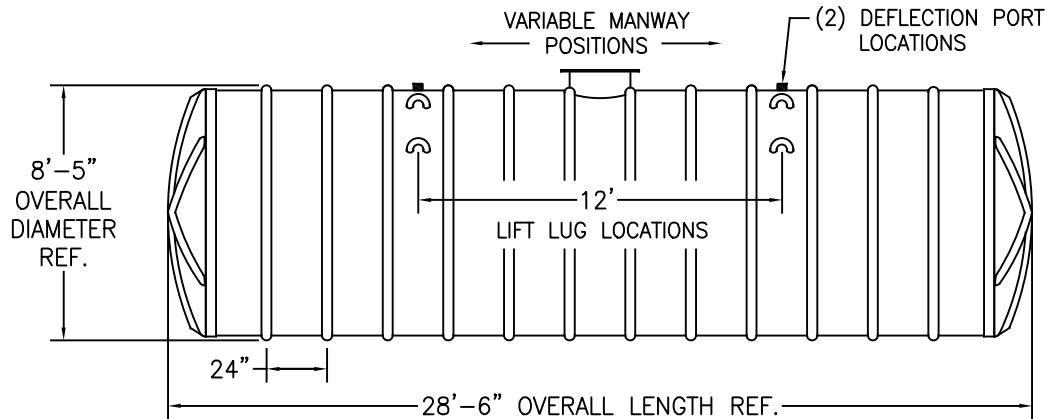
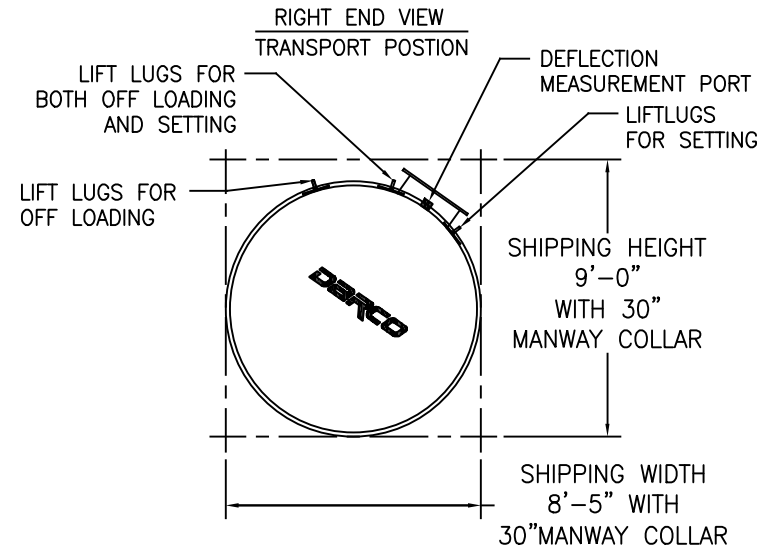
LOCKABLE HINGED  
MANWAY COVER  
AVAILABLE FOR 30" DIA.  
EXTENSIONS ONLY



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**  
FRP UNDERGROUND TANKAGE

Rev Date  
8/31/20

Rev Let  
INT. REL

8'-0" I.D. 10,000 GAL.  
FIBERGLASS HORIZONTAL TANK

Sheet  
1 of 1

Darco Incorporated  
Post Office Box 68 Cottonwood, AZ 86326  
800-232-8660 - [www.darcoinc.com](http://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.

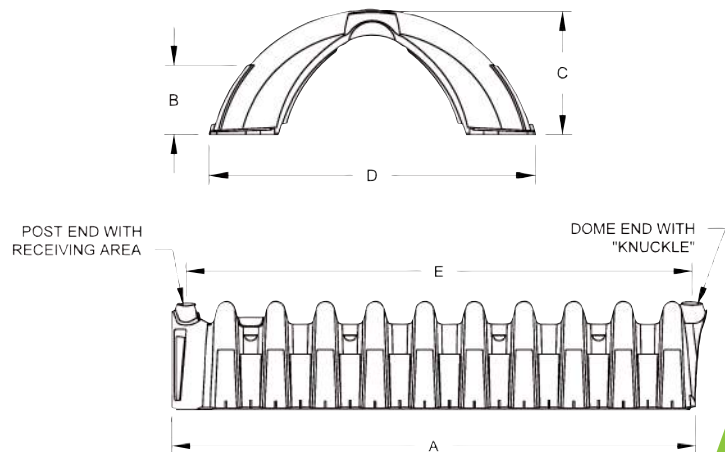
## Installation

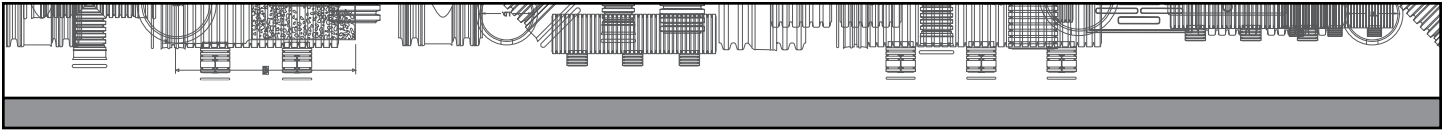
Installation shall be in accordance with ADS installation procedures as well as all state and local health department regulations.

## 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.

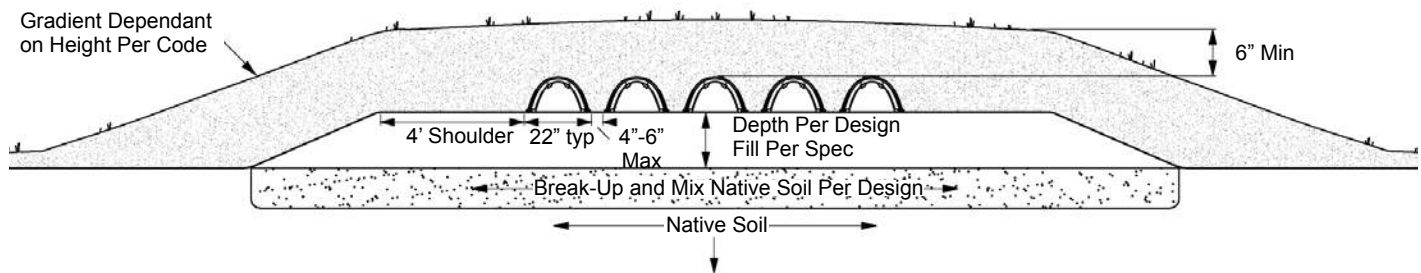




## Installation Configurations:

### 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.