PAYING FOR ENERGY USE REDUCTION AND ENERGY GENERATING

Minuteman Regional Vocational Technical School District
Edward A. Bouquillon, Ph.D.,
Superintendent-Director
Minuteman Regional Vocational Technical School District

Dr. Edward Bouquillon is the Superintendent-Director of the Minuteman Regional Vocational Technical School District in Lexington – a role he has held since 2007. “Dr. B” has more than three decades of experience in the administration of career and technical education. While at Minuteman, he oversaw the 12 year district wide approval process resulting in the opening of the new school in 2019. The district has received numerous state and national recognitions for its academic rigor, including a 2018 National Blue Ribbon School designation, and in 2020, the Massachusetts Reading Association honored Minuteman with its Exemplary Reading Program Award.

Kathleen Bouchard, M.Ed, C.A.G.S.
Interim Principal and Director of Career Technical Education
Minuteman Regional Vocational Technical High School

Kathleen Bouchard is the Interim Principal and Director of Career Technical Education at Minuteman Regional Vocational Technical High School in Lexington. Ms. Bouchard has worked for Minuteman since 2009. She served as an Early Education and Teaching instructor for several years before becoming the Assistant CTE Director. She was named Director of CTE in July 2020. Bouchard was named Interim Principal in October 2021.

Gregory Joynt, AIA, LEED BD+C
Associate Principal
Kaestle Boos Associates, Inc.

Gregory Joynt is an Associate Principal for Kaestle Boos Associates, Inc. where he has overseen multiple large scale and technically complex projects Since joining KBA in 2007. Greg work includes the additions and renovations of the Bay Path Regional Vocational Technical High School in Charlton, along with multiple Public Safety, municipal and school district projects. Greg was the Project Architect for the construction of the new Minuteman Regional Vocational Technical High School.
PHOTOVOLTAIC SYSTEM - GOALS

- Lead by Example
- Provide Teaching Opportunities
- Reduce Carbon Impact
- Reduce Operating Cost
- Limit Project Budget Impacts
<table>
<thead>
<tr>
<th>District Owned PV</th>
<th>Purchase Power Agreement (PPA) Bid</th>
<th>Purchase Power Agreement (PPA) Power Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Benefits</td>
<td>• Benefits</td>
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<tr>
<td>• No 3rd party power agreements.</td>
<td>• No up-front costs</td>
<td>• Known Vendor</td>
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<tr>
<td>• No easements</td>
<td>• Most competition</td>
<td>• Upfront procurement completed</td>
</tr>
<tr>
<td>• Retain Environmental attributes</td>
<td>• Challenges</td>
<td>• Design input</td>
</tr>
<tr>
<td>• Challenges</td>
<td>• Timeframe</td>
<td>• Challenges</td>
</tr>
<tr>
<td>• Upfront funding</td>
<td>• Smaller System Size</td>
<td>• Environmental Attributes belong to the PPA vendor</td>
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<td>• Bonding costs</td>
<td></td>
<td>• District must join the consortium</td>
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</tbody>
</table>
PHOTOVOLTAIC SYSTEM – PPA DETAILS

System Size: 250kW AC
374kW DC
Avg. Annual Production:
397kWH
Behind the Meter

Projected Cost Reduction*:
Annual: -$28,500
20 Yr. Life: -$570,000

*85% guaranteed
PHOTOVOLTAIC SYSTEM – PROJECT IMPACTS

Energy Savings by Cost (all energy)
Without PV: 16.3% Below Code Baseline
With PV: 33.8% Below Code Baseline

LEED Energy Performance Impacts
Without PV: 6 points
With PV: 13 points + 1 Regional Priority