Lagoon Ridge Subdivision
septic system documents
DRI 464-M3

Land Use Planning Committee
May 2, 2022
Lagoon Ridge septic system documents

Owner/applicant: CapeBuilt Lagoon Ridge LLC (Eric Peters, agent)
Location: Land off Barnes and Double Ox Roads, Oak Bluffs

Decision filed 6/16/16
MVC 11/5/20 – Approved extension through Nov. 5, 2024 (to record the subdivision plan and covenants)
LUPC 10/4/22 – Approved project phasing plan (Condition 2.3)
Cluster B

"Lagoon Ridge"

Plan Scale: 1in. = 60ft.

Note: the precise location of the development envelopes is to be determined by the lot owner prior to construction.

<table>
<thead>
<tr>
<th>Core</th>
<th>Radius</th>
<th>Length</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>102.70</td>
<td>154.54</td>
<td>275.85</td>
</tr>
<tr>
<td>C2</td>
<td>112.46</td>
<td>151.58</td>
<td>276.70</td>
</tr>
<tr>
<td>C3</td>
<td>108.96</td>
<td>134.34</td>
<td>184.29</td>
</tr>
<tr>
<td>C4</td>
<td>106.46</td>
<td>158.13</td>
<td>277.26</td>
</tr>
<tr>
<td>C5</td>
<td>101.90</td>
<td>162.43</td>
<td>276.12</td>
</tr>
<tr>
<td>C6</td>
<td>99.00</td>
<td>164.88</td>
<td>276.00</td>
</tr>
</tbody>
</table>

Sheet 2 of 4
Updates since 2016

• Planning Board Special Permit issued and revised in 2018 (included reconfiguration of Cluster C to have a 50 ft buffer of open space)

• MVC extensions granted in 2019 and 2020 (now valid through Nov. 5, 2024)

• Special Permit conditions 10, 11, and 12 amended in February 2021
  • Affordable units increased from 3 to 4, located on 2 lots in Cluster C as duplex units
  • The additional unit further restricted as one of the six units for occupancy by people 55 and older
  • Phasing plan (Cluster C → Cluster B → Cluster A)
MVC Condition 7.6

• The applicant shall provide an operation and maintenance manual for the shared facility once it has been purchased and for the denitrification septic systems based on the design, installation, use, and maintenance recommended by the manufacturers. These manuals shall be submitted to and are subject to the approval of the MVC’s Land Use Planning Committee prior to installation.
Submittals (with links)

• Final sewage disposal system plan
• Amphidrome wastewater treatment system operation and maintenance manuals
• Amphidrome owner’s guide
• Grinder pump – homeowner operation and maintenance manual
• Letter from FR Mahoney and Associates confirming nitrogen reduction limits (system is designed to meet total nitrogen limit of less than 10 mg/L)
• Oak Bluffs Board of Health approval of sewage disposal system (with conditions)
Amphidrome O&M manuals

Wastewater pumps
• Specs and performance data
• Installation, operations, and maintenance manuals

Chemical feed system
• Specs and instructions
• Installation and maintenance manual

Packaged air system
• Specs, instructions, maintenance, etc.

Flow metering
• Specs

Odor control
• Specs and installation

Ancillary equipment
• Specs
• Installation and maintenance instructions

Reactors
• Construction drawings – installation, assembly, etc.

Control system
• Electrical plans
BOH conditions of approval (7/21/21)

• **Operations and maintenance costs:** Cape Built will initially subsidize the costs for O&M on a pro rata basis for homes within clusters A and B prior to transfer to buyers and will then turn responsibility for the O&M to the homeowners association. Pumping frequency is likely to be 2x per year but will depend on loading to the system and will be determined based on sludge and scum levels in the tank.

• **System operator:** Cape Built will contract with a local operator with the property wastewater operator license who will be trained by Amphidrome. Amphidrome will also offer support after the sale.

• **Alarms:** There is to be a power outage alarm. The pump alarms will have visual and audio alarms. All alarms will notify the operator via phone/text or other appropriate automated method. FR Mahoney will also ensure that the system is constructed with the ability to remotely access the system. The typical alarm package has a 12 volt battery, when AC power is lost it will notify the operator. In addition the 12 volt battery will report any alarms until the battery dies. The battery life is about 1-2 days. Once power is restored the battery will recharge itself, If the battery goes below 11 volts it will issue a low battery alarm as well.

• **Generator:** In the event of a power failure, the check valves allow for the water to flow through via gravity so water will still flow through the whole system normally even without pumps. In addition, Cape Built will install an automatic propane-fueled backup generator adjacent to the control house that will be capable of operating the Amphidrome system in the event of a prolonged power failure.
Related MVC condition (for later LUPC review)

7.9) The applicant shall submit a plan to cover the costs of maintaining the shared facility in perpetuity. The affordable housing lots and units shall be exempt from contributing to such costs unless the applicant or association, prior to the transfer of the affordable lots to the town, develops with the Dukes County Regional Housing Authority a contribution formula for these lots/units that does not jeopardize the affordability of said lots/units. Any such formula shall be approved by the Land Use Planning Committee of the MVC before being recorded or implemented.