

**Martha's Vineyard Refuse Disposal & Resource Recovery District (MVRDRRD)
Central Facility Transfer Station
Cost Estimate for Conceptual Layout of Drop-Off Facilities**



Version: July 22, 2014

References/Notes

- A. MassDOT Weighted Average Book (September 2012 through September 2013)
- B. Engineering News-Record (ENR) Website: September 2013 Index Value for Construction Cost = 9551.58
- C. Quotes from Vineyard-based Contractors, wherever possible.
- D. The cost estimate was forecasted to July 2015 by using the ENR inflation rate between September 2013 to July 2014 (9834.63/9551.58 = 3%), extended to July 2015 (6% overall).

<u>Item No.</u>	<u>Item Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Subtotal</u>	<u>Reference</u>	<u>Notes</u>
1	<u>Mobilization, Bonds, Insurance</u>	1	LS	\$15,000	\$15,000	EPG Judgement	Assumes Vineyard-based Contractor
2	<u>Clearing and Grubbing</u>	6.0	Acre	\$13,000	\$78,000	MassDOT Item 101; Requested quote from Clements Tree Service, Vineyard Haven	
3	<u>12" Diameter Filter Sock for Erosion Control</u>	2,000	LF	\$5	\$10,000	Previous Bid Tabs	Allowance Including Cutting, Filling, and Rehandling. Includes 11,320 cy cut, and 3,290 cy fill. Including grading basins. Not including any swales. Does not include hauling/removing material from site.
4	<u>Earthwork</u>	14,610	CY	\$7	\$102,270	EPG Judgement	
5	<u>Fine Grading for Swales</u>	1,667	SY	\$5	\$8,333	MassDOT Item 101	Total length of swales = 1,000 lf. Assume 15' wide swale.
6	<u>Drainage: Deep Sump Catch Basin</u>	6	EA	\$4,000	\$24,000	EPG Judgement	Allowance. Completely installed, including excavation, backfilling, frames, grates, etc.
7	<u>Drainage: Manhole</u>	3	EA	\$4,500	\$13,500	EPG Judgement	Allowance. Completely installed, including excavation, backfilling, frames, grates, etc.
8	<u>Drainage: 12" Corrugated Plastic Piping</u>	500	LF	\$40	\$20,000	EPG Judgement	Allowance. Completely installed, including excavation, backfilling, compacting, flared end sections, etc.
9	<u>Guardrail (Steel with beam, double faced)</u>	300	LF	\$30	\$9,000	MassDOT Item 621.1	Use instead of jersey barriers
10	<u>New Attendant's Shed</u>	1	LS	\$10,000	\$10,000	EPG Judgement; Previous Projects	Assume 14'x14'x10' high shed.
11	<u>Concrete Pad for Container Area & Miscellaneous Recyclables Area</u>	14,400	SF	\$6	\$86,400	Quote requested from P&P, West Tisbury	Total Area = 14,400 sf. Assume 6" thick. Including proof rolling, subbase, and 6" thick slab-on-grade. 760 lf total; avg. height = 4'; Cast in place concrete wall: assume \$1,000/cy, in-place, including concrete slab, assume 1' width for wall, and avg. height = 4'.
12	<u>Retaining Walls for Roll Off Areas</u>	112	CY	\$800	\$89,600	Quote requested from P&P, West Tisbury	
13	<u>Fencing on Retaining Walls</u>	760	LF	\$15	\$11,400	EPG Judgement	760 lf total. Assume avg. height of 3.5' for fencing. Assume fencing for pedestrians may be carpentry fencing.
14	<u>Sub-base (Recycled Asphalt Pavement)</u>						Sub-base for Pavement Areas. Area to be paved = 158,300 sf = 3.63 Acres. Assume 9"-12" thick layer, and + 20% in-place. Approx. 5,300 cy to 7,000 cy required.
	Materials	6,300	CY	\$20.00	\$126,000	Goodale quote for RAP	
	Installation	158,300	SF	\$1.75	\$277,025	Quote from MVRRD	
15	<u>Paving: Binder and Wearing Course - 4" thick</u>	3,826	Tons	\$185	\$707,733	Unit price from MVRRD	Area to be paved = 158,300 sf.
16	<u>4 Inch Reflectorized Yellow Line (Thermoplastic)</u>	3,200	LF	\$2	\$6,400	MassDOT Item 867.04	Allowance. Pavement striping. Assume total length = 3,200 sf. Assume single lines for striping, not double.
17	<u>Pavement Arrows Reflectorized White (Thermoplastic)</u>	2,600	SF	\$5	\$13,000	MassDOT Item 864.04	Allowance. Pavement Arrows. Assume total area = 130 sf per arrow; 20 arrows; 2,600 sf total.
Subtotal, Estimated Construction					\$1,607,661		
Contingency (25%)					\$482,298		
Engineering, Permitting, Bidding, Construction Admin. (15%)					\$241,149		
Total Estimated Cost, September 2013					\$2,367,109		
						<u>Paving-related costs</u>	
						Sub-base \$403,025	
						Asphalt <u>\$707,733</u>	
						Subtotal \$1,110,758	
						<u>Contingency (25%) \$277,689.48</u>	
						Total \$1,388,447	
TOTAL ESTIMATED COST, JULY 2015 (see Note 4)					\$2,509,135		