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**Town of Middlebury
Infrastructure Committee
Thursday, November 17, 2022
Meeting Minutes**

Members Present: Candy McLaughlin, Judy Wiger-Grohs, Erik Remsen, Luther Tenny and Alternate Jef Bratspis. Heather Seeley arrived during the Hoyle Tanner presentation. Gary Baker was absent.

Staff Present: Town Manager Kathleen Ramsay, Co-Directors of Public Works Planning Dan Werner and Emmalee Cherington, and Wastewater Superintendent Bob Wells.

Also Present: Representatives from engineering firms Hoyle Tanner, Stantec and Wright-Pierce

1. Call to Order

The meeting was called to order at 8:30 a.m. by Jef Bratspis who was acting as Chair until Seeley arrived.

2. Approval of Agenda

Remsen moved to approve the agenda and McLaughlin seconded the motion. The agenda was approved as presented with 4 in favor, 2 absent. **MOTION PASSED**

3. Approval of Minutes

The approval of minutes for October 27, 2022 were deferred until the December 1st meeting.

4. Citizen Comments

There were no citizen comments.

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5. Wastewater Design Presentations

Hoyle Tanner

Presenting for Hoyle Tanner were:

Jennie Auster, PE, Project Manager and Technical and Funding Lead
Kirstin DiPietro-Worden, PE, Senior Engineer & Detailed Design Lead
Matthew Scarborough, PS, Senior Engineer Wastewater Process Modeling and Anaerobic Digestion

Auster said that Hoyle Tanner is a multi-disciplinary engineering firm with 5 offices located in New England, and their Burlington office has a staff of 9, most of whom are their wastewater treatment team.

Their slide show presentation featured their experience in evaluation of activated sludge alternatives, including completely aerated, using the Milford, NH and Woodstock, VT plants as examples. They are also experienced in mesophilic and thermophilic digester process, and Auster was the technical lead in the Bellows Falls WWTF mesophilic digesters with biogas for process and facility heat, as well as Essex Jct and St Albans digester upgrades.

Because we already have a Preliminary Engineering Report (PER) prepared by Tata Howard, they will review the report and make any additional recommendations to consider an addendum to the Report that is already approved by the State.

Auster said helping with funding is one of their strengths, and they are familiar with all the VTDEC funding sources, as well as USDA Rural Development, Congressionally Directed Spending and the Norther Borders Regional Commission grants.

They stressed the fact they are local and can be on-site in about an hour, and that they are familiar with Vermont funding and look to have a long-term investment in the community.

Cherington asked about permitting and how many change orders they anticipate in a project. Auster said they have a full permitting group in the Manchester, NH office and they are familiar with permitting in all the New England states. As far as change orders, Auster said that there is no perfect design and you never know what you'll find in the existing conditions, so change orders are part of the process, however they do look at

82 the problem as whether it will be a benefit to the project prior to issuing the change
83 order.

84

85 Werner asked what the timeframe was for completing the design. Auster said they'd
86 review the existing PER for any changes and look for potential cost savings, but it would
87 probably be 12-18 months for the design, but she would keep in mind the important
88 deadline for grants in February.

89

90 Tenny asked if they had in-house technical staff, such as electrical and control
91 integration, as well as their training and hand-off process at the end of the project.
92 Auster said they use subcontractors that they have long-term relations with, and these
93 subcontractors do about 90% of the wastewater work in Vermont. She said in response
94 to handoff of the system, they prepare presentations and materials for each of the
95 process components, and for 3 years in a row they've been chosen for technical
96 assistance and outreach by the State of Vermont and Champlain River Basin Program
97 for wastewater facilities, so they are here to help work through the kinks.

98

99 Seeley asked about Errors and Omissions insurance. Auster said she can provide their
100 insurance information, but it is included in their corporate liability.

101

102 Wiger-Grohs asked if they would be lowering the phosphorous level in the discharge,
103 and Auster said Middlebury's discharge already has a good phosphorous level and
104 meets regulatory requirements, but there is potential to go lower should the community
105 choose to do so. Ramsay asked Auster if she had any idea of any future regulatory
106 changes. Auster said EPA may require lowering phosphorous levels if the non-source
107 contributors don't reach their goal, but it wouldn't be hard to add additional filtration, or if
108 the Town chooses, the process could be designed to lower the phosphorus levels.

109

110 **Stantec**

111

112 Presenting for Stantec were:

113

114 Justin Rabidoux, Project Manager

115 Jack Myers, PE, Technical Lead

116 Kaytee Manchester, ME, PE,

117

118 Stantec is a national company with 25,000+ employees, but they have a strong Vermont
119 staff that is located about an hour away, and they have extensive wastewater
120 experience with municipal and industrial waste streams and have done the upgrade of

121 the Stowe WWTF and the upgrade and expansion of the South Burlington WWTF,
122 along with numerous industrial WWTF.

123

124 The Stantec team had toured the Middlebury WWTF and said the facility is well
125 maintained and operated, although the UV system being used has a high-power
126 demand and is no longer being serviced.

127

128 Myers said after reading the PER and their anaerobic digestion recommendations, he
129 said some additional things to consider would be the need for additional feed stock for
130 the digester, since the plant would not produce enough to meet the 4-6% required for
131 thickening the sludge, and the need for additional storage for holding the gas from the
132 system, but there would be a benefit in the use of this gas for supplemental heat for the
133 plant.

134

135 Manchester spoke on sludge management and the ongoing challenges in Vermont and
136 thought there would be grants available in the future for dealing with the biosolid
137 removal, and this isn't just a state problem, it's a regional problem, and if the State shuts
138 down on land application for sludge in the future, then they must provide alternatives.

139

140 Rabidoux said they have technical staff in-house, so they don't need to deal with a lot of
141 subcontractors, so they are a one-stop shop.

142

143 Tenny asked about the commissioning of the plant at completion, to train staff and make
144 sure everything is running properly. Myers said they understand the importance of the
145 commissioning process, and while they don't commission the equipment themselves,
146 they rely on their suppliers to do that, but they create contract documents that spell out
147 the requirements. Rabidoux said their experience shows that the best way is to make
148 sure these details are covered in the contracts and that is how you protect yourself, and
149 they can deliver that, but stressed the importance of communication.

150

151 Cherington asked of their funding experience, and Rabidoux said he had worked with
152 the CWSRF process numerous times, and he is aware of the importance of the timing of
153 the Vermont Municipal Bond Bank and spoke of things to consider regarding bonding.

154

155 Werner asked of the timing to complete the design, and they said there would be some
156 early initial studies, but it would probably be a year, and in regard to permitting
157 experience, they said they have done about every type of permit.

158

159 Seeley asked about their insurance, and they said they have standard insurance, but
160 they have a very active in-house quality control process and independent technical
161 review of each discipline in the plan, designed to avoid any type of error or omission.
162

163 **Wright-Pierce**

164
165 Mike Kiernan, Regional Group Leader
166 Michael Theriault, PE and Senior Project Manager
167 Kristen Lemasney, PE and Project Manager
168 Doug Hankins, PE and Technical Advisory
169

170 They said they are a New England firm established in 1947 and their main office is
171 based in Manchester, NH with regional offices throughout New England. They have
172 designed over 100 treatment plants, and their strength is municipal wastewater facilities.
173 In Vermont they have worked on the 3 wastewater facilities in Burlington, and in addition
174 to those they have worked on sewer system evaluations in Shelburne and stormwater
175 work in Burlington. They said while they are all aware of the funding process, they have
176 a funding manager in the NH office that does all their funding and in-house technicians
177 with experience in wastewater facilities.
178

179 Theriault said the PER had a lot of recommendations, including a major process
180 change. He said they have come into several projects after the completion of the PER
181 and they are able to fill in the gaps and strategize on what makes sense moving into
182 design, and look at can the project be broken down to have a lower impact on the tax
183 base. He said Middlebury is looking at a \$21 million dollar project, and due to the
184 regulatory changes in Vermont and New England, and not knowing the future of land
185 application in the future, he wondered if now was the right time to be looking at anaerobic
186 digesters or was it better suited to be a future phase of the project.
187

188 Hankins said they have some concerns with the current PER and would like to do a
189 supplement to this PER to avoid having to do a new PER and the need to submit it to
190 the State for approval. He said his team helps with the evaluation of the project and
191 different processes available prior to the design phase.
192

193 Hankins and Lemasney went through a slide show of the various wastewater projects
194 they've done in New England in the past few years and described the various processes
195 used and changes made to each facility and stated again that their focus has been on
196 wastewater facility design for many years and importance of their experience together
197 as a project team.
198

199 Bratspis asked what the top options were for sludge management. Theriault said in the
200 past it has been land application, but with the way regulations are changing, it is a
201 matter of “when”, not “if” land application goes away, so that leaves landfills, incineration
202 (none in Vermont) or digestion. He said some communities are sending sludge to
203 Canada, but they look at that as a short-term solution, and land fills are reaching
204 capacity and are expensive.

205
206 Bob Wells questioned holding off on the digester, since it seemed like a good solution to
207 the problem here in Middlebury. Theriault said they looked into that for a similar facility
208 in Concord, NH but they completely moved away from it due to the cost, and they
209 stopped making a Class A product and just produce sludge in a cake form and transport
210 it to Canada, so that’s why they want to look at all the other options.

211
212 Werner asked on timeframe for completing engineering design, and they said they need
213 to revisit some parts of the PER and they have experience in putting the town in a
214 position for obtaining better grant funding, so if a supplement needs to be done to the
215 PER they would do that over the next 3 months and begin the design process in early
216 2024.

217
218 Cherington asked about their availability for meeting with the municipality and onsite
219 work since they’re based in New Hampshire. They said they have found a lot of value
220 of virtual communication and have all the technologies to stay connected but can be
221 available in person when needed and travel is something they make time for and is built
222 into their schedule and plans.

223
224 Tenny asked how they integrated their in-house technical staff and wondered how they
225 work with staff at the completion of the project to hand over the plant. Hankins said they
226 make sure they are all on site at the start up of each process of the project.

227
228 Seeley asked about their errors and omissions insurance coverage and how the Town
229 would be covered and how they reduced liability. They responded they have a standard
230 agreement for that, but in terms of errors and omissions, they work through the contract
231 to make sure it’s covered in every aspect, and they have independent in-house review
232 at every level.

233
234 **South Street Engineering Proposal**

235
236 Werner said Landmark Engineering has submitted an engineering proposal for South
237 Street and this proposal includes everything but construction review. He said this part
238 of the proposal takes us through to final design, the bidding process and construction

239 administration that comes to \$28,760. He said the construction review comes in at
240 \$86,760, but typically that is not approved until we get through the bid process. He said
241 this is just for the water portion of the project that is funded with ARPA funds and he has
242 reviewed the proposal and it is consistent with others in the past.

243
244 Tenny asked the strategy on the rest of the project. Werner said the water line needs to
245 be moved to the east side of the street before the sanitary portion can be done. He said
246 the sanitary and storm portion of this project will be paid for with the CWSRF funds, so
247 they want to do the water portion first and completed before the next phase of the
248 project. Cherington said the idea was to compete the water portion first while they wait
249 to complete the CWSRF funding process. They said this will be a two-year project from
250 Main Street to Porter Field Road.

251
252 Bratspis moved to send the proposal of \$28,760 from Landmark Engineering to the
253 Selectboard and recommend approval. Wiger-Grohs seconded the motion. The motion
254 carried with 6 in favor. **MOTION PASSED.**

255 Project Updates

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257
258 Werner said paving has been completed on Colonial Drive but there will need to be
259 some final restoration work done in the spring.

260 Adjournment

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262
263 The meeting adjourned at 11:15 a.m. upon motion by McLaughlin, seconded by Eric.

264
265 The next meeting of the Infrastructure Committee will be Thursday, December 1st at
266 9:00 a.m.

267
268 Respectfully submitted,
269 Beth Dow

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