Tuesday July 28, 2020 Medway Planning and Economic Development Board 155 Village Street Medway, MA 02053

REMOTE MEETING

| Members | Andy | Bob | Tom | Matt | Rich | Jessica |
|------------|------------|--------|-----|-------|----------|---------|
| | Rodenhiser | Tucker | Gay | Hayes | Di Iulio | Chabot |
| Attendance | X | X | Х | X | X | X |

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, and the Governor's Orders imposing strict limitations on the number of people that may gather in one place, <u>no in-person attendance of members of the public will be permitted at this meeting</u>. Board members will participate remotely via ZOOM. Meeting access via ZOOM is provided for the opportunity for public participation; information for participating via ZOOM is included at the end of the meeting agenda. Members of the public who wish to watch the meeting may do so, on Medway Cable Access: channel 11 on Comcast Cable, or channel 35 on Verizon Cable; or on Medway Cable's Facebook page @medwaycable.

ALSO PRESENT IN ZOOM MEETING:

- Susy Affleck-Childs, Planning and Economic Development Coordinator
- Amy Sutherland Recording Secretary
- Steve Bouley, consulting engineer from Tetra Tech

The Chairman opened the meeting at 7:00 pm.

There were no Citizen Comments.

PEDB MEETING MINUTES:

July 14, 2020:

On a motion made by Rich Di Iulio and seconded by Bob Tucker, the Board voted by Roll Call to approve the minutes from the July 14, 2020 meeting as revised.

Roll Call Vote:

| Bob Tucker | aye |
|----------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

WILLIAMSBURG FIELD CHANGE:

The Board is in receipt of the following: (See Attached)

• 6-18-20 email from Paul Yorkis requesting authorization to not plant one tree as shown on the approved site plan.

Mr. Yorkis was present at the Zoom meeting. Mr. Yorkis explained that the town had included on the Williamsburg punch list the installation of a tree within the island where the mailboxes are located. This was on the original landscape plan. Bill Canesi of Canesi Brothers, the firm that installed the infrastructure, advised that it is not the ideal location to install a tree in this location due to the conduit. Mr. Yorkis informed the Board that he spoke with Rick Tweedy who manages the Williams Condominiums Association and he agreed to allow Mr. Yorkis to send a check in the amount of \$250.00 payable to the Association in lieu of planting the tree since they did not want it planted in another location.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call vote to adopt the field change for Williamsburg Condominium Corporation as presented.

| Roll Call Vote: | |
|-------------------|-----|
| Rich Di Iulio | aye |
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

MILLSTONE FIELD CHANGE:

The Board is in receipt of the following: (See Attached)

- 7-21-20 letter from GLM Engineer Rob Truax
- Emails from Steve Bouley dated 7-21-20

The applicant's representative, GLM principal Joyce Hastings, was present during the Zoom meeting.

The Chairman disclosed to the Board that he had retained Ms. Hastings/GLM Engineering to assist him with some conservation issues at his home.

Ms. Hasting explained that the submitted field change addresses the drainage structure that was installed on Riverstone Drive. The structure appears to be a small leaching catch basin that wasn't functioning properly and flooded the road on occasion. This was also connected to the flood drain infiltration system as its outlet. The provided calculations indicate that the drain trench will recharge the surface from the drainage area for the 100-year storm event.

Consultant Bouley noted that the pipe is currently connected to drain. This cannot be connected to the structure or any other pipe. It was noted that the drawing dated June 28, 2020 needs to be changed by adding a note that the pipe cannot be tied into the catch basin. Consultant Bouley indicated that this will be inspected.

A member of the public joined the Zoom meeting and wanted to know what happens to the roof

drain. Consultant Bouley responded that the cultec system is already there. An inlet water quality unit will be there for the catch basin. Consultant Bouley would like a note that the pipe is to be installed with a perforation at the invert of the pipe to ensure it actively infiltrates during all storm events. The applicant will provide the noted field change on a revised plan.

On a motion made by Matt Hayes and seconded by Bob Tucker, the Board voted by Roll Call to approve the field changes for Millstone Village.

| Roll Call Vote: | |
|------------------------|-----|
| Rich Di Iulio | aye |
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

MEDWAY MILL SITE PLAN PUBLIC HEARING:

The Board is in receipt of the following: (See Attached)

- 7-17-20 notice to continue the Medway Mill site plan public hearing to 7-28-20.
- 7-24-20 declaration by PEDB chairman Andy Rodenhiser to continue the hearing to 8-11-2020.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call to continue the hearing for the Medway Mill Site Plan to August 11, 2020 at 7:15 pm.

Roll Call Vote:

| Bob Tucker | aye |
|-----------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

MEDWAY PLACE SITE PLAN PUBLIC HEARING:

The Board is in receipt of the following: (See Attached)

- 7-17-20 notice to continue the Medway Mill site plan public hearing to 7-28-20.
- 7-23-20 request from attorney Gareth Orsmond to continue the hearing.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call to continue the hearing for Medway Place Site Plan to August 11, 2020 at 9:00 pm.

Roll Call Vote:

| Bob Tucker | aye |
|----------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

ARCPUD RULES AND REGULATIONS:

The Board is in receipt of the following: (See Attached)

• Draft of the proposed amendments to the ARCPUD Rules and Regulations dated 7-20-20.

The Board was informed that Barbara Saint Andre had asked for the ARCPUD Rules and Regulations to be updated since this was last done in 2001. The majority of the changes are basic "housekeeping" amendments, similar to what was done recently with the AUOD Rules and Regulations.

Some of the edits include:

- Remove the term Planning Board and just have Board.
- Remove the number and write out the numbers (3) three.
- Change the word bond to surety.
- Change term building inspector to building commissioner
- Include ARCPUD Plan review fee as referenced in G.L. Chapter 44, Section 53 G.
- Eliminate the section on penalties within this noted section.

The Board agrees with the recommended edits and would like to hold the public hearing on this at the August 25, 2020 meeting.

<u>ZBA PETITION – Request for Amendment to 1997 variance for 72A Fisher</u> <u>Street:</u>

The Board is in receipt of the following: (See Attached)

- Application from Kathleen and Patrick McSweeney.
- Variance Decision July 17, 1997.

NOTE – Patrick McSweeney zoomed in for the meeting.

The Zoning Board of Appeals received a petition from Kathleen and Patrick McSweeney requesting an amendment to the 1997 variance for 72A Fisher Street. The variance decision allowed a house to be constructed on a lot with less than the standard frontage for the zoning district. However, that decision included a condition that the property could not be further divided. The current owners seek to have this condition be removed so they can then file with the PEDB for a 2-lot private way subdivision to create frontage for 2 lots. The applicant wants to build a new home on a newly split off lot, and then sell the other lot which will include their current home. The Board has no objections to this amendment and would normally not provide a comment to the ZBA.

Susy Affleck-Childs suggested the Board might want to inform the ZBA that the 2-lot private way subdivision is an appropriate step for the applicant to take if the ZBA were to approve the variance amendment.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call that they communicate with the ZBA about the permanent private way subdivision. Minutes of July 28, 2020 Meeting Medway Planning & Economic Development Board APPROVED – August 11, 2020

| Roll Call Vote: | |
|----------------------|-----|
| Rich Di Iulio | aye |
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

CONSTRUCTION REPORTS:

The Board is in receipt of the following: (See Attached)

- Salmon SWPPP report from Coneco Engineering
- Salmon construction report #42 (7-14-20) Tetra Tech
- Salmon construction report #43 (7-15-20) Tetra Tech

Consultant Bouley explained that he is working with the Conservation Agent Bridget Graziano and Coneco on revisions to the Salmon SWPPP based on the discussions from the last PEDB meeting. The draft revisions to the SWPPP were submitted last week. Those were reviewed by the Conservation Agent and Consultant Bouley. A few more refinements are needed.

ENVIRONMENTAL REGULATIONS:

The Board is in receipt of the following: (See Attached)

- Revised draft dated 7-27-20
- Email dated 6-22-20 from resident John Lally
- Email dated 7-28-20 from resident John Lally

Member Gay began the discussion on the Environmental Regulations by explaining that the presented document has been reviewed by both Susy and Barbara. This document specifies how the Building Commissioner will address complaints. It allows for the gathering of data on other complaints giving the Building Commissioner some enforcement leverage. This helps the building department decide if there is a minor problem with possible mitigation or if the issue rises to a bigger level. Member Gay noted that he did read the recent comments offered by Mr. Lally has and does not have a problem with changing the distance standards.

One of the keys changes has to do with the fee for a consultant to determine if there is a violation. The new language would allow for the Building Commissioner to use a noise or odor consultant if needed. However, the Town cannot charge a property owner for that. The Building Department would need a consulting services line item in its budget if it needed to retain outside noise and odor consultants.

The current process for enforcement is a \$300.00 per day violation which is a non-criminal ticket. Resident John Lally communicated that it would be helpful if there was a clear definition of what constitutes an "objectional" odor and this should be included in the bylaw. Mr. Lally recommended a definition. There was a statement that an odor does not mean that it is not always objectionable or nasty. (ex. fresh mulch). The goal of this is to not limit the wording to just odor.

Resident Lally next referenced the investigated section where odor can be an indication of a danger to health, life, and property. He would like to see all odor complaints investigated.

Member Gay noted that there is always an option for a complaint to be investigated but if there are multiple complaints, it would have to be investigated. There was also a comment about the distance of 300 ft. for complaints to be investigated. Mr. Lally would like to see this increased to 1,000 ft. Member Gay has no issue with this being 1,000 ft as recommended by John Lally.

The other item suggested by Mr. Lally is to allow the Building Commissioner to use any other means he deems appropriate for investigation. The Board agrees that this language would allow for flexibility. He also stated that "objectionability" is something other than the threshold. He would like to see that "objectionability" is going to be determined by the Building Commissioner. Mr. Lally wants a precise measurement for the Building Commissioner to use. Mr. Lally also read the definition of detection threshold. He further explained that there are two thresholds - detection and recognition. Detection is that an odor is noticeable. Recognition is the identification of what the odor is. (ex. cannabis facility). Mr. Lally further define this and specify the qualifications of the people doing the odor assessment.

The Board would like Susy to further revise and edit the document and then it will be presented to the Board at a follow-up meeting.

OTHER BUSINESS:

Salmon Construction Account:

The Board is in receipt of the following: (See Attached)

- Salmon Construction Services Project Accounting Report dated 7-14-20
- Updated Tetra Tech construction services estimate dated 7-28-20

On a motion made by Bob Tucker and seconded by Matt Hayes, the Board voted by Roll Call to approve the supplemental estimate for Salmon in the amount of \$29,245.00.

Roll Call Vote:

| Bob Tucker | aye |
|-------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

Central Business District Zoning Project:

The Board is informed that a recommendation and contract proposal will be presented to the Board of Selectmen on August 3, 2020 for Ted Browvitz for consulting services for the Central District Zoning Project. It was noted that the EDC would like to be part of the discussions.

Millstone:

The Board was informed that Susy Affleck-Childs and Conservation Agent Bridget Graziano had a productive Zoom meeting with the condo management company which has recently been retained for Millstone. The representative was informed about the permits, restrictions, trails, and stormwater. This was a good discussion. The Board was informed that Susy Affleck-Childs was contacted by a resident on Carriage Way about the proposal for an 800,000-warehouse facility being built in the Town of Holliston behind their subdivision. Susy has requested the traffic study and full set of plans. There is a concern about the traffic on Clark Street to South Street. There was a suggestion to approach MAPC to look at traffic in this area since it will be a regional problem.

FUTURE MEETING:

• Tuesday, August 11 & 25, 2020

ADJOURN:

On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted by Roll Call vote to adjourn the meeting at 8:47 pm.

Roll Call Vote:

| Bob Tucker | aye |
|-------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

The meeting was adjourned at 8:47 pm.

Prepared by, Amy Sutherland Recording Secretary

Reviewed and edited by, Susan E. Affleck-Childs Planning and Economic Development Coordinator

Board Members

Andy Rodenhiser, Chair Robert Tucker, Vice Chair Thomas Gay, Clerk Matthew Hayes, P.E., Member Richard Di Iulio, Member Jessica Chabot, Associate Member



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PLANNING AND ECONOMIC DEVELOPMENT BOARD

Remote Meeting Notice

Tuesday, July 28, 2020 @ 7:00 p.m.

This meeting is being broadcast and recorded by Medway Cable Access

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, and the Governor's Orders imposing strict limitations on the number of people that may gather inside in one place, <u>no in-person attendance of members of the public will be permitted at this meeting</u>. Board members will participate remotely via ZOOM. Meeting access via ZOOM is provided for the opportunity for public participation; information for participating via ZOOM is included at the end of this Agenda. Members of the public who wish to watch the meeting may do so on Medway Cable Access: channel 11 on Comcast Cable, or channel 35 on Verizon Cable; or on Medway Cable's Facebook page @medwaycable.

AGENDA

CALL TO ORDER

CITIZEN COMMENTS

APPOINTMENTS

| 7:05 p.m. | Williamsburg Condominium (Williamsburg Way off of West Street) - Field Change |
|-----------|---|
| 7:10 p.m. | Millstone Condominium (Fieldstone Drive off Millstone Drive off of Winthrop Street) - Field |
| | Change |

DEVELOPMENT PROJECTS PUBLIC HEARINGS

- 7:15 p.m. Public Hearing Medway Mill Site Plan *This hearing has been continued to August 11, 2020 at 7:15 p.m.*
- 8:15 p.m. Public Hearing Continuation Medway Place Shopping Plaza Site Plan *This hearing will be continued to August 11, 2020 at 9 p.m.*

OTHER BUSINESS

- 1. Discussion of proposed amendments to the Adult Retirement Community Planned Unit Development (ARCPUD) Rules and Regulations
- 2. Review petition to the Zoning Board of Appeals to amend a variance granted in 1997 for 72A Fisher Street
- 3. Continued discussion of possible amendments to Section 7.3 Environmental Standards of the Medway Zoning Bylaw
- 4. Consideration of PEDB Meeting Minutes July 14, 2020 meeting
- 5. Construction Reports Tetra Tech
- 6. Other Reports Staff and Committee Liaisons

- 7. PEDB Members' Comments and Concerns
- 8. Review Correspondence/Communications
- 9. Other Business as May Properly Come Before the Board

ADJOURN

The listed agenda items are those reasonably anticipated by the Chair to be discussed at the meeting. Public hearings cannot commence before the specified time. Appointment times are approximate and may be adjusted. Not all of the listed items may in fact be discussed. The Board may address and consider other matters not specified to the extent permitted by law.

FUTURE PEDB MEETINGS Tuesdays - August 11 & 25, September 8 & 22, October 13 & 27, November 10 & 24, 2020

ZOOM MEETING – Access Instructions

Topic: Planning Board Zoom Meeting July 28, 2020 - 7 PM Time: Jul 28, 2020 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting https://us02web.zoom.us/j/89887763202

Meeting ID: 898 8776 3202

One tap mobile +13017158592,,89887763202# US (Germantown) +13126266799,,89887763202# US (Chicago)

Dial by your location +1 301 715 8592 US (Germantown) +1 312 626 6799 US (Chicago) +1 929 436 2866 US (New York) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

Meeting ID: 898 8776 3202

Participant Information

- All non-board members are muted
- To participate in the meeting
 - Click CHAT from the menu options
 - o If calling in, enter *9 on your telephone
 - Type "Raise My Hand" in the chat window and send, or you can also click on the Raise Hand button
 - o Wait for the moderator to acknowledge you and speak



July 28, 2020 Medway Planning & Economic Development Board Meeting

PEDB Meeting Minutes

• Draft minutes of the July 14, 2020 PEDB meeting

Tuesday July 14, 2020 Medway Planning and Economic Development Board

REMOTE MEETING

| Members | Andy | Bob | Tom | Matt | Rich | Jessica |
|------------|------------|--------|-----|-------|----------|---------|
| | Rodenhiser | Tucker | Gay | Hayes | Di Iulio | Chabot |
| Attendance | X | X | Х | X | X | X |

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, and the Governor's March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place, <u>no in-person attendance of members of the public</u> <u>will be permitted at this meeting.</u> Board members will be participating remotely via ZOOM. Meeting access via ZOOM is provided for the opportunity for public participation; information for participating via ZOOM is included at the end of the agenda. Members of the public who wish to watch the meeting may do so on Medway Cable Access; channel 11 on Comcast Cable, or channel 35 on Verizon Cable; or on Medway Cable's Facebook page @medwaycable.

ALSO PRESENT IN ZOOM MEETING:

- Susy Affleck-Childs, Planning and Economic Development Coordinator
- Amy Sutherland Recording Secretary
- Steve Bouley, Tetra Tech
- Barbara Saint Andre, Director of Community and Economic Development

The Vice Chairman opened the meeting at 7:04 pm

There were no Citizen Comments.

The Chairman arrived at 7.10 pm.

PUBLIC HEARING – PROPOSED AMENDMENTS TO THE ADAPTIVE USE OVERLAY DISTRICT (AUOD) RULES AND REGULATIONS:

The Board is in receipt of the following: (See Attached)

- Public Hearing Notice
- Draft amendments dated 6-24-20

The public hearing for the proposed amendments to the *Adaptive Use Overlay District Rules and Regulations* was opened.

On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted by Roll Call vote to waive the reading of the public hearing notice.

| Roll Call Vote: | |
|----------------------|-----|
| Rich Di Iulio | aye |
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

Among others, the following changes are recommended:

- The date has been amended
- The name of Jessica Chabot has been added to document
- Title has been changed to Planning and Economic Development
- Wording changed from "Planning Board" to Board
- Writing out numbers in text.
- Changing the # of submittal copies from 18 to 3.
- Changing title from Zoning Enforcement Officer to Building Commissioner
- Distribution of application within 35 days.
- Add reference to MGL Chapter 44, Section 53 G for consultant fees.
- Replace the word bond to surety.
- Include language that AUOD special permits are subject to the lapse provisions of Section 3.4.E of the Zoning Bylaw.
- Retain the requirement of the public hearing process for any amendments.
- Delete the requirement to file the AUOD Rules and Regulations with the Registry of Deeds.

The public was asked to provide comments. There were no comments presented.

On a motion made by Matt Hayes and seconded by Bob Tucker, the Board voted by Roll Call vote to adopt the Rules and Regulations as discussed.

Roll Call Vote:

| Rich Di Iulio | aye |
|-------------------|-----|
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted by Roll Call vote to close the public hearing.

Roll Call Vote:

| Rich Di Iulio | aye |
|-------------------|-----|
| Matthew Hayes | aye |
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |

MEDWAY MILL SITE PLAN PUBLIC HEARING: (See Attached)

• 7-9-20 Andy Rodenhiser declaration to continue the Medway Mill public hearing from July 14, 2020 to July 28, 2020.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call to affirm the chairman's declaration and continue the hearing for Medway Mill Site Plan to July 28, 20220 at 8:15 pm.

Roll Call Vote:

| Bob Tucker | aye |
|-------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

ELECTION OF OFFICERS AND SELECTION OF COMMITTEE APPOINTMENTS AND LIAISON ASSIGNMENT:

Chairman:

On a motion made by Matt Hayes and seconded by Rich Di Iulio, the Board voted by Roll Call vote to select Andy Rodenhiser as the Chairman of the Planning and Economic Development Board.

Roll Call Vote:

| Bob Tucker | aye | |
|-------------------|-----|--|
| Tom Gay | aye | |
| Andy Rodenhiser | aye | |
| Matt Hayes | aye | |
| Rich Di Iulio | aye | |
| | | |

Vice Chairman:

On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted by Roll Call vote to select Bob Tucker as the Vice Chairman to the Planning and Economic Development Board.

Roll Call Vote:

| Bob Tucker | aye |
|-----------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

Clerk:

On a motion made by Matt Hayes and seconded by Rich Di Iulio, the Board voted by Roll Call vote to select Tom Gay as the clerk to the Planning and Economic Development Board.

| Roll Call Vote: | |
|------------------------|-----|
| Bob Tucker | aye |
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

<u>Committee Assignments</u>: (See Attached)

The Board discussed the variety of committee representatives and liaison assignments. Alternate Member Chabot is interested in serving as the Board's liaison to the ZBA liaison. Member Tucker is happy to pass that assignment to her and retain his other existing liaison duties (Energy and Sustainability, Agricultural Committee, Conservation Commission, and Finance Committee). Member Hayes would like to remain with his current assignments (Community Preservation Committee member and liaison to Capital Improvements Committee and Historical Commission). Member Gay would like to remain on the Design Review Committee and Sign Bylaw task force and take on small projects as needed. Member Di Juho would like to keep with his assignments (member of the Economic Development Committee, alternate to the DRC, SWAP, and liaison to Open Space Committee) but there has been a conflict with the meetings with OSC since the dates of OSC meetings on the first Tuesday of the month sometimes conflict with PEDB (extra meetings). Andy Rodenhiser will continue on the Redevelopment Authority as a regular member and liaise with Affordable Housing, Board of Assessors, Board of Health, Water/Sewer Commissioners, Town Manager and Board of Selectmen. Susy Affleck-Childs encouraged the Board to see more effort put into liaising with the Energy and Sustainability Committee and the Open Space Committee.

SALMON SENIOR LIVING COMMUNITY-PROJECT UPDATE

The Board is in receipt of the following: (See Attached)

- 6-29-20 Susy Affleck-Childs email to Jeff Robinson as a follow-up from PEDB discussion during the 6-23-20 PEDB meeting.
- Follow-Up emails between Salmon development team and Susy Affleck-Childs in response to the above email
- Updated construction schedule dated 7-9-20
- 6-29-20 communication from abutter Tim Choate after heavy rain
- Tetra Tech inspection report dated 6-30-20
- Email dated 7-14-20 from Tom Geer
- SWPPP Site Inspection Report dated 7-2-20 from Coneco Engineering

Present during the ZOOM call were:

- Jeff Robinson, Managing Partner
- Conservation Agent, Bridget Graziano
- Tetra Tech Consultant, Steve Bouley
- Coneco Engineering, Jonathan Novak
- Abutter, Tim Choate

The Board was informed that the Salmon site had significant issues with the recent rainstorms on June 28 - 30, 2020. There was over 5½ inches of rain over two hours. There was damage to Mr. Choate's property to the immediate east of the Salmon site. Consultant Bouley explained that the silt sacks clogged up and stopped working properly. Consultant Bouley and Conservation Agent Graziano visited the site on June 30, 2020 to evaluate the situation. There was discussion on how to mitigate for future potential storm events. Ms. Graziano noted that no sediment had been discharged into the wetlands. The location of the flooding was on Waterside Run between the eastern abutters. The flooding occurred when the DCB-1 inlet protection constricted water flow through the structure. The grates on DCB-1 were removed during the storm to allow floodwaters to discharge through the cross culvert.

The contractor intends to mitigate future stormwater impacts to abutters' properties by modifying the proposed swale high point elevation to an elevation lower than the abutter's basement to allow the flow to enter the DCB's. Mr. Choate communicated that the Rubicon representative came to site and found the storm drain and took off the cover to the drain to allow the water to drain. He further stated that Salmon was taking care of the damage to his home.

Ms. Graziano indicated that neither she nor Mr. Bouley were contacted directly after this storm event. She was notified by Mr. Choate. For future storm issues on site, she would like to be added to the contact list. Rubicon will take responsibility on contacting Tetra Tech and the Conservation Commission after any rain event over .25". Rubicon has installed a new rain gauge on the construction trailer on site to replace the defective one. Ms. Graziano communicated that one of the biggest issues was that the roof drains from the main building were not connected. Jeff Robinson responded that the roof drains were not yet installed because the siding and roof need to go on first. One of the mitigation measures will be to add a secondary silt sack to assist in mitigating the flow.

The construction schedule was also updated and provided to the Board. Susy Affleck-Childs asked about the status of their plans for the eastern slope. Project developer Jeff Robinson communicated that they did consider putting in sod, but it is July and the sod would not do well due to the heat. Ms. Graziano wants erosion blankets placed along the slope to stabilize site area. Susy Affleck-Childs asked if a field change is needed. Consultant Bouley does not think a field change is needed since the final design has not changed. There was a recommendation to put some documentation about the new mitigations in place for the record as a revision to the SWPPP. Coneco will handle that.

The next item discussed was the fencing. There will be a temporary visual screen on top of guardrails where installed. However, there are not guardrails at the northern section of Waterside Run near the Barstow and Hickey properties. A smaller temporary safety fence will be installed to separate Waterside Run from the neighbors. There has been a fence and gate installed at the bridge at the end of Waterside Run, so that the building is securely removed from Waterside Run.

TETRA TECH CONSTRUCTION REPORTS: (See Attached)

Medway Community Church:

The Medway Community Church project is near completion. Member Gay visited the site and reviewed the punch list from Tetra Tech's previous inspection. The remaining items are landscaping along the interior of the fence line and islands within the parking lot. There was a requirement for a tree, but this area is too small to accommodate this tree and would require a field change. This will be placed on the next agenda.

Millstone Village:

The Board was informed that there were erosion issues which occurred on site during the June 28, 2020 storm. There was flooding at the low point of the site. Conservation Agent Graziano and Consultant Bouley did a site visit and there a sink hole near basin 4P. Consultant Bouley is getting further data to see if the lining in the system fabric was compromised in the corner of the system. GLM did communicate that they did complete a test pit. The slope has been stabilized.

Williamsburg Way:

The Board was informed that there was a tree which was to be placed in a specific area and it cannot be placed there due to an electrical conduit. Developer Paul Yorkis has indicated he will provide a check for \$250 to the Williamsburg condo association management in lieu of this tree planting. The management company, on behalf of the condo association, is amenable to this. Consultant Bouley indicated that planting a tree in this location is not a good idea since the roots could potentially cause an issue. There will need to be a punch list inspection by Tetra Tech for project completion, but it has not yet been requested by Mr. Yorkis.

MEDWAY PLACE SHOPPING PLAZA SITE PLAN: (See Attached)

• 7-8-20 email from Attorney Gareth Orsmond requesting a continuation of the public hearing.

On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted by Roll Call to continue the hearing for Medway Place Shopping Plaza Site Plan to July 28, 20220 at 7:15 pm.

Roll Call Vote:

| Bob Tucker | aye |
|----------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

ZBA PETITION – 14 PHILLIPS STREET:

The Board is in receipt of the following: (See Attached)

- ZBA petition from Kerry & Kevin Graves
- Email dated 6-25-20 from Andy Rodenhiser to the ZBA with personal comments
- Photos
- Email from Kerry Graves 7.10.20

> The Zoning Board of Appeals received a petition from the owners of 14 Phillips Street. The applicant is requesting a nonconforming special permit and/or side setback variance. The owner wants to demolish the existing, non-conforming and dilapidated garage and replace it with a comparably sized garage structure that would still be non-conforming in terms of side setbacks. The house on this property is vintage 1880 but the age of the garage structure is not known. The former property owner had secured a permit from the ZBA in 2011 to allow the garage demolition and new construction, but never acted on it, so it has expired. The applicant, Kerry Graves, was present on ZOOM. She indicated a new garage will improve the neighborhood visually since the current garage is falling down. A question was asked that the previous special permit was for 5 ft from the side property line, but the current application is proposing only a $3\frac{1}{2}$ foot side setback. The Chairman communicated that if this is pre-existing non-conforming structure, shouldn't the proposed structure be exactly the same. He noted the access could be achieved by constructing a conforming structure outside the setback area closer to the home without needed a variance. The other members of the PEDB had no objections or issues with the application and would like to remain silent on this application and not provide any comments to the ZBA.

Master Plan Discussion:

The Board discussed the next steps for the master plan update. Susy asked the Board if they wanted to get started on this process now or postpone working on this until the COVID State of Emergency limitations on meetings and gatherings are removed. There would be several steps to take to establish the Master Plan Update Committee. The Board is in agreement that they would like to hold off on working on the Master Plan and revisit the issue in the fall.

CENTRAL BUSINESS ZONING DISCUSSION:

The Board discussed at their 6-23-20 meeting the possible steps for developing new zoning regulations for the Central Business District. Susy Affleck-Childs had suggested establishing a CBD Zoning Task Force to work with a zoning consultant on this project, similar in concept to how it was done with the Oak Grove zoning task force. The Board was advised that there will need to be a Request for Quote process for hiring a consultant with the \$15,000 approved at Town Meeting. This would be in lieu of a more formal RFP process.

The Board discussed having the Planning Board serve as the "task force" in lieu of creating a separate committee to undertake this work with a consultant. Barbara Saint Andre indicated that the work could be accomplished more readily with the Board as lead. The goal would be to have something ready for the November town meeting. It was decided to handle it as a Board and look at what had initially been proposed for the May town meeting to submit for the November town meeting. was accomplished in May 2020.

Rich Di Iulio made a motion, seconded by Matt Hayes for the Board to set up a task force to look at the Central Business District and report back to the Board and town. Discussion of motion.

Member Chabot noted during discussion that there could be a hybrid option to accomplish working with the Consultant and Board. This could include a two-session workshop with various boards to collect ideas/options. The Board could then take this information and craft the zoning from this.

Member Di Iulio withdrew his motion.

The Board discussed having responsibility of this be with the PEDB, but part of the process would be to have a community engagement opportunity which would be similar to Oak Grove Task Force. The committee members/focus group would participate for two or three meetings with Consultant to brainstorm ideas. The Board can then take the information and create the changes.

OTHER BUSINESS

Planning Board in Person Option for Public Hearings:

Susy Affleck-Childs reported she has been exploring how to get back to the business of the Board conducting hearings on development projects. She is working to get permission to use the Presentation Room at the middle school for meetings. It would be a hybrid meeting with Medway Cable doing the standard broadcast, then offer meeting open to the public for a maximum of 25 people. There will be social distancing within the room. Then offer a ZOOM option where citizens can pose questions through the ZOOM chat feature. This input would be part of the record. This could be a suitable option to hold the public hearings in person. There would need to be clarification of when masks need to be worn. The Board is in support of this option. Barbara Saint Andre communicated that the Board needs to be careful when planning to hold a public hearing since the meeting needs to have room for 10 or 100 people. It needs to accommodate those who want to be heard. There are still logistics which need to be figured out. The goal is to start this at the August 11, 2020 meeting for the Medway Mill project.

PEDB MINUTES:

June 23, 2020:

On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted by Roll Call to approve the PEDB meeting minutes as revised from June 23, 2020.

Roll Call Vote:

| Bob Tucker | aye |
|----------------------|-----------|
| Tom Gay | abstained |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

FUTURE MEETING:

• Tuesday, July 28, 2020

ADJOURN:

On a motion made by Matt Hayes and seconded by Bob Tucker, the Board voted by Roll Call vote to adjourn the meeting.

| <u>Roll</u> | Call | Vote: |
|-------------|----------|-------|
| Dah | T | |

| Bob Tucker | aye |
|-------------------|-----|
| Tom Gay | aye |
| Andy Rodenhiser | aye |
| Matt Hayes | aye |
| Rich Di Iulio | aye |

The meeting was adjourned at 9:47 pm.

Prepared by, Amy Sutherland Recording Secretary

Reviewed and edited by, Susan E. Affleck-Childs Planning and Economic Development Coordinator





July 28, 2020 Medway Planning & Economic Development Board Meeting

Williamsburg Field Change

 6-18-20 email from developer Paul Yorkis requesting authorization to not plant one tree as shown on the approved site plan

You discussed this briefly at the last meeting, but I ask that you handle this as a field change, so we have the appropriate paper trail for this adjustment.

Paul will ZOOM in briefly to answer any questions you may have.

Susan Affleck-Childs

| From: | Paul Yorkis <pgyorkis@gmail.com></pgyorkis@gmail.com> |
|----------|---|
| Sent: | Thursday, June 18, 2020 4:12 PM |
| То: | Susan Affleck-Childs |
| Cc: | Rick Tweedy; Bouley, Steven |
| Subject: | A Tree at the Mail Boxes at Williamsburg |

Steve Bouley had on his punch list the installation of a tree within the island where the mailboxes are located because a tree was shown on the original landscape plan.

Today I was on site with Bill Canesi of Canesi Brothers, the firm that installed the infrastructure.

Bill advised me that it would be inappropriate to install a tree in that location because of conduit.

I called and spoke with Rick Tweedy who manages the Williamsburg Condominiums Association and I suggested that I would send a check in the amount of \$250 to him payable to the Association so the funds could be used as the association sees fit.

Rick agreed with the proposal.

Would you please let me know as soon as you are able if this meets with the approval of the Planning and Economic Development Board.

Thank you in advance for your assistance.

Paul G. Yorkis Williamsburg Condominium Corporation 508-509-7860



July 28, 2020 Medway Planning & Economic Development Board Meeting

Millstone Field Change

- 7-21-20 letter from GLM engineer Rob Truax with a drawing and associated drainage calcs for a field change to address a drainage issue on Fieldstone Drive
- Subsequent follow-up emails from Steve Bouley dated 7-21-20 and Rob Truax dated 7-23-20

This field change addresses a drainage structure that was installed but wasn't shown on the approved plans. The structure appears to be a small leaching catch basin that wasn't functioning properly and flooded the road on occasion. It was also connected to the roof drain infiltration system as its outlet.

NOTE – GLM principal Joyce Hastings will ZOOM in for the discussion.

Civil Engineering • Land Surveying • Environmental Consulting

GLM Engineering Consultants, Inc.

July 21, 2020

Medway Planning Board Town Hall 155 Village Street Medway, MA 02053

Project: Millstone Village (Adult Retirement Community) Medway, MA

Dear Board Members,

Our firm has prepared a minor modification for the drainage at the end of the common drive between Units 58 and 59. The grading in this area was lowered to accommodate the garage elevations for these units. The result created a low area where surface water accumulates. The proposal is to install a new catch basin and connect it to catch basin #40. The proposed pipe will consist of a 12 inch perforated pipe with crushed stone to provide recharge.

The contributing area is only 3,380 square feet. The flow will be mitigated with the proposed perforated drainage pipe and the overflow will be directed into catch basin #40 as shown on the attached site plan. The calculations indicate the proposed drain trench will recharge the surface from the drainage area for the 100 year storm event.

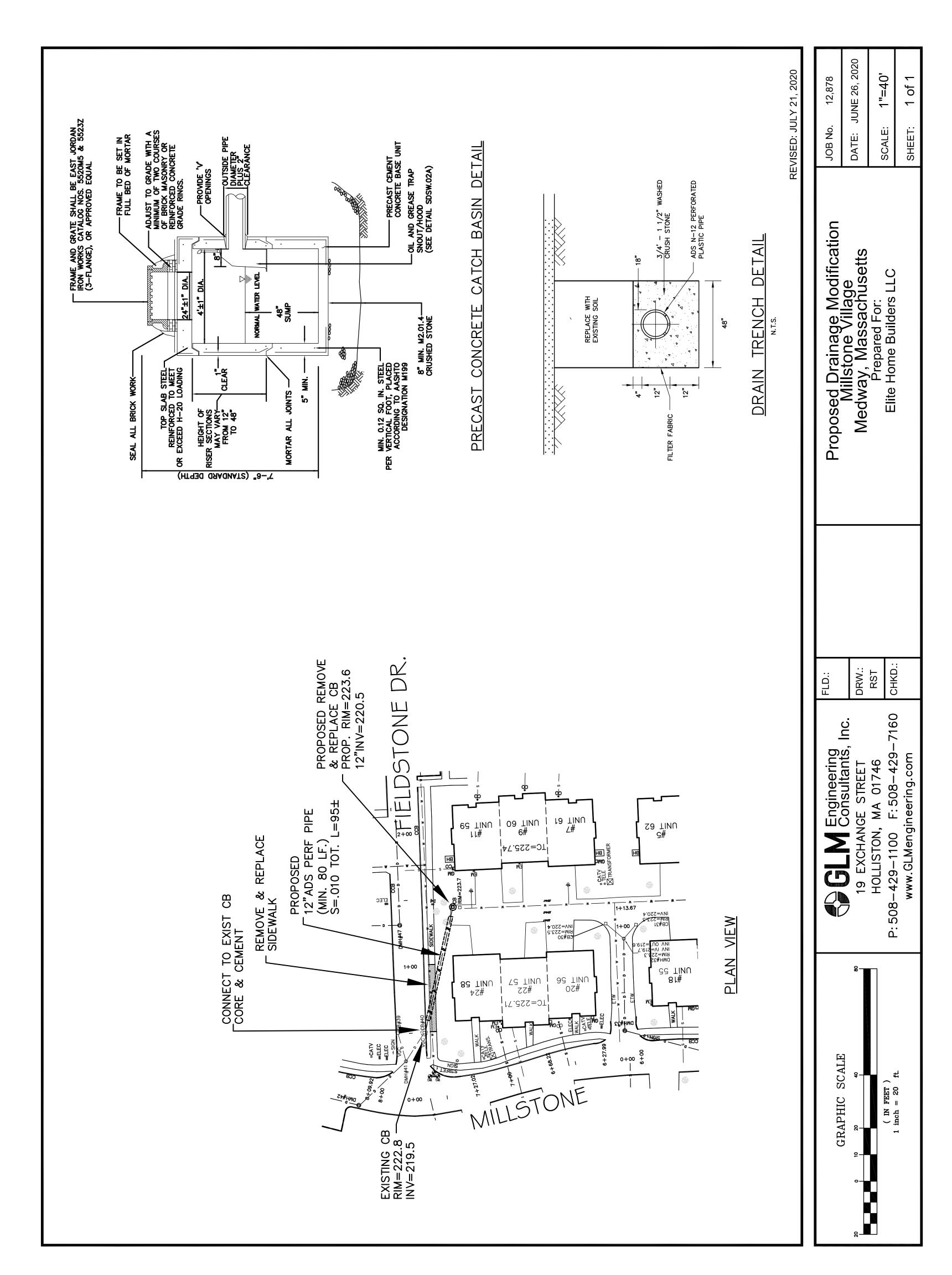
Enclosed herewith is a revised site plan and supporting hydrocad calculations for the trench drain sizing.

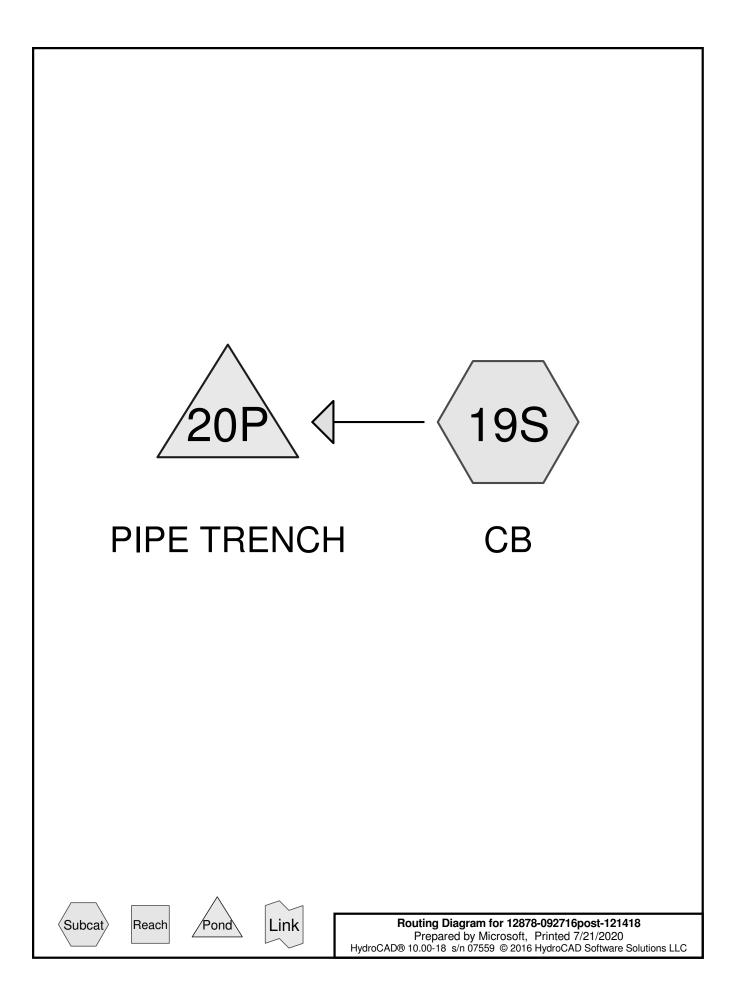
Thank you for your attention in this matter.

Yours Truly, GLM Engineering Consultants, Inc.

Robert S. Truax

Project Manager/Design Eng.

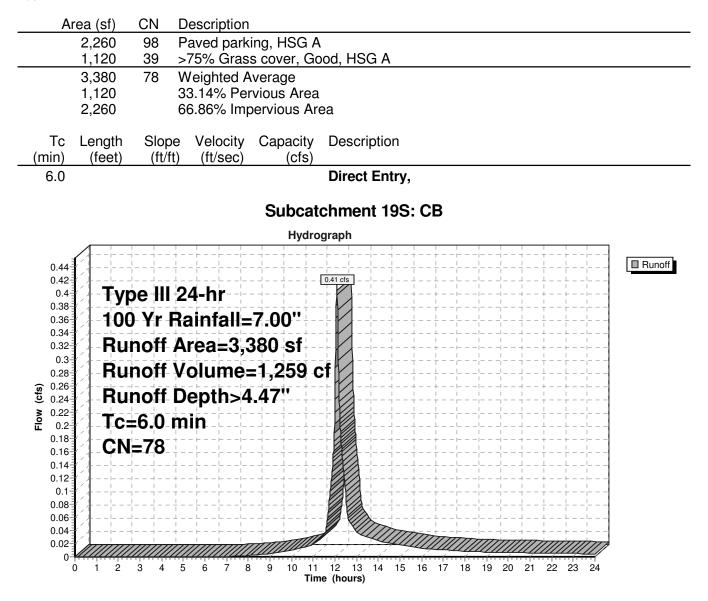




Summary for Subcatchment 19S: CB

Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,259 cf, Depth> 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs Type III 24-hr 100 Yr Rainfall=7.00"



Summary for Pond 20P: PIPE TRENCH

| Inflow Area = | 3,380 sf, 66.86% Impervious, | Inflow Depth > 4.47" for 100 Yr event |
|---------------|-------------------------------|---------------------------------------|
| Inflow = | 0.41 cfs @ 12.09 hrs, Volume= | 1,259 cf |
| Outflow = | 0.10 cfs @ 12.48 hrs, Volume= | 1,259 cf, Atten= 75%, Lag= 23.6 min |
| Discarded = | 0.10 cfs @ 12.48 hrs, Volume= | 1,259 cf |
| | | |

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs Peak Elev= 220.97' @ 12.48 hrs Surf.Area= 349 sf Storage= 306 cf

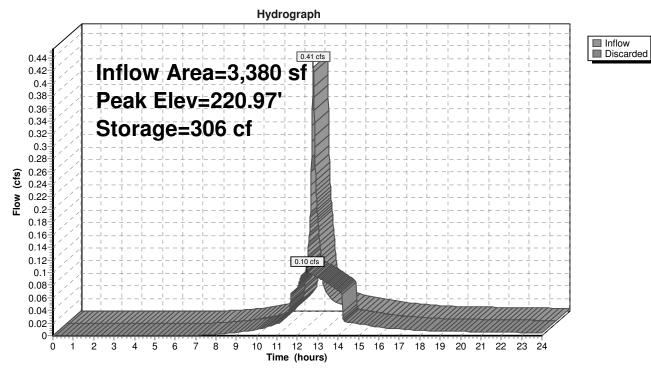
Plug-Flow detention time= 19.2 min calculated for 1,259 cf (100% of inflow) Center-of-Mass det. time= 19.1 min (831.2 - 812.1)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|---|
| #1A | 219.00' | 322 cf | 4.21'W x 83.00'L x 2.54'H Field A |
| | | | 888 cf Overall - 84 cf Embedded = 804 cf \times 40.0% Voids |
| #2A | 220.00' | 65 cf | ADS N-12 12 x 4 Inside #1 |
| | | | Inside= 12.2"W x 12.2"H => 0.81 sf x 20.00'L = 16.2 cf |
| | | | Outside= 14.5"W x 14.5"H => 1.05 sf x 20.00'L = 20.9 cf |
| | | 387 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices | | |
|--|-----------|---------|---|--|--|
| #1 | Discarded | 219.00' | 8.270 in/hr Exfiltration over Surface area | | |
| | | | Conductivity to Groundwater Elevation = 215.00' | | |
| Discourded OutFlows Mary 0.40 at 0.40 https://www.com/com/com/com/com/com/com/com/com/com/ | | | | | |

Discarded OutFlow Max=0.10 cfs @ 12.48 hrs HW=220.97' (Free Discharge) **1=Exfiltration** (Controls 0.10 cfs) Pond 20P: PIPE TRENCH



From: Robert Truax <Robert.Truax@glmengineering.com>
Sent: Thursday, July 23, 2020 1:10 PM
To: Bouley, Steven <Steven.Bouley@tetratech.com>; Susan Affleck-Childs <sachilds@townofmedway.org>
Cc: Brian Clarke (brian-clarke@live.com) <brian-clarke@live.com>
Subject: RE: Millstone Drainage Revision

Thanks Steve and Susy,

We are agreeable to providing an inlet water quality unit for the catch basin. I have sent a request to Contech for design of the unit.

At this time we would ask the Planning Board to review the proposed field change and condition it that we provide a water quality unit for the catch basin.

Once we receive the design I will forward it to you for your review and approval.

Susy,

We would like to keep this moving forward, I spoke with Joyce she is available to present this on Tuesday night to the board.

Thank you for expediting this matter.

Rob

From: Bouley, Steven [mailto:Steven.Bouley@tetratech.com]
Sent: Tuesday, July 21, 2020 3:08 PM
To: Robert Truax; Susan Affleck-Childs
Cc: Brian Clarke (brian-clarke@live.com)
Subject: RE: Millstone Drainage Revision

Hi Rob,

Did the basin not have enough capacity to mitigate the change? Since the site is in rapidly infiltrating soils that flow would have to be treated to 44% removal prior to recharge, an inlet water quality unit may work here. Also, I believe the

perforations on N12 pipe are every 45° around the pipe, please add to the note that the pipe is to be installed with a perforation at the invert of the pipe to ensure it actively infiltrates during all events (it shows this on the detail but want to make sure when it is installed that the contractor knows).

I have no issue with the test pit being performed at the same time as this work. Pending approval, what are you thinking for a timeline on this?

Please let me know if you have any questions, thanks.

Steve

Steven M. Bouley, P.E. | Senior Project Engineer | Tetra Tech Direct +1 (508) 786-2382 | Business +1 (508) 786-2200 | steven.bouley@tetratech.com

While we are operating remotely in response to COVID-19, Tetra Tech teams remain fully connected and hard at work servicing our clients and ongoing projects. We would also like to wish health and wellness to you and your family.

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Robert Truax <<u>Robert.Truax@glmengineering.com</u>>

Sent: Tuesday, July 21, 2020 2:00 PM

To: Susan Affleck-Childs <<u>sachilds@townofmedway.org</u>>

Cc: Bouley, Steven <<u>Steven.Bouley@tetratech.com</u>>; Brian Clarke (<u>brian-clarke@live.com</u>) <<u>brian-clarke@live.com</u>> Subject: Millstone Drainage Revision

A CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Hi Susie and Steve,

I attached a revise sketch of the drainage revision for Fieldstone Catch Basin for your review.

Steve, we decided to use a perf pipe with stone for the connection the catch basin for mitigation.

Also, we would like to conduct the test pit as requested when they are constructing this drainage system. They will have a machine on site during that time.

Thank you Rob

Robert S. Truax Principal Email: <u>Robert.truax@glmengineering.com</u>



July 28, 2020 Medway Planning & Economic Development Board Meeting

Medway Mill Site Plan Public Hearing

- 7-17-20 notice to continue the Medway Mill site plan public hearing to 7-28-20
- 7-24-20 declaration by PEDB chairman Andy Rodenhiser to continue the hearing to 8-11-20

Board Members

Andy Rodenhiser, Chair Robert Tucker, Vice Chair

Thomas Gay, Clerk Matthew Hayes, P.E., Member

Richard Di Iulio, Member Jessica Chabot, Associate

Member



TOWN OF MEDWAY COMMONWEALTH OF MASSACHUSETTS

PLANNING AND ECONOMIC DEVELOPMENT BOARD

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

JUL 17 2020 TOWN CLERM

MEMORANDUM

July 17, 2020

 TO: Maryjane White, Town Clerk Town of Medway Departments, Boards and Committees
 FROM: Susy Affleck-Childs, Planning & Economic Development Coordinator
 RE: Public Hearing Continuation for Medway Mill Site Plan - 165 Main Street Continuation Date: Tuesday, July 28, 2020 at 7:15 p.m.

On July 9, 2020, Planning and Economic Development Board (PEDB) Chairman Andy Rodenhiser declared that the public hearing on the application of 165 Main Street Realty Trust of Medway, MA for approval of a site plan for proposed site improvements at the Medway Mill property located at 165 Main Street would be continued from July 14, 2020 to July 28, 2020 at 7:15 p.m. See attached documentation. This continuation was also announced during the July 14th PEDB meeting. The July 28th meeting will be held via remote participation on ZOOM. Instructions for accessing the ZOOM meeting will be included on the meeting agenda. *This continuation is made pursuant to Chapter 53 of the Acts of 2020, enacted April 3, 2020, which grants authority to Massachusetts planning boards to reschedule public hearings to a date not more than 45 days after the termination of the COVID-19 State of Emergency. At this time, the State of Emergency remains in effect with no specified conclusion date.*

The applicant proposes to undertake a series of site improvements to the 7.28-acre property located in the Agricultural-Residential II zoning district. These include creating a 41-space surface parking area with electric vehicle charging stations and bike racks, installation of stormwater management facilities for the parking area, landscaping and lighting, and expansion of the bridge across Chicken Brook for approximately 25 linear feet on each side. The site includes "riverfront" areas under the jurisdiction of the Conservation Commission and is subject to its review for an Order of Conditions and a Land Disturbance Permit.

The application, site plan, and supporting documentations were filed with the Town on February 18, 2020. The site plan and proposed landscaping are shown on *Site Plan – Medway Mills* dated February 14, 2020, prepared by Guerriere and Halnon of Franklin, MA. The documents are on file with the Medway Town Clerk and at the Community and Economic Development Department at Medway Town Hall, 155 Village Street, Medway, MA. The materials have been posted to the Planning and Economic Development Board's page at the Town's web site at: <u>https://www.townofmedway.org/planning-economic-development-board/pages/medway-mills-major-site-plan-review.</u> A revised plan dated May 13, 2020 has been received and is posted to the web page.

Kindly review the plan and forward any comments to me by July 24th. Please don't hesitate to contact me if you have any questions. Thanks.

Susan Affleck-Childs

From:Andy Rodenhiser <Andy@rodenhiser.com>Sent:Thursday, July 09, 2020 11:08 AMTo:Susan Affleck-ChildsSubject:Medway Mill Site Plan

Dear Susy,

In my role as Chairman of the Medway Planning and Economic Development Board, I declare that the public hearing for the Medway Mill Site Plan scheduled for Tuesday, July 14, 2020 has been continued to Tuesday, July 28, 2020 at 7:15 PM due to the COVID-19 pandemic and the Commonwealth's associated limitations on public meetings.

Thank you.

Andy S. Rodenhiser *President* Rodenhiser Home Services Inc.

Susan Affleck-Childs

From:Andy Rodenhiser < Andy@rodenhiser.com>Sent:Friday, July 24, 2020 10:20 AMTo:Susan Affleck-ChildsSubject:Medway Mill Site Plan

Susy,

In my role as Chairman of the Medway Planning and Economic Development Board, I declare that the public hearing for the Medway Mill Site Plan scheduled for Tuesday, July 28, 2020 has been continued to Tuesday, August 11, 2020 at 7:15 PM. This hearing will be held online via ZOOM and live in Sanford Hall at Medway Town Hall but with limited public seating due to the COVID-19 pandemic and the Commonwealth's associated limitations on public meetings.

Thank you.

Andy



July 28, 2020 Medway Planning & Economic Development Board Meeting

Medway Place Site Plan Public Hearing

- 7-17-20 notice to continue the Medway Place site plan public hearing to the 7-28-20 PEDB meting
- 7-23-20 request from attorney Gareth Orsmond to continue the hearing

I recommend the hearing be continued to the PEDB meeting on August 11, 2020 at 9 pm.

Board Members

Andy Rodenhiser, Chair Robert Tucker, Vice Chair

Thomas Gay, Clerk

Matthew Hayes, P.E., Member

Richard Di Iulio, Member Jessica Chabot, Associate Member



Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

TOWN OF MEDWAY **COMMONWEALTH OF MASSACHUSETTS**

PLANNING AND ECONOMIC DEVELOPMENT BOARD

RECEIVED JUL 2020 TOWN OL

MEMORANDUM

July 17, 2020

TO:

FROM: RE:

Maryjane White, Town Clerk

Town of Medway Departments, Boards and Committees Susy Affleck-Childs, Planning & Economic Development Coordinato **Public Hearing Continuation:** Medway Place Shopping Plaza Site Plan 98, 108 and 114 Main Street Tuesday, July 28, 2020 at 8:15 pm

Continuation Date:

At its July 14, 2020 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Medway Realty LLC of Boston, MA for approval of a site plan for proposed site improvements at the Medway Place shopping plaza located at 98, 108 and 114 Main Street to Tuesday, July 28, 2020. The continuation was approved at the request of the applicant.

This continuation is also made pursuant to Chapter 53 of the Acts of 2020, enacted April 3, 2020, which grants authority to Massachusetts planning boards to reschedule public hearings to a date not more than 45 days after the termination of the COVID-19 State of Emergency. At the present time, there is no conclusion date for the COVID state of emergency in Massachusetts.

The continued hearing is scheduled for 8:15 p.m. on July 28th. The meeting will be held via remote participation on ZOOM; instructions for accessing the meeting will be included on the meeting agenda.

The applicant proposes changes in the layout of and landscaping for the 446 space Medway Place parking lot as a result of the recently completed Mass Department of Transportation Route 109 improvement project which included a new traffic light and entrance into Medway Place. The parking lot work will align the parking spacing with the Mass DOT constructed boulevard style main entrance to improve traffic circulation on site. The work will include widening the east side of the entrance aisle to the property to 20' wide. The applicant also proposes to install new stormwater management controls to treat stormwater collected from the parking lot before it is discharged into the Town's municipal storm drain system to meet the Town's MS4 requirements.

The proposed improvements are shown on Medway Place Site Plan and Landscape Plan dated October 16, 2019 by Howard Stein Hudson of Boston, MA. The Drainage Improvement Plan for 98, 108 and 114 Main Street is dated September 7, 2019 and was prepared by Grady Consulting, LLC of Kingston, MA. The documents are on file with the Medway Town Clerk and at the Community and Economic Development office at Medway Town Hall, 155 Village Street, Medway, MA. The materials have been posted to the Planning and Economic Development Board's page at the Town's web site at: https://www.townofmedway.org/planning-economic-development-board/pages/medway-plaza-siteplan. A revised plan is expected and will be posted upon receipt. Please don't hesitate to contact me if you have any questions.

Susan Affleck-Childs

From:Gareth Orsmond <gorsmond@PierceAtwood.com>Sent:Wednesday, July 08, 2020 3:40 PMTo:Susan Affleck-ChildsSubject:RE: Medway Place - Public Hearing Continuation

Hi Susan,

I hope you're well.

I understand there has been a hold-up on the stormwater permit. Can we please continue this matter?

1

Also, can we try to schedule that call I requested for sometime next week?

Thx. Gareth

Gareth OrsmondPIERCE ATWOOD LLPPH 617.488.8181

From: Susan Affleck-Childs <sachilds@townofmedway.org> Sent: Wednesday, June 24, 2020 11:13 AM To: Gareth Orsmond <gorsmond@PierceAtwood.com> Subject: Medway Place - Public Hearing Continuation

This message originated outside your organization

FYI.

Susy

Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053 508-533-3291

Susan Affleck-Childs

| From: | Gareth Orsmond <gorsmond@pierceatwood.com></gorsmond@pierceatwood.com> |
|----------|--|
| Sent: | Wednesday, July 22, 2020 5:58 PM |
| То: | Susan Affleck-Childs |
| Cc: | Barbara Saint Andre |
| Subject: | RE: Medway Place PH continuation |

Hi Susan.

I spoke with Barbara this afternoon and she told me that the town would prefer us to proceed with the major site plan review process than explore alternatives.

I also understand that some progress has been made this week addressing the outstanding stormwater issues, but that it won't be done by the next planning board hearing.

Can we please continue this matter to another hearing date? I've not been brought fully up to speed on stormwater so I'm not sure of the timetable for resolution at this time.

Thank you.

Gareth

 Gareth Orsmond

 PIERCE ATWOOD LLP

 PH 617.488.8181

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Friday, July 17, 2020 10:18 AM
To: Gareth Orsmond <gorsmond@PierceAtwood.com>
Subject: Medway Place PH continuation

This message originated outside your organization

Good morning,

See attached PH continuation notice I filed this morning with the Town Clerk.

Best regards,

Susy

Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053 508-533-3291



July 28, 2020 Medway Planning & Economic Development Board Meeting

ARCPUD Rules and Regulations

• Draft proposed amendments to the ARCPUD Rules and Regulations dated 7-20-20

Note, the ARCPUD Rules and Regs were first established in 2001 and have never been updated. Barbara Saint Andre has asked that we undertake some basic "housekeeping" amendments, similar to what was done with the AUOD Rules and Regs.

This draft is a compilation of recommended edits made by Stefany, Barbara and Susy.

NOTE – The current regs require that you hold a public hearing to amend the Rules and Regs.



TOWN OF MEDWAY Planning and Economic Development Board Rules & Regulations

Chapter 300

ADULT RETIREMENT COMMUNITY PLANNED UNIT DEVELOPMENT (ARCPUD)

Rules & Regulations for the Review and Approval of ARCPUD Plans and Issuance of ARCPUD Special Permits

Medway Planning and Economic Development Board

Andy Rodenhiser, Chairman Robert K. Tucker, Vice-Chairman Tom Gay, Clerk Matthew J. Hayes, P.E. Richard Di Iulio Jessica Chabot, Associate Member

Adopted: Ju Amended:

July 17, 2001

1

TOWN OF MEDWAY

Planning and Economic Development Board Rules & Regulations

Chapter 300

ADULT RETIREMENT COMMUNITY PLANNED **UNIT DEVELOPMENT (ARCPUD)**

Rules & Regulations for the Review and Approval of ARCPUD Plans and Issuance of ARCPUD Special Permits

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Chapter 300

ADULT RETIREMENT COMMUNITY PLANNED UNIT DEVELOPMENT (ARCPUD)

Rules and Regulations for Review and Approval of ARCPUD Plans and Issuance of ARCPUD Special Permits

Adopted by the Medway Planning and Economic Development Board: July 17, 2001

ARTICLE I AUTHORITY

s. 301 - 1 ADOPTION - The Planning and Economic Development Board (the "Board") hereby adopts these Rules and Regulations governing the review and approval of plans and the issuance of Special Permits for Adult Retirement Community Planned Unit Developments (ARCPUD) in Adult Retirement Community Overlay Districts (ARCOD) pursuant to Section 8.5 of the Medway Zoning By-LawBylaw. approved as Article 11 at the October 16, 2000 Special Town Meeting.

s. 301-2 PURPOSE – These regulations provide for the procedural and substantive requirements of the Section 8.5 V (T) of the Medway Zoning By LawBylaw including the process for submission, review and processing of ARCPUD Plans, issuance of ARCPUD Special Permits, applicable site, open space, design and construction standards, and the corresponding fees. The purpose of these regulations is to guide the applicant and their consultants, Town officials and Boards, and others involved in the preparation, submittal, processing and review of ARCPUD Plans.

ARTICLE II DEFINITIONS

s. 302 –1 APPLICABILITY - In these Rules and Regulations, the terms used, unless a contrary meaning is required by the context or is specifically prescribed, shall have the meaning as specified in the Medway Zoning By-LawBylaw, Section 2H DEFINITIONS in effect at the time the ARCPUD application is submitted.

ARTICLE III ARCPUD SPECIAL PERMIT APPLICATION

s. 303 – 1 GENERAL INFORMATION

A. General – An ARCPUD development shall be permitted only upon the granting of an ARCPUD Special Permit by the-Planning Board. An applicant shall apply for an ARCPUD Special Permit by submitting an ARCPUD Plan and all other required information in accordance with the requirements set forth in these *Rules and Regulations*. The Planning-Board shall review an ARCPUD Special Permit Application pursuant to the submission and procedural requirements set forth in these *Rules and Regulations*, and shall review the ARCPUD Plan for conformance with all standards of Section 8.5V (T)

of the Town of Medway Zoning By LawBylaw. The application, submission, and procedural review process for an ARCPUD Special Permit shall adhere to all minimum requirements specified herein. The exact content of an ARCPUD Special Permit Application beyond the minimum requirements may vary depending on the exact use(s) and structure(s) proposed by an applicant.

B. Coordination with Subdivision Plan Approval - It is expected that most ARCPUD developments will involve the subdivision of land and thus be subject to an application to the Planning Board for subdivision plan approval as well as an application for an ARCPUD Special Permit. It is the intent of the Planning-Board to enable simultaneous and coordinated review of both the subdivision plan and ARCPUD Special Permit Applications. However, when application for subdivision approval is necessary for a proposed project that also is subject to obtaining an ARCPUD Special Permit, it is mandatory that all application forms, plans, and submission materials for the subdivision plan approval be submitted in full and independent of the application for the ARCPUD Special Permit. It also is mandatory that the Planning Board's review of the application for subdivision plan approval meet all the normal substantive, procedural, and public hearing requirements for a subdivision plan approval in accordance with its Land Subdivision Rules and Regulations and in accordance with the Massachusetts Subdivision Control Law (M.G.L. Chapter 41, Sections 81K-81GG). In turn, the review of the ARCPUD Special Permit Application shall be subject to all substantive, procedural, and public hearing requirements prescribed for a special permit review pursuant to these Rules and Regulations and in accordance with Section 9 of M.G.L. Chapter 40A. Notwithstanding these requirements, the Planning Board believes there is benefit to a coordinated review of the subdivision and special permit aspects of an ARCPUD project.

C. Pre-Application Meeting – The applicant shall have a Pre-Application Meeting with the Planning Board to provide for a preliminary review of the proposed project. This will provide the applicant with the opportunity to present preliminary concepts for its ARCPUD and gain informal feedback and input from the Planning Board, other Town officials, and interested citizens at an early stage of project planning. This meeting also will allow the Planning Board and other involved Town officials to provide guidance to the applicant on the ARCPUD Special Permit Application and review process. The Pre-Application Meeting shall be conducted subject to the following requirements:

(1) The applicant shall pay a non-refundable \$500.00 Pre-Application Meeting Fee to the Planning Board at the time the meeting occurs. This fee shall be used to cover the Planning_Board's costs of staff or outside consultant advisory services associated with the Pre-Application Meeting and the subsequent evaluation of the completeness of the submittal of the ARCPUD Special Permit Application with ARCPUD Plan.
(2) The "additional information requirements" as outlined in Section 303 – 4 (B) of these Rules and Regulations shall be required as part of the ARCPUD Special Permit Application with ARCPUD Plan.
(2) The "additional information requirements" as outlined in Section 303 – 4 (B) of these Rules and Regulations shall be required as part of the ARCPUD Special Permit Application with ARCPUD Plan unless a specific waiver is granted by the Planning Board. The applicant should provide a list of requested waivers for_discussion to the Planning Board prior to the meeting.

D. Application Forms – The Planning Board has prepared shall devise and make available to the public an application form for "ARCPUD Special Permit Application-" which shall be used by all applicants. The application form shall be designed to obtain general information about the applicant and its agents; the location, size, and nature of the proposed ARCPUD development site; and a general description of the proposed ARCPUD development program.

s. 303 – 2 STANDARDS FOR ARCPUD PLAN PREPARATION

- A. The ARCPUD Plan shall be prepared by a professional engineer and or a registered land surveyor (or other professional as required) registered in Massachusetts and certified by same with their seal stamp and signature.
- B. The ARCPUD Plan shall be clearly and legibly presented in black ink for proper construction of the proposed project. The plans will be plotted on the standard size (24" X 36") translucent mylar (4 mil) matted on one side. The drawings shall be prepared in accordance with the Rules and Regulations of the Registry of Deeds, Chapter 36, Section 13A as amended, pertaining to plan size, materials, ink, lettering height, and related requirements.
- C. The ARCPUD Plans shall be at a scale of one-inch $\frac{(1^{22})}{(1^{22})}$ equals forty feet $\frac{(40^2)}{(1^{22})}$, or such other scale as the <u>Planning</u> Board may have accepted in advance to show details clearly and adequately.
- **D.** All existing and proposed elevations shall refer to the North American Vertical Datum of 1988 (NAVD88).
- *E.* Sheet sizes shall be twenty-four by thirty-six inches $(24^{\circ} \times 36^{\circ})$ -including a three <u>quarter three-quarter</u> inch $(3/4^{\circ})$ -border on the top, bottom and right sides and a one and one half inch $(1 1/2^{\circ})$ -border on the left side.
- s. 303 3 SUBMITTAL REQUIREMENTS TOWN CLERK
- A. The applicant shall file by delivery in hand, or registered or certified mail, the following:
 - (1) A copy of the ARCPUD Special Permit Application filed on forms supplied by the Planning Board.
 - (2) One set of the ARCPUD Plans in conformance with these *Rules and Regulations* and the requirements of the Zoning By LawBylaw, Section 8.5 V. Use <u>Regulations</u>, Sub-Section T, Adult Retirement Community Overlay Districts.
 - (3) Project Narrative as described in s. 303-4 A. (13) of these *Rules and Regulations*.
 - (3) A request for review of street names by the Street Naming Committee.
- **B.** The applicant shall secure a receipt from the Town Clerk and provide a copy of such to the Planning Board. Said receipt shall include the date and time the application was filed with the Town Clerk.
- s. 303 4 BOARD SUBMITTAL REQUIREMENTS PLANNING BOARD

- A. Basic Information Any person or entity that submits an application and plans for an ARCPUD Special Permit shall file with the <u>Planning</u> Board all items required herein for the application to be "duly submitted" in accordance with these *Rules and Regulations*. Such submissions shall be made directly to the <u>Planning</u> Board. The applicant shall file by delivery in hand, or registered or certified mail, the following:
 - The original ARCPUD Special Permit Application, properly executed, filed on forms supplied by the <u>Planning</u> Board including the names, addresses, and telephone numbers of the applicant, land owner if other than the applicant, and all agents such as architect, engineer, and attorney;
 - (2) Fourteen (14) Three copies of the ARCPUD Plan in conformance with these Rules and Regulations and the requirements of the Zoning By LawBylaw, Section 8.5V. Use Regulations, Sub section T. Adult Refirement Community Overlay Districts.
 - (3) An ARCPUD Plan Filing Fee of \$1,000 as established in these *Rules and Regulations*.
 - (4) A list of all abutters within five hundred (500) feet of the site's property lines as appearing on the most recent tax list as certified by the Board of Assessors of all applicable communities.
 - (5) Three (3) copies of the storm drainage calculations including technical supporting documents, using the Rational Method (for pipe sizing) and Soil Conservation Service Method (TR55 and/or TR 20) for Storm Water Management;
 - (6) Copies of all relevant approvals received to date by the applicant from other <u>Bb</u>oards or commissions (i.e. Determination of Applicability, Order of Conditions, zoning variance, etc.)
 - (7) Two (2) sets of Layout/Floor plans with the uses of areas labeled and two (2) sets of Elevation Drawings of the building(s) facades from all four directions.
 - (8) Street plans and profiles of every proposed street shall be at a scale of one (1)-inch equals forty (40)-feet horizontal and one (1)-inch equals four (4)-feet vertical;
 - (9) Locus Map A locus plan of the project area showing the street configuration, major land uses, major natural features, and zoning district boundaries within two thousand (2,000) feet of the perimeter boundaries of the site, at a minimum scale of one (1) inch equals eight hundred (800) feet.
 - (10) Context Plan A plan showing all property lines and buildings, as shown on the current Assessor's Maps, within five hundred (500) feet of the perimeter boundaries of the site, at a minimum scale of one (1) inch equals one hundred (100) feet.
 - (11) Plot Plan (certified by a land surveyor) indicating total land area boundaries, angles, and dimensions of the site and a north arrow:

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- (12) Site Plan(s) or plan sets, at a minimum scale of one (1) inch equals forty (40) feet, showing the following:
 - (a) Existing use(s) of land and existing buildings, if any;
 - (b) Proposed use(s) of land and proposed buildings;
 - (c) Dimensions of existing and proposed building(s) or other structures including height, setbacks from property line, and total square footage of building area;
 - (d) For non-residential buildings and for non-residential uses in any building, the total square footage of building area on each floor or the total square footage occupied on a given floor by non-residential uses;
 - (e) Locations and dimensions of any easements, public or private rights-of-way, or other burdens (existing or proposed);
 - (f) All parking and loading areas, including surface (at-grade) parking lots and parking structures, showing the number, location, and dimension of parking and loading spaces, driveways, other access ways, sidewalks and the like.
- (13) Project Narrative A written narrative describing the proposed ARCPUD development including the following:
 - (a) Intended or targeted resident or user population(s) to be served including a description of the protective covenants which shall be executed to accomplish same;
 - (b) Types, number, and mixture of ARCPUD uses proposed;
 - (c) Proposed construction (and/or demolition);

- (d) Type and number of buildings, dwelling units, home sites, etc. that are proposed, including the size (e.g., number of bedrooms, square footage) of all uses other than detached single family homes;
- (e) Proposed staging or phasing of construction of the ARCPUD;
- (f) Proposed form(s) of ownership, including the form of ownership for any common property;
- (g) For non-residential uses, nursing homes, medical facilities, assisted care or continuing care facilities, a description of the nature of such use(s), the expected number of employees (as applicable) broken down by each type of use or business within the ARCPUD that will have employees, and the proposed hours of operation;
- (h) Description of how the project will comply with each ARCPUD standard;

- (i) Description of proposed means of compliance with the ARCPUD open space standards, including the type of mechanism to be used for permanent protection of open space and indication as to whether any of the required open space will be deeded to the Town, any assign(s) of the Town, or association, or other mechanism for maintenance of the open space.
- (14) Receipt from the Town Clerk acknowledging the date and time of the filing of the ARCPUD Special Permit Application with the ARCPUD Plan.
- B. Additional Information Requirements The Planning Board shall require the following additional information including, but not limited to tThe items listed below, shall also be provided to the Board, unless the applicant requests a specific waiver(s) which are granted agreed upon by the Planning Board, at the pre-application meeting. Only that information which is applicable to a proposed use or structure will be required.
 - (1) The total floor area and ground coverage ratio of each proposed building and structure;
 - (2) front, side and rear <u>building</u> elevations;
 - (3) existing and proposed contour elevations in two foot increments;
 - provisions for vehicular and pedestrian access ways and/or trails including proposals for new or relocated curb cuts and access for emergency vehicles;
 - (5) color, materials, and exterior features of proposed structures;
 - (6) landscaping and screening, including trees, stones, walls, fences and other features to be retained and/or removed, as well as color, size, and type of landscaped surface materials;
 - (7) measures taken to preserve and protect natural resources;
 - (8) outdoor lighting, including locations and intensity of lighting facilities;
 - (9) locations and significance of historic structures;
 - (10) locations and adequacy of existing and proposed on-site public utilities, facilities, and conditions (water, sewerage, and drainage), showing size, material and direction of flows;
 - (11) a traffic study including peak hour traffic volumes generated by the proposed use in relation to existing volumes and projected future conditions;
 - (12) wetlands, ponds, and surface water bodies, as defined under the Wetlands Protection Act, M.G.L. Chapter 131, Section 40, and rules promulgated hereunder, 310 CMR 10.00, and any other applicable local bylaws, rules or regulations; and
 - (13) such other information as will aid the Planning Board in judging the application and in determining special conditions and safeguards, and as the Board should deem necessary, in its determination of completeness of said application.

C. Acknowledgement – The Planning Board shall provide a receipt to the applicant acknowledging delivery of the application and plans.

. 303 – 5 PLANNING BOARD DESIGNEE – The Planning Board may designate a Town official, agency, or person in charge of administering the clerical and processing requirements set forth in these *Rules and Regulations* for ARCPUD Special Permit Applications and for the scheduling of meetings, public hearings, and the like.

s. 303 – 65 ARCPUD PLAN CONTENTS – Said plan shall include the following:

- **A.** A title, appearing in the lower right-hand corner of the plan, showing the name of the site; the date; the scale, the names and addresses of the applicant; and the names of the engineer and surveyor;
- **B.** North point, graphic scale, benchmarks (vertical and horizontal) and boundaries of the development;
- C. Major features that exist near or on the entire tract of land or near the site at the time of survey, such as existing waterways, swamps, all wetlands, including identification of individuals making such determinations, water bodies, natural drainage courses, walls, fences, buildings, historic markers, milestones, bridges, clearly defined trails, large trees, wooded areas, rock/ledge outcroppings, ditches and existing utilities;
- **D.** Lines of existing and proposed streets, ways, lots, lot numbers or other designations of each lot, easements and public or common areas within the development;
- *E*. The location, names and present widths of all adjacent streets bounding, approaching or within 700 seven hundred feet of the development, sufficient to analyze traffic flow;
- F. Sufficient information to determine the location, direction and length of every street including street stationing, lot lines, easement and boundary lines, and to be able to establish these lines on the ground. It shall include the lengths and bearings of the plan and boundary lines of all lot lines including lot frontage on the streets, boundary lines of all streets and easements, the lengths, radii, tangents, and central angles of all curves in lot lines and street lines. All angle points or intersections of tangents along the street lines shall be shown. Areas of lots with lot numbers and the area and frontage on pubic ways of adjoining lands of the applicant not included in the subdivision will be shown. The total length (s) of streets within the subdivision shall be provided;
- G. The lengths, radii, tangents and central angles of all curves in lot lines;
- *H.* The location of all sidewalks, driveway aprons, trees and grass plots;
- *I.* North arrow and north arrow reference;

J. House numbers;

- **K.J.** Assessor's Map, block and parcel numbers;
- *L*.<u>*K*.</u> Location of all permanent monuments properly identified as to whether existing or proposed;

- M.L. Location of the minimum lines of building setback (front, side and rear) required by the Zoning By LawBylaw. The calculation of the lot shape factor shall also be provided for each lot;
- **N.M.** List of all items that shall require a waiver from the Planning Board;
- *O*.<u>N.</u> If the property has been examined, approved and confirmed by the Massachusetts Land Court, such information shall be noted in the plan with case numbers.

s. 303 – 7 <u>6</u> SUBMISSION PROCESSING

- A. Completeness Review To ensure the ARCPUD Special Permit Application with ARCPUD Plans contain all required information and to avoid the possibility of denial due to an incomplete application, the applicant should review the application and plan documents with the Planning Board or its designee prior to filing the application with the Town Clerk. The Planning Board or its designee will review the application to determine if it meets all submission requirements. Once this completeness review is completed, the applicant may file the ARCPUD Special Permit Application with the Town Clerk to commence the formal review.
- В. Applications Rejected Due to Incompleteness - The Planning Board may reject an ARCPUD Special Permit Application upon a determination that the application does not satisfy the information/submission requirements of these Rules and Regulations. Such determination, if made, shall be made within fourteen (14)-days of the date of filing of the application with the Town Clerk, and the Planning Board shall return the application and plan documents to the applicant. The Planning Board shall provide the applicant with a written explanation as to the specific reason(s) for the determination of incompleteness with a citation of the specific provisions of these Rules and Regulations regarding the missing or incomplete information and the remedies required to make the application complete. The Planning Board shall send a notice of its determination to the Town Clerk. The ARCPUD Special Permit Filing Fee shall be retained by the Planning Board and be applied to any future resubmission of the application. When brought into conformity with the content requirements of these Rules and Regulations, an ARCPUD Special Permit Application may be resubmitted for consideration by the Planning Board without prejudice.

ARTICLE IV ARCPUD REVIEW AND APPROVAL PROCEDURE

s. 304 – 1 USE OF OUTSIDE CONSULTANTS

- A. After the applicant has filed an application for an ARCPUD Special Permit with Plan and it has been determined to be complete, the <u>Planning</u> Board may determine that the assistance of outside consultants is warranted due to the size, scale, or complexity of the proposed project or its potential impact on the Town.
- B. In hiring outside consultants, the <u>Planning</u> Board may engage the services of engineers, planners, lawyers, urban designers or other appropriate professionals who can assist the <u>Planning</u> Board in analyzing the application and project to ensure compliance with all relevant laws, <u>by-lawBylaws</u> and regulations.

C. Review Fees - If the Planning Board determines that such services are required, the applicant shall pay an ARCPUD Plan Review Fee prior to review by the outside consultants.consultants and the opening of the public hearing. Section 310-2 of these Rules and Regulations sets forth the various review fees.

s. 304 – 2 REVIEW BY TOWN OFFICIALS

- A. The Planning-Board shall not make a decision on an application for an ARCPUD Special Permit until Town Bboards, commissions and departments have been notified and have submitted reports or recommendations thereon. If reports are not received within thirtyfive (35) days since receipt of the application by such Bboards or agencies, this shall be deemed lack of opposition thereto.
- B. Circulation of ARCPUD Application The Planning Board shall circulate one copy each of the ARCPUD application and plan documents to the following Bboards, commissions, <u>fand</u> departments for their information and to request their review and comments:
 - (1) Board of Selectmen/Town Administrator Manager
 - (2) Building <u>CommissionerInspector</u>/Zoning Enforcement Officer as to general conformance with the Zoning By Law and to the general suitability of lots for building purposes.
 - (3) Board of Assessors
 - (4) Conservation Commission as to the potential involvement with MGL Chapter 131, Section 40, stormwater management, and the effects of the development on streams, wildlife and similar considerations within the scope of the Conservation Commission.
 - (5) Fire Department as to street alignment, location of hydrants, installation of the alarm system and emergency access.
 - (6) Police Department as to traffic control, street safety, both vehicular and pedestrian, safe stopping site distance, access for emergency vehicles, and street light location.
 - (7) Department of Public <u>Works</u> Services as to the design of the street system, location of easements, monuments, streetlights, drainage systems, and curb cuts.
 - (8) Water/Sewer Department as to conformance with their regulations regarding the water and sanitary sewer systems.
 - (9) (8) Board of Health as to the design of any proposed sewer or septic systems to serve the proposed ARCPUD project, or the design of any other aspects of the project (e.g., food services) that are subject to permitting through the Board of Health.

(10)(9) Tree Warden

(10) Open Space Committee

(12) Design Review Committee

C. The Town Clerk shall convene a meeting of the Street Naming Committee and report its decision to the Planning Board.

s. 304 – 3 PUBLIC HEARING – The Board shall conduct a public hearing in accordance with G.L. c. 40A, s. 11

A. General Before taking any action on an ARCPUD Special Permit Application with an ARCPUD Plan, the Planning Board shall hold a public hearing. At such duly conducted public hearing, the applicant shall present the proposed ARCPUD project. Members of the public shall be provided the opportunity to offer comment in person, by agent or attorney, or in writing, on the ARCPUD Special Permit Application.

B. ARCPUD Special Permit Application

- (1) Public Hearing Before taking any action on an ARCPUD Special Permit Application to approve, approve with conditions, or deny the granting of the ARCPUD Special Permit, the Planning Board shall hold a public hearing within sixty five (65) days after the filing and receipt of the ARCPUD Special Permit Application with the Town Clerk, in accordance with the special permit requirements set forth in Chapter 40A, Section 9, of the Massachusetts General Laws.
- (2) Abutter Notice The Planning Board shall prepare the public hearing notice and provide it to the applicant who will notify all abutters within five hundred (500) feet of the parcel, of the time, date and nature of the public hearing. Said notification shall be by certified mail, return receipt requested, at least ten (10) days prior to the hearing. The cost of certified mailing shall be borne by the applicant. The signed green certified mail return cards from all the abutters shall be submitted to the Planning Board prior to the public hearing. The Board shall provide notice in accordance with G.L. Chapter 40A.
 - Legal Notice The Planning Board shall provide notice of the public hearing by advertisement in a newspaper of general circulation in the Townnot less than fourteen (14) days prior to the public hearing and again eight (8) days prior to the public hearing. The cost of the advertisement shall be borne by the applicant who shall be billed directly by the newspaper for same. The notice shall also be provided to the Town Clerk for posting in a conspicuous place in Town Hall for a period of not less than fourteen (14) days before the day of the hearing.
- (4) Continuation At its discretion, the Planning Board may continue the public hearing by providing written notice to the applicant and the Town Clerk for posting in Town Hall. Said notice shall include the date and time when the public hearing will be continued.

s. 304 – 4 ARCPUD AND SCENIC ROADS - Any proposed ARCPUD which shall border a scenic road so designated by the Town of Medway pursuant to M.G.L. Chapter 40,

Section 15C, the Scenic Roads Act, shall comply with all additional special requirements as may be in effect at the time the application is submitted.

s. 304 – 5 PROCEDURES FOR APPROVAL OR DENIAL

A. General Criteria

- (1) The granting of an ARCPUD Special Permit is discretionary. An applicant is not entitled to eligible for an ARCPUD Special Permit unless its ARCPUD Special Permit Application with the ARCPUD Plan is in complete conformance with all provisions pursuant to Section <u>8.5V. (T)</u> of the Town of Medway Zoning By Law <u>Bylaw governing the granting of an ARCPUD Special Permit for development</u> within the Adult Retirement Community Overlay District; is in full compliance with the application information, submission, procedural, and substantive requirements of these *Rules and Regulations*; and unless the <u>Planning</u> Board is able to make positive findings and determinations with respect to the stated provisions. The Planning Board, at its discretion, may deny the granting of an <u>ARCPUD Special Permit if it is unable to make a positive finding and determination</u>.
- (2) The <u>Planning</u> Board, as a condition of granting approval of an ARCPUD Special Permit Application, may impose reasonable requirements to promote the health, convenience, safety and general welfare of the community and to benefit the Town of Medway. In such event, the <u>Planning</u> Board shall endorse such conditions on the ARCPUD Plan to which they relate and/or set forth a separate instrument to be attached thereto, to which reference is made on such Plan and which shall be deemed to be a part of the Plan.

B. Decision of the Planning Board

- The Planning Board may grant, grant with conditions, deny, or grant a leave to (1)withdraw an application for an ARCPUD Special Permit within ninety (90) days of the close of the public hearing for filing the an ARCPUD Special Permit Applicant with ARCPUD Plan. A decision to grant, or grant with conditions, shall cite the specific section of the Zoning By-LawBylaw or ARCPUD Rules and Regulations that refers to the granting of a special permit and shall incorporate by reference the plans that have been filed with the application. Within fourteen (14) days of its decision, the Planning Board shall set forth clearly the reasons for its decision and shall provide written notification of its action, specifying its findings and all waivers and conditions, to the applicant, the Town Clerk, to the parties in interest as specified in Section 11 of M.G.L. Chapter 40A, and to every person present at the public hearing who requested that notice be sent to him and stated the address to which such notice was to be sent. Such notice shall specify that any appeals shall be made pursuant to Section 17 of M.G.L., Chapter 40A and shall be field within twenty (20) days after the date of filing of such notice in the office of the Town Clerk.
- (2) An ARCPUD Special Permit shall require a vote of at least four (4) members of the five (5) member Planning Board or the Planning Board associate member, if

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sitting, to hear and act on the special permit application in order to constitute a membership of five (5).

- C. PEDBlanning Board Findings The Planning Board shall make findings on the ARCPUD Special Permit Applicant with ARCPUD Plan pursuant to the Medway-Zoning By LawBylaw, Section 8.5 V. Use Regulations, Sub-Section T. Adult Retirement Community Overlay Districts, 4. f)3.4 in effect at the time the application is submitted.
- D. Conditions for Approval of ARCPUD Special Permit In addition to the conditions, standards and criteria set forth in the sections of the Zoning By LawBylaw and these Rules and Regulations that authorize the granting of an ARCPUD Special Permit, the Planning Board may attach such conditions and limitations as it deems necessary to ensure that the findings and determinations it must make are complied with.

E. Time Limitations

- Except as hereinafter provided, the Planning Board shall take final action on an ARCPUD Special Permit Application with ARCPUD Plan within ninety (90) days following the date close of the public hearing.
- (2) Extension of Time for Action, <u>Leave Leave</u> to Withdraw The period within which final action shall be taken by the <u>Planning</u> Board may be extended for a definite period by written mutual consent of the <u>Planning</u> Board and the applicant. In the event the <u>Planning</u> Board determines that the plans and evidence included with the ARCPUD Special Permit Application with ARCPUD Plan or presented to it at the public hearing are inadequate to permit the <u>Planning</u> Board to make a finding and determination, then in its discretion, instead of denying the application, it may:
 - (a) continue the public hearing to a later date to permit the applicant to submit a revised ARCPUD Plan and further evidence, provided, however, that such continuation shall not extend the ninety (90) day period within which final action shall be taken by the Planning Board, unless said period is extended to a day certain by mutual consent; or
 - (b) grant a leave to withdraw the application without prejudice so that the applicant may submit a revised application, which shall not be considered as a repetitive petition. Such revised application shall be treated as a new application. In such a case, the applicant will bear the cost of readvertising the revised application, re-notification of the abutters and all subsequent ARCPUD fees as may be necessary.
- (3) The <u>Planning</u> Board shall file a written notification of public hearing continuation, deadline extension or application withdrawal with the Town Clerk.

. <u>PEDB</u>Planning Board's Failure to Take Action

1) In the event the Planning Board shall fail to hold a public hearing or shall fail to take action on an ARCPUD Special Permit Application with ARCDPUD Plan within the times set forth in these *Rules and Regulations* or within such extended period as may have been mutually agreed, then upon the expiration of said times, the Planning Board shall be deemed to have approved the application.

- An applicant who seeks such approval by reason of the failure of the Planning (2)Board to act within such time prescribed, shall notify the Town Clerk, in writing, within fourteen (14) days of the expiration of said ninety (90) days or extended time, if applicable, of such approval and that notice has been sent by the applicant to parties in interest. The applicant shall send such notice to parties in interest by regular mail and each such notice shall specify that appeals, if any, shall be made pursuant to M.G. L. Chapter 40A, Section 17 and shall be filed within twenty (20) days after the date the Town Clerk received such written notice from the applicant that the Planning Board failed to act within the time prescribed. After expiration of twenty (20) days without notice of appeal pursuant to Section 17, or, if appeal has been taken, after receipt of certified records of the court in which such appeal is adjudicated, indicating that such approval has become final, the Town Clerk shall issue a certificate stating the date of approval, the fact that the Planning Board failed to take final action and that the approval resulting from such failure has become final, and such ARCPUD Special Permit shall be forwarded to the applicant.
- *G_:F. Twenty* (20) *Day Appeal* Any person aggrieved by a decision of the <u>Planning</u> Board may file an appeal to an <u>appropriate</u> court of the Commonwealth by bringing an action within twenty (20) days of the date the decision was filed with the Town Clerk, as provided for in M.G.L. Chapter 40A Section 17.

s. 304 – 6 **PERFORMANCE GUARANTEE** – Before the Planning Board endorses its approval of an ARCPUD Plan, the applicant shall agree to complete the required improvements (construction of ways and installation of municipal services) at no cost to the Town of Medway. The developer shall provide security by one or both of the following methods:

- A. Covenant A covenant not to sell or build upon any lots until completion of the approved improvements which shall be reviewed and approved by Town Counsel. The covenant must be referred to on the plan and be recorded with it. The covenant shall be executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall beshall be completed to serve any lot before such lot maybe built upon or conveyed, other than by mortgaged deed; provided, that a mortgagee who acquires title to the mortgagesd premises by foreclosure or otherwise, and any succeeding owner of such premises or part thereof may sell any such lot subject to the covenant which provides that no lot shall be built until such ways and services have been completed to serve such lot. This section shall not prohibit a conveyance, subject to said covenant, of the entire parcel or all lots not previously released by the Planning Board. A deed or to any part of the project in violation hereof shall be voidable by the grantee prior to the release of the covenant but not later than three (3) years from the date of such deed.
- B. Bond-Surety The Planning Board may require a developer to post a cash bond or a bond-surety that has been reviewed and approved by the Planning Board, and accepted by the Town Treasurer/Collector, for the minimum bond value determined by the Planning Board to ensure timely performance of the requirements imposed at the time the ARCPUD Special Permit with ARCPUD Plan is approved, particularly where actions authorized by the approval may make the enforcement of some requirements unfeasible

in the absence of such security. A deposit of funds shall be made in a joint passbook with the Town of Medway in an amount determined by the <u>Planning</u> Board to be sufficient to cover the cost of all or any part of the approved improvements, <u>based on an estimate</u> provided by the Board's consulting engineer. At the time of plan endorsement, a signed withdrawal slip shall be provided to the Planning Board for said account.

s. 304 – 7 PLAN ENDORSEMENT AND ISSUANCE OF ARCPUD SPECIAL PERMIT

- A. The applicant will supply the <u>Planning</u> Board with <u>the</u> the original and fourteen (14) complete sets of the ARCPUD Plans for endorsement. Final approval, if granted, shall be endorsed on every page of the original drawings of all of the sheets of the ARCPUD Plans and one complete set of copies, by the signature of a majority of the <u>Planning</u> Board on every page. The originals will be returned to the applicant to supply three copies thereof to the Board and the copied set will be retained by the Planning Board as a permanent record. Final approval, if granted, shall be endorsed on the other thirteen (13) sets of copies of the plan by the <u>Planning</u> and <u>Economic Development Coordinator</u> <u>Planning Board Clerk.</u>
- B. Plan endorsement will not be made until the requirements as set forth herein are met and the statutory twenty (20) day appeal period has elapsed following the filing of the Board's action with the Town Clerk, and said Clerk has notified the Planning Board that no appeal has been filed. If appeal has been made, said endorsement shall be made after the entry of a final decree of the Court sustaining the approval of such ARCPUD Special Permit with ARCPUD Plan.
- C. At least twenty (20)-days prior to endorsement, all required Covenants shall be provided to the Planning Board along with a Designer's Certification and Applicant's Sworn and Authorized Affidavit that title to the premises shown on said plan and appurtenances thereto including any off-site easements and rights of way are in the applicant's name and are free of all encumbrances or that the encumbrances set forth will not preclude any required improvements.

The Planning Board will distribute sets of the ARCPUD Plans endorsed by the_Planning Board Clerk to Town officials including the Town Clerk.

E. Validity

- (1) The ARCPUD Special Permit is subject to Section 3.4 E of the Zoning Bylaw regarding the lapse of special permits, and the endorsement of the approved ARCPUD approved ARCPUD Plans by the Planning Board shall be valid for a period of two (2) years from the granting thereof or such shorter time as specified in said permit.
- (2) The ARCPUD Special Permit and endorsed ARCPUD Plans shall be carried into effect by the commencement of construction pursuant to the ARCPUD Special Permit and the endorsed ARCPUD Plans by the applicant or its assignees by such date except for good cause. Good cause shall be determined by the Planning Board, and only upon a finding of demonstrated hardship (e.g. financing

problems, labor strike, bad weather conditions, or act of God) and that there has been a good faith effort to overcome the hardship and expedite progress.

F. Extension of ARCPUD Special Permit

- (1) At least ninety (90)-days prior to the expiration of the approval period, the applicant and/or owner may request, in writing, that the <u>Planning</u>-Board grant an extension of time. The request for an extension shall state the reasons for the requested extension and also the length of time requested. The period of extension of the life of an ARCPUD Special Permit shall be, at minimum, the time required to pursue or await determination of an appeal, but t<u>T</u>he maximum extension shall not exceed one (1) year beyond the original permit life. Failure by the applicant to request an extension of time prior to the expiration date of the approval period will result in the Board's notifying the Building <u>Inspector Commissioner</u> that no additional building permits shall be issued in said development.
- (2) Prior to approving any extension of time, the <u>Planning</u> Board will review and revise the amount of the <u>bond deposit or other</u> surety and the applicant shall provide a new or revised instrument prior to the <u>Planning</u> Board's vote to approve the requested extension.

s. 304 – 8 **RECORDING** - The applicant shall file a copy of the decision of the Planning Board granting an ARCPUD Special Permit, the Covenant and the originals of all approved and endorsed ARCPUD Plans, at the Registry of Deeds or where applicable, in the Land Court of the Commonwealth, and shall notify the Planning Board in writing, presenting evidence of the recording of the plans and the Covenant within thirty (30) days of such recording.

s. 304 – 9 BUILDING PERMITS

A. Building permits shall not be issued until the following has occurred:

- the <u>Planning</u>-Board shall approve, or approve with conditions the ARCPUD Special Permit and Plan, or shall allow one hundred thirty-five (135) days to elapse from the official date of submission of the application by the <u>Planning</u> Board; and
- (2) the appropriate site plan and/or subdivision approvals have been granted.

Prior to issuance of a building permit, the applicant shall present to the Building Inspector <u>Commissioner</u> evidence of recording the ARCPUD Special Permit and ARCPUD Plans.

B. In the event that the <u>Planning</u> Board approves an ARCPUD Special Permit, any use or any construction, or any subsequent reconstruction or substantial exterior alteration shall be carried out only in conformity with all conditions and limitations included in the decision of the <u>Planning</u> Board, and only in conformity with the application and the ARCPUD Plan on the basis of which the finding and a determinations were made.

ARTICLE V GENERAL STANDARDS

s. 305-1 The applicable ARCPUD General, <u>Open Space</u>, and <u>Site Development</u> Standards shall be those specified in the <u>Medway</u> Zoning <u>By LawBylaw</u>, Section <u>8.5</u> V. Use <u>Regulations</u>, <u>Sub-section T. Adult Retirement Community Overlay Districts</u>, part 4. c) in effect at the time the application is submitted.

ARTICLE VI OPEN SPACE STANDARDS

The applicable ARCPUD Open Space Standards shall be those specified in the Medway Zoning By Law, Section V. Use Regulations, Sub-section T. Adult Retirement Community Overlay Districts, part 4. d) in effect at the time the application is submitted.

ARTICLE VII SITE DEVELOPMENT STANDARDS

The applicable ARCPUD Site Development Standards shall be those specified in the Medway Zoning By Law, Section V. Use Regulations, Sub section T. Adult Retirement Community Overlay Districts, part 4. e) in effect at the time the application is submitted.

ARTICLE VIII DESIGN STANDARDS

305 – 2 The applicable ARCPUD Design Standards shall be those specified in the Medway Planning and Economic Development Board's Site Plan Review and Approval Rules and Regulations and the Medway Design Review Regulations <u>Guidelines</u> in effect at the time the application is submitted.

ARTICLE IX CONSTRUCTION STANDARDS

s. <u>305-3</u> The applicable ARCPUD Construction Standards shall be those specified in the <u>Medway Planning and Economic Development</u>-Board's *Land Subdivision Rules and Regulations* in effect at the time the application is submitted.

ARTICLE XVI ADMINISTRATION

s. 310-306-1 VARIATION – Strict compliance with the requirements of these ARCPUD-Rules and Regulations may be waived when, in the judgment of the Planning Board, such action is in the public interest and not inconsistent with Section 8.5 V (T) of the Medway Zoning By LawBylaw.

- s. <u>310 306</u> 2 ARCPUD FEES
- A. Pre-Application Meeting Fee Fee A non-refundable Pre-Application Meeting Fee of five hundred dollars (\$500) shall be remitted to the Planning Board at such time as the Pre-Application Meeting takes place with the Planning Board.
- B. ARCPUD Plan Filing Fee Pursuant to G. L. Chapter 40, s. 22F, as adopted by the Medway Town Meeting on October 16, 2000, A a non-refundable ARCPUD Plan Filing Fee of one thousand dollars (\$2,51,000) shall be remitted to the Planning Board at the

Commented [SA3]: I would recommend deleting this requirement.

> time the ARCPUD Special Permit Application with ARCPUD Plans are submitted to the Planning-Board.

C. ARCPUD Plan Review Fee

- (1) Pursuant to G.L. <u>Chapter 44, section 53G</u>, <u>Chapter 40, 22F</u>, as adopted by the Medway Town Meeting on October 16, 2000, an ARCPUD Plan Review Fee shall be established by the <u>Planning</u>-Board for review of the ARCPUD Plan based on an itemized budget estimate prepared by an outside consultant. This fee shall be the reasonable costs to be incurred by the <u>Planning</u> Board to assist in the review of the proposed project. The ARCPUD Plan Review Fee shall not be a fixed amount but will vary with the costs incurred by the Board.
- (2) The applicant shall remit the ARCPUD Plan Review Fee to the <u>Planning</u> Board upon receipt of notice and invoice of the estimated ARCPUD Plan Review Fee and prior to the public hearing. Failure to pay the ARCPUD Plan Review Fee shall constitute grounds for the <u>Planning</u> Board's denial of the ARCPUD Special Permit.
- (3) Should the services of outside consultants be required after the initial ARCPUD Plan Review Fee has been expended, then the applicant shall be required to pay additional fees for the subsequent review of resubmitted and/or revised documents. A new estimate for additional review services shall be remitted to the applicant. Failure of the applicant to pay the necessary additional ARCPUD Plan Review Fees shall be grounds for the Planning Board to reject the plan, withhold plan approval and endorsement, and deny the ARCPUD Special Permit.

D. ARCPUD Construction Observation/Inspection Fee

- (1) When an ARCPUD Special Permit with ARCPUD Plan are approved by the Planning Board, the Board may determine that the assistance of outside consultants is warranted to observe and inspect the construction due to the size, scale or complexity of the approved plan with any terms or conditions or because of its impact on the town. In hiring outside consultants, the Planning-Board may engage the services of engineers, planners, lawyers, urban designers or other appropriate professionals who can assist the Planning Board in the inspection of the approved plan. The assistance of these consultants shall include but not be limited to pre-construction meetings, monitoring or inspecting a project during construction or implementation, preparation of bond estimates and reductions, review of as-built plans and other related professional services.
- (2) If the Board determines that such construction observation services are required, the applicant shall pay an ARCPUD Construction Observation Fee before the <u>Board endorses the plan .pre-construction meeting and any site preparation work</u> <u>commences.</u>
- (3) This fee shall be the reasonable costs to be incurred by the Planning Board to observe and inspect the construction of the proposed project and shall be based on an estimate provided by the consultant. The ARCPUD Construction Observation Fee shall not be a fixed amount but will vary with the costs incurred by the Board.

- (4) Should the services of outside consultants be required after the initial ARCPUD Construction Observation Fee has been expended, then the applicant shall be required to pay an additional fee for the subsequent observation of construction. The <u>Planning</u>-Board will keep the developer apprized of the status of the account and invoice as needed. Failure of the applicant to pay necessary additional ARCPUD Construction Observation Fees shall be grounds for the <u>Planning</u>-Board to direct its outside consultant to halt all construction observation services.
- *E.* Other Costs and Expenses All expenses for advertising, publication of notices, postage and mailings, recording and filing of documents and all other expenses in connection with an ARCPUD including without limitation sampling and/or testing required by the Board or its agents shall be borne solely by the applicant.

F. Payment of Fees

- (1) Fees paid by the applicant shall be by certified check made payable to the Town of Medway and submitted to the <u>Planning</u> Board. When the ARCPUD Plan Review Fee and the Construction Observation/Inspections Fee are received by the <u>Planning</u> Board pursuant to this section, they shall be deposited with the Town Treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the <u>Planning</u> Board without further appropriation. Expenditures from the special account shall be made only for services rendered in connection with a specific ARCPUD project or projects for which a fee has been or will be collected from the applicant. Accrued interest may also be spent for this purpose.
- (2) At the completion of the project, any excess amount in the account, including interest, attributable to a specific project shall be repaid to the applicant or the applicant's successor in interest. A final report of said account shall be made available to the applicant or the applicant's successor in interest. For the purpose of this regulation, any person or entity claiming to be an applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.

s. <u>310306</u> – 3 APPEAL

A. Selection of Outside Consultant – Any applicant may make an administrative appeal from the-Planning Board's selection of the outside consultant (for plan review or construction observation services) to the Medway-Board of Selectmen. Such appeal must be made in writing and may be taken only within twenty (20) days after the Planning Board has mailed or hand-delivered notice to the applicant of the consultant's selection. The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum, required qualifications. The minimum qualifications shall either consist of an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue or a related field. The required time limit for the Planning Board's action upon an application shall be extended by the duration of the administrative appeal. In the event that no decision is made by the

Board of Selectmen within one (1) month following the filing of the appeal, the consultant selection made by the <u>Planning</u> Board shall stand.

B. 20 Day Appeal Period - Any person aggrieved by a decision of the <u>Planning</u> Board may file an appeal to the Court of the Commonwealth by bringing an action within twenty (20) days of the date the decision was filed with the Town Clerk.

s. <u>310306</u>-4 CONSTRUCTION OBSERVATION/ and INSPECTION

- A. Developer Responsibilities
 - (1) The developer shall notify the <u>Board's Engineer</u>, and the <u>Medway</u> Department of Public <u>WorksServices</u>, the Medway Water and Sewer Department, and the <u>Engineer designated by the Planning Board</u> at least forty-eight (48) hours prior to the time at which each one of the required construction observations should take place.
 - (2) The developer shall provide safe and convenient access to all parts of work for observation by the Department of Public <u>WorksServices</u>, the Water and Sewer Department, the <u>Board's</u> Engineer, and the <u>Planning</u> Board or its agents.
- B. Pre-Construction Meeting The developer must notify the <u>Planning and Economic</u> <u>Development office Department of Public</u> <u>Works Services, the Water and Sewer Department, the Fire Department and the Engineer</u> <u>designated by the Board, in writing, no later than seven (7) days prior to the start of</u> construction in order to hold a pre-construction meeting, preferably on site, with the developer and contractor. The pre- construction meeting shall not be held unless the developer has paid the ARCPUD Construction Observation Fee as established by the <u>Planning</u> Board.
- *C*. No work shall be approved that has been constructed before the required inspection/ observation occurs<u>as specified herein</u>.
- D. The developer must notify the Department of Public WorksServices, the Water and Sewer Department and the Engineer designated by the Board when underground infrastructure, such as but not limited to sewer, fire alarm and drainage, are installed in order for inspection of the installation by the respective department before the excavation is backfilled.
- *E.* The subgrade must be approved by the Department of Public <u>WorksServices</u> and the Engineer designated by the <u>Planning</u> Board before the application of the gravel base course.
- *F*. The gravel base course must be approved by the Department of Public <u>WorksServices</u> and the Engineer designated by the Board before the application of bituminous concrete (street or sidewalk) pavement.
- *G.* The developer must notify the Department of Public <u>WorkServices</u> and the Engineer designated by the Board with at least forty-eight (48) hours written notice prior to the

start of each application of bituminous concrete on the street and sidewalk and of placement of curbing for approval.

H. The developer must keep the Department of Public <u>WorksServices</u> and the Engineer designated by the Board informed when materials and other items of work are ready for inspection and approval such as the installation of bounds, loam, and seeding, and general cleanup.

s. <u>310-306</u> – 5 <u>BOND SURETY</u> REDUCTION - The penal sum of any <u>such bond_surety</u> or the amount of any deposit held for the completion of the improvements required by the ARCPUD Special Permit as security for the performance of which was given by bond, deposit or covenant, or upon the performance of any covenant with respect to any lot, may from time to time, be reduced by the <u>Planning</u> Board and the obligations of the parties thereto released by the <u>Planning</u> Board in whole or in part, except that a minimum of <u>thirty five-forty</u> thousand dollars (\$35,000) or ten percent (10%) of the original <u>bond surety</u> amount, whichever is more, shall be retained until all work is completed to the satisfaction of the <u>Planning</u> Board, the Building <u>CommissionerInspector</u>/Zoning Enforcement Officer and the Department of Public <u>Services.Works</u>. If acceptance of a road as a public way is a condition of the ARCPUD Special Permit, Town Meeting acceptance of the street(s) as a public way is also required.

s. <u>310306</u> – 6 PROJECT COMPLETION

A. As-Built Plans

- (1) Prior to the final release, the developer shall file with th<u>ee Planning</u> Board an original and six prints of the "as-built" plans of the completed streets and site work. Additionally, an electronic file may be is required by the Planning Board in a format to be specified by the Town of Medway. The "as-built" plans shall show all plans and profiles corrected and certified by the applicant's engineer to be actual "as-built" locations and profiles of all streets, ways and utilities, including those installed by others such as power, telephone, fire alarm and gas.
- (2) The "as-built" plans shall be prepared in a manner suitable for recording at the Registry of Deeds, with proper legal description for initiating an article in the Town Warrant for the acceptance of the ways by Town Meeting.
- (3) The "as-built" plans shall be drawn with a minimum lettering height of <u>one-eight</u> 148 inch (Registry of Deeds standards) and to a <u>one inch 4^{22} = forty foot 40²</u> scale.
- (4) The "as-built" plans will contain the following:
 - (a) graphical scale;
 - (b) boundaries of the roadway layout and all easements;
 - (c) reference to the approved ARCPUD including all plan recording data;
 - (d) locus map;
 - (e) curb type<u>s/ and limits</u>, sidewalks, pedestrian ramps and driveways;
 - (f) all monumentation, including vertical benchmarks;

- (g) all utilities (water, water services and valves, sanitary sewers, storm drains, manholes, catch basins, electric/telephone/cable TV, gas and fire alarm system) in plan view. A Symbol key shall be provided along with appropriate labels.)
- (h) water, sanitary sewer and drainage shown on the profile, noting inverts, rims, pipe type and sizes; and
- (i) centerline stationing with the starting and ending of the layout clearly noted.
- **B.** <u>Partial</u> Release of Performance Guarantee The Planning Board shall not grant a partial release of Covenant and Conditions until the following items have been installed, inspected and approved by the Board or its agent:
 - (1) Subgrade gravel base;
 - (2) Binder course;
 - (3) Berm along the roadway edges as proposed;
 - Drainage system completed to the proposed outfall with frame and grates set to binder grade;
 - (5) Street name signs, stop signs, and "Street Not Accepted by the Town" signs are installed;
 - (6) Stop line/proposed pavement markings;
- C. Release of Bond Surety The Planning Board shall release the bond surety upon written verification from its agent that the required conditions have been satisfactorily met. In the event of failure to comply with the requirements within the time period agreed upon in the ARCPUD Special Permit, the bond surety shall may be used by the Town of Medway to correct the unsatisfactory conditions. Improvements not completed within the time required shall thereafter be completed in accordance with the current standards of the Planning Board.

s. <u>310_306</u> – 7 REVISIONS TO APPROVED PLANS

A. Minor Revisions

(1) Subsequent to an ARCPUD Special Permit granted by the <u>Planning</u> Board, minor revisions in the ARCPUD Plan may be made from time to time in accordance with applicable law, <u>ordinances, by-laws</u>, and regulations but the use or development approved under the ARCPUD Special Permit shall otherwise be in accordance with the plan referred to, and such conditions as may be included, in the decision of the <u>Planning</u> Board.

If revisions to an approved ARCPUD Plan are needed, the applicant shall provide written notification to the <u>Planning</u> Board in advance of such revision including an explanation as to the need thereof. Proposed revisions, which in the opinion of

the <u>Planning</u> Board are minor and non-substantive, must be reviewed and may be approved by a majority of the<u>e Planning</u> Board without a public hearing. Such revisions shall not be effective until approved by vote of the <u>Planning</u> Board.

(2) The-<u>Planning</u> Board will notify the Town Clerk of any approved minor revisions.

B. Major Revisions

(1) The <u>Planning</u> Board may determine that such proposed revisions are not minor. These <u>would</u> include but are not limited to any significant change in the size, type, or location of buildings, access and exit curb cuts, overall parking layout, buffer strips or screening, overall appearance of the building, including building material or fenestration, or the type or intensity of use, or in the conditions specifically addressed in the decision of the <u>Planning</u> Board.

(2) (2) The Planning Board shall order that an application for a Revised ARCPUD Special Permit and Plan be filed and that additional plan reviews and a new public hearing will be held in the same manner as set forth herein.

(3) The Planning-Board will notify the Town Clerk of any proposed major revisions to an approved ARCPUD Plan.

C. Revision Fees

- (1) Whenever additional reviews by the Board, its staff or consultants are necessary due to plan revisions, the applicant is responsible and shall be billed for all costs incurred including but not limited to additional ARCPUD Filing and Filing and Plan Review Fees and any other expenses including but not limited to advertising and mailing costs.
- (2) If the revisions affect only specific limited aspects of the site, th<u>ce Planning</u> Board may reduce the scope of the required review and waive a portion of the additional ARCPUD Filing and Plan Review Fees.

s. <u>310 8 PENALTIES</u> Any applicant, individual, property owner or business entity that violates or permits a violation of these *Rules and Regulations* shall be subject to a fine as follows:

| | -\$3100.00 |
|-----------------------------|---|
| Maximum fille allowed. | 4 <u>5</u> 100.00 |
| | Building Inspector/Zoning Enforcement |
| Officer <u>Commissioner</u> | |
| Fine Schedule: | _ |
| First Offense | Warning |
| Second Offense | <u> </u> |
| Third Offense | \$ 20050.00 |
| Fourth and each subs | |
| Manimum non daar a | all data to constitute a compared attained on |

- Maximum per day each day to constitute a separate violation.

s. <u>310306</u> – <u>98</u> AMENDMENTS – These *Rules and Regulations* may be amended from time to time by the <u>Planning Board</u>. <u>A-Board following a public hearing</u>. <u>shall be held with appropriate notice in compliance with state statute and local by laws</u>.

s. 310306 - 109 VALIDITY – If, in any respect, any provision of these *Rules and Regulations* in whole or in part, shall prove to be invalid for any reason, such invalidity shall only affect the part of such provision which shall be held invalid and in all other respects these *Rules and Regulations* shall stand.

These ARCPUD *Rules and Regulations* were initially adopted by a vote of the Medway Planning Board on February 27, 2001. Revised ARCPUD *Rules and Regulations* were approved by a vote of the Medway Planning Board and are to be in full force and effect on and after July 17, 2001. A copy thereof has been filed with the Town Clerk and the Norfolk County Registry of Deeds.

Initially Approved: February 27, 2001 by the Medway Planning_Board

Revisions Approved: July 17, 2001 by the Medway Planning Board

Revisions Approved:

Attest:

 Susan E. Affleck-Childs
 Date

 Planning Board Administrative Secretary and Economic Development Coordinator



July 28, 2020 Medway Planning & Economic Development Board Meeting

<u>Review of ZBA Petition – Request for</u> <u>Amendment to 1997 variance for 72A</u> <u>Fisher Street</u>

- Application from Kathleen and Patrick McSweeney. They seek an amendment to the previous frontage variance issued in 1997 for this property.
- Variance decision July 17, 1997. This variance allowed a house to be constructed on a lot with less than the standard frontage for the zoning district. However, that variance included a condition that the property could not be further divided.

The current owners seek to have this condition removed so they can then file with the PEDB for a 2-lot private way subdivision to create frontage for 2 lots. They wish to build a new home on a newly split off lot, and then sell the other lot which will include their current home.

GENERAL APPLICATION FORM Case Number: _____



TOWN OF MEDWAY

ZONING BOARD OF APPEALS

155 Village Street Medway MA 02053 Phone: 508-321-4915 | zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS.

TO BE COMPLETED BY THE APPLICANT

| Applicant/Petitioner(s): Patrick R. McSweeney and | Application Request(s): | | |
|---|--|--------------|--|
| Kathleen E. McSweeney | | | |
| Property Owner(s): Patrick R. McSweeney | Appeal | | |
| and Kathleen E. McSweeney | Special Permit | | |
| Site Address(es): 72A Fisher Street, Medway, MA 02053 | Variance | | |
| | Determination/Finding | | |
| | Extension (provide previous case #) | | |
| | Modification (provide previous case #) | \checkmark | |
| Parcel ID(s): | Withdrawal | | |
| 35-033 | Comprehensive Permit | | |
| | | | |
| Zoning District(s): ARI | | | |
| Registry of Deeds Book & Page No. and Date or Land Court Certificate No. and Date of Current Title: | | | |
| Norfolk County Registry of Deeds E | Book 12320, Page 475 | | |

| TOWN CLERK STAMP | TO BE COMPLETED BY STAFF: |
|------------------|-----------------------------|
| | Check No.: |
| | Date of Complete Submittal: |
| | Comments: |
| | |
| | |
| | |
| | |
| | |
| | |

Received by: _____ Date: _____

GENERAL APPLICATION FORM

Case Number:

APPLICANT/PETITIONER INFORMATION

The owner(s) of the land must be included as an applicant, even if not the proponent. Persons or entities other than the owner may also serve as coapplicants in addition to the owner(s), however, in each instance, such person shall provide sufficient written evidence of authority to act on behalf of the owner(s). For legal entities such as corporations, LLCs, etc., list the type and legal status of ownership, the name of the trustees/officer members, their affiliation, and contact information. Please provide attachment for information if necessary.

| Applicant/Petitioner(s): | Phone: |
|--|-----------------------------------|
| Patrick R. McSweeney and | 508-533-1284 |
| Kathleen E. McSweeney | Email: patrickmcsw@comcast.net |
| Address: 72A Fisher Street, Medway, MA 02053 | |
| | |
| Attorney/Engineer/Representative(s): | Phone: |
| Stephen J. Kenney, Kenney & Kenney | 508-533-6711 |
| Stephen J. Kenney, Kenney & Kenney | Email: sjk@kenney-law.com |
| Address: 181 Village Street, Medway, MA 02053 | |
| | |
| Owner(s): | Phone: |
| Patrick R. McSweeney | 508-533-1284 |
| and Kathleen E. McSweeney | Email: patrickmcsw@comcast.net |
| Mailing Address: 72A Fisher Street, Medway, MA 020 | 053 |
| | |

Please list name and address of other parties with financial interest in this property (use attachment if necessary):

None

Please disclose any relationship, past or present, interested parties may have with members of the ZBA:

None

I hereby certify that the information on this application and plans submitted herewith are correct, and that the application complies with all applicable provisions of Statutes, Regulations, and Bylaws to the best of my knowledge, and that all testimony to be given by me during the Zoning Board of Appeals public hearing associated with this application are true to the best of my knowledge and belief.

Date oner or Repr ntative Signature of

Signature Property Owner (if different than Applicant/Petitioner)

Received by:

GENERAL APPLICATION FORM

Case Number:

APPLICATION INFORMATION

| | YES NO |
|---|---|
| Requesting Waivers? | \odot |
| Does the proposed use conform to the current Zoning Bylaw? | $\odot \bigcirc$ |
| Has the applicant applied for and/or been refused a building permit? | $\bigcirc \odot$ |
| Is the property or are the buildings/ structures pre-existing nonconforming? | $\bigcirc \odot$ |
| Is the proposal subject to approval by the BOH or BOS? | $\bigcirc \odot$ |
| Is the proposal subject to approval by the Conservation Commission? | $\bigcirc \odot$ |
| Is the property located in the Floodplain District? | $\bigcirc \odot$ |
| Is the property located in the Groundwater Protection District? | $\bigcirc \odot$ |
| Is the property located in a designated Historic District or is it designated as a Historic Landmark? | $\bigcirc \odot$ |
| | Does the proposed use conform to the current Zoning Bylaw? Has the applicant applied for and/or been refused a building permit? Is the property or are the buildings/ structures pre-existing nonconforming? Is the proposal subject to approval by the BOH or BOS? Is the proposal subject to approval by the Conservation Commission? Is the property located in the Floodplain District? Is the property located in the Groundwater Protection District? Is the property located in a designated Historic District or is it designated as a |

Describe Application Request:

The Petitioner is seeking a Modification of a prior Grant of Variance dated July 17, 1997 and recorded with the Norfolk County Registry of Deeds on September 12, 1997 at Book 11988, Page 12, a copy of which is attached hereto and incorporated herein by reference. The Modification that is being sought at this time is to remove the conditions of only one single family dwelling to be constructed upon the lot and including a specific condition in any deed of the premises that the premises are not to be subdivided and are to be used for one single family dwelling. The Petitioner is planning on applying to the Planning and Economic Development Board for a "private way" limited subdivision which would allow each of the two lots to have adequate frontage and area for compliance with the Town of Medway Zoning By-Laws.

Received by:

Date:

COLUMN ST

FILL IN THE APPLICABLE DATA BELOW

| Required Data | Bylaw Requirement | Existing | Proposed |
|-------------------|-------------------|-------------------------|----------------------|
| A. Use | | Single Family Residence | Two Family Residence |
| B. Dwelling Units | | One | Two |
| C. Lot Size | | 177,093 sq. ft. | 90,075 187,018 |
| D. Lot Frontage | | 117.9 ft | |
| E. Front Setback | | excess of 230 ft. | excess of 230 ft. |
| F. Side Setback | | excess of 60 ft. | excess of 60 ft. |
| G. Side Setback | | excess of 60 ft. | excess of 60 ft. |
| H. Rear Setback | | excess of 60 ft. | excess of 60 ft. |
| I. Lot Coverage | | in conformity | in conformity |
| J. Height | | in conformity | in conformity |
| K. Parking Spaces | | N/A | N/A |
| L. Other | | | |
| | | | |
| | | | |
| | | | |

> After completing this form, please submit an electronic copy to zoning@townofmedway.org and 10 paper copies to the Community & Economic Development Department.

Received by: _____

Date:

BK11988PG012

COMMONWEALTH OF MASSACHUSETTS

NORFOLK, SS

94574

IN THE MATTER OF:

Robert Curatola Petitioner

NORFOLK COUNTY HELISTHY UP DELUC

CERTIF

BARRY T HANNON, REGISTER

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PH 12:

OPINION OF THE BOARD

REQUEST FOR VARIANCE

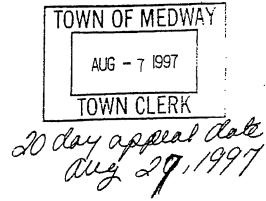
HEARING: June 18, 1997 July 17, 1997

DECISION: July 17, 1997

MEMBERS PRESENT:

Jan V. Morris, Chairman David E. D'Amico, Clerk Stephen J. Reding David J. Cole Bonnie Tetrault

THE WRITTEN OPINION WAS DELIVERED ON JULY 30, 1997



BK 1 1 9 8 8 PG 0 1 3

OPINION OF THE BOARD

This is a proceeding of the Zoning Board of Appeals of the Town of Medway, MA (hereinafter the Board) acting under the Zoning By-Laws of the Town of Medway, MA 02053 and the Massachusetts General Law C40A, as amended, in which the petitioner, Robert Curatola, requests a Variance to construct one single family home on a vacant lot known as Lot#1, Fisher St., Medway, MA 02053.

Following the giving of notice as required by law, a public hearing on this petition scheduled for June 18, 1997, was postponed at the request of the applicant, to July 17, 1997, and held on that date in Sanford Hall, Medway Town Hall, Medway, MA 02053.

On June 18, 1997, Chairman Jan V. Morris opened the hearing and advised the applicant and his attorney that there was only a four member Board present. He further advised that should they choose, they were welcome to postpone the hearing until such time that a five member Board was available. After conferring with his attorney, the applicant decided to postpone the hearing until a five member board was available.

On July 17, 1997, the applicant, Robert Curatola, along with his attorney, John Dugan, and Paul DeSimone, surveyor, came before the Board to request relief from frontage requirements to allow for the construction of one single family home. Attorney Dugan presented a plan to the Board showing the four acre lot with only 117± feet of frontage on Fisher Street. The lot is under a Purchase & Sale Agreement between the owner, Joan E. Giovanella, and the applicant. The large lot, in the ARI district, has no subdivision plan associated with it. It was stated that the original developer of the surrounding area, it appears, specifically left this area aside in 1972 for the potential development of a cul-de-sac and three house lot subdivision. When the developer left the area, Mrs. Giovanella purchased the lot, and it has remained undeveloped since her ownership. She now wishes to sell the property, but would prefer that only one single family home be constructed to allow the remainder of the large lot to remain in its natural state. The applicant wishes to construct only one single family home in which he and his family will reside. He has no plans for any future development and will place in the deed as a covenant a condition stating that the premises are not to be subdivided. Such a covenant would be permanent and binding on all future owners. Additionally, there would be only one well and septic system associated with the four acre lot which would be less of a strain on the environment and intensity of the area, than would a three house lot subdivision. Attorney Dugan submitted a letter to the Board from the Fire Chief stating that the proposed plan would not be a detriment to public safety and that there is an automatic aid agreement in place with the Holliston Fire Department for response to the area of Fisher Street.

The public was addressed and asked if any one had any questions. Mr. Twomey of 68 Fisher St. asked if the proposed covenant would be enforceable. Attorney Dugan stated that is was extremely difficult to break a covenant. Such action would involve land court and zoning board involvement which was extremely time consuming and costly.

At the hearing, no one spoke in favor of, nor did any one speak in opposition to the petition.

During deliberation, discussion centered around the benefits, including environment, safety, density issues, etc., of constructing only one single family home on the four acre, non conforming lot. While it was obvious that the original intent in 1972 was a subdivision, with no preliminary, definitive or other plan associated with the lot, what is left is a large non-conforming, four acre lot with inadequate frontage, thereby, restricting compliance with the zoning by-law. Furthermore, with the addition of a covenant on the deed, it is improbable that a

Curatola Page 2

future subdivision plan could be formulated. Additionally, it was found that the proposed plan would not generally affect the zoning district; was not a detriment to the public good; nor, did it substantially derogate from the intent or purpose of the by-law. Therefore, in a majority decision of the five members, (Messrs. Morris, Cole, Reding and Ms. Tetrault in favor. Mr. D'Amico opposed), the Board voted to grant the relief from frontage requirements to Robert Curtola for the purpose of constructing one single family home on Lot 1, Fisher St., Medway, MA. Said variance shall generally conform to the plan presented dated April 18, 1997, signed by the Board on July 17, 1997 and attached to this decision. The variance is granted with the following expressed conditions:

- 1. Only one single-family dwelling is to be constructed upon this lot.
- 2. The applicant shall include a specific condition in any deed of the premises that the premises are not to be subdivided and are to be used for one single-family dwelling. This condition shall exist as a covenant and shall run with the land.
- 3. The position of the single-family dwelling on the lot shall come no closer than 50 feet from any property line.

The Board hereby makes a detailed record of its findings and proceedings relative to this petition, sets forth its reasons for its findings and decision, incorporates by reference any plan or diagram received by it, directs that this decision be filed in the office of the Town Clerk and be made a public record and that notice and copies of its decision be made forthwith to all parties or persons interested.

IN ACCORDANCE WITH MASSACHUSETTS GENERAL LAW, CHAPTER 40A, SECTION 11 NO VARIANCE, SPECIAL PERMIT OR CONSTRUCTIVE GRANT OF A VARIANCE TAKES EFFECT UNTIL RECORDED IN THE REGISTRY OF DEEDS.

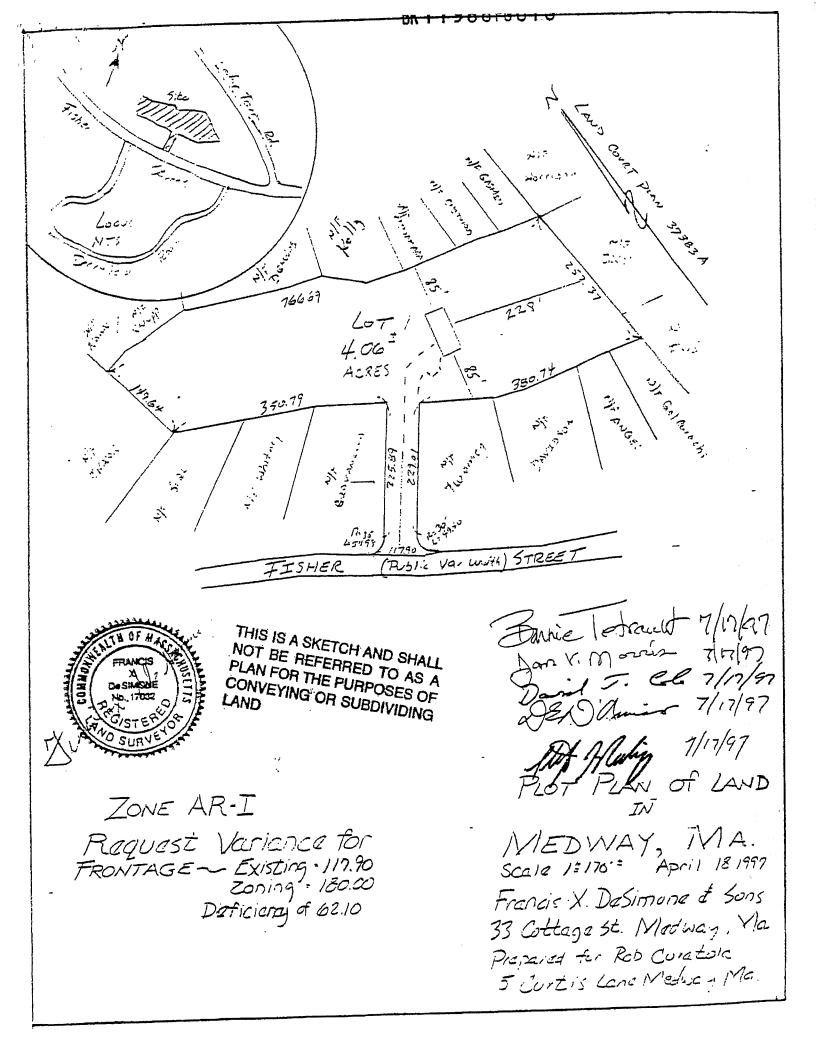
Jan V. Morris, Chairman

David E. D'Amico, Clerk

Stephen J. Reding

David J. Cole

Bonnie Tetruult



BK | | 988PG0|6

TOWN OF MEDWAY MEDWAY, MASSACHUSETTS 02053

TEL. (508) 533-6059



Town Clerk Maryjane White

<u>C E R T I F I C A T I O N</u>

I, Town Clerk of the Town of Medway, hereby certify that notice of the decision of the Zoning Board of Appeals of the Town of Medway in the matter of:

Robert Curatola

ATTEST:.....

MODIFICATION FORM



TOWN OF MEDWAY ZONING BOARD OF APPEALS

155 Village Street Medway MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

TOMP OF BUILDING STAMP

NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS.

TO BE COMPLETED BY THE APPLICANT

Please attach the decision in question. Please provide attachments detailing the Reason(s) for requesting a modification to the existing decision and citation(s) of the portion(s) of the decision to be modified. Please provide any additional waiver requests as needed.

| Applicant/Petitioner(s): Patrick R. McSweeney and Kathleen É. McSweeney | Previous Decision was for: | | |
|--|--|--------------|--|
| | Variance | \checkmark | |
| Property Owner(s): | Special Permit | | |
| Patrick R. McSweeney and Kathleen E. McSweeney | Comprehensive Permit | | |
| Site Address(es): 72A Fisher Street, Medway, MA 02053 | Appeal | | |
| | | | |
| Parcel ID(s): | | | |
| 35-033 | | | |
| · · · · · · · · · · · · · · · · · · · | Date of Previous Decision: July 17, 1997 | | |
| Zoning District(s): | | | |
| Heat Kenn | 6/25/20 | | |
| ignature of Applicant/Petitioner or Representative | Date | | |

Signature Property Owner (if different than Applicant/Petitioner)

 $\mathbb{E}_{\{0,0\}}$

REASONS FOR REQUESTING MODIFICATION TO THE EXISTING DECISION AND CITATIONS OF THE PORTIONS OF THE DECISION TO BE MODIFIED

The request for a Modification to the Decision dated July 17, 1997, granting a Variance of frontage is made as a result of the change in circumstances of the current owner of the subject real estate. The portions of the Decision that are being requested to be modified are conditions number one and number two found on page 2 of the Decision. The subject Decision was recorded with the Norfolk County Registry of Deeds on September 12, 1997 at Book 11988, Page 12. The first condition that is being requested to be modified is to allow two single family dwellings to be constructed upon the subject lot instead of one single family dwelling. The second condition that is being requested to be modified is to remove the requirement that the applicant shall include a specific condition in any deed of the premises that the premises are not to be subdivided and to are to be used for one single family dwelling. The petitioner is requesting that the condition be modified so that the applicant shall include a specific condition in any future deed of the premises that the premises are not to be further subdivided and are to be used for two single family dwellings and any structures that are appurtenant to a single family dwelling, such as a barn, a shed, etc.

The Petitioner is planning on applying for a "private way" limited subdivision with the Planning and Economic Development Board, which would allow each of the two lots to have adequate frontage and area for compliance with the Town of Medway Zoning By-Laws.

The change in circumstances that has taken place since the granting of the original variance is as follows. The petitioners had constructed their home on the subject parcel in 1998. The petitioners have lived in the home since that time. The subject parcel is a large 4.02 acre parcel and the home and accompanying structures are time consuming and expensive to maintain properly. The petitioners wish to downsize to a smaller home which would be next to the barn

that the petitioners have constructed on the property. The petitioners wish to construct a smaller cape-style home so that they can continue to reside in the Town of Medway as they grow older and can continue to maintain the property properly, as well as continue to afford the real estate taxes and upkeep expenses that come with such a large parcel of land.

The new home that the petitioners wish to build will be constructed in the middle of the parcel so that it is not near any of the abutters and not near any of the lot lines. This proposal is more in line with the petitioners' needs and wishes. It is also more conducive to the area and is in the best interest of the neighbors and the neighborhood to allow the construction of one single family residence.

As mentioned the petitioners are looking to downsize and wish to continue to reside in the Town of Medway but there are limited lots for sale in the Town of Medway. The petitioner, Patrick R. McSweeney, is a physician who had practiced in the Town of Medway for many years and has now taken an administrative position as President of the Milford Regional Physician Group. Patrick McSweeney is a lifelong resident of the Town of Medway, graduated from Medway High School and has continued to live here his entire life. He and his wife, Kathy, wish to continue to reside in the Town of Medway, but, as stated the opportunity for the purchase of lots to build a single family home upon are limited.

The petitioners suggest that the construction of an additional single family residence on approximately a 4 acre parcel will not overburden the real estate nor will it burden the abutters or the neighbors of the subject parcel of real estate. In this particular instance there is a 4+ acre parcel of real estate with one single family residence built upon it. The petitioner simply wishes to construct a second single family structure on the subject piece of real estate with each parcel having approximately two acres of land. The petitioner plans on maintaining the heavily wooded nature of the remainder of the real estate so that other than the area needed to construct a second home the real estate will remain heavily wooded. This will also ameliorate any of the abutters concerns that their privacy may be interrupted in some way. As mentioned, this is a heavily wooded lot so that none of the neighbors will be impacted in any way by the construction of the house. All other zoning requirements will be met in their entirety. The subject property is not in the ground water protection district nor is it within the flood plain zone. The subject property is 100% upland so that there are no wetland or conservation issues that arise. The petitioner proposes that this would be the best use of the property with the least intrusion upon the abutters and the neighbors of the subject neighborhood.



July 28, 2020 Medway Planning & Economic Development Board Meeting

Construction Reports

- Salmon SWPPP report from Coneco Engineering dated 7-27-20
- Salmon construction report #42 (7-14-20) Tetra Tech
- Salmon construction report #43 (7-15-20) Tetra Tech

Bridget Graziano and Steve Bouley are also working with Coneco on revisions to the SWPPP (Stormwater Pollution Prevention Plan for construction) based on the discussions at the last PEDB mtg. Draft revisions to the SWPPP were submitted this week and have been reviewed by both Bridget and Steve and comments provided back to Coneco. Coneco is making revisions and will resubmit. I will forward to you upon receipt, hopefully on Monday.

| General Information (see reverse for instructions) | | | | | | | | |
|--|--|--|------------------------|---------------------------------|----------------------|------------------------------------|--|--|
| Name of Project | Salmon H | ealth and Retirement Community | NPDES ID No. | MAR1001Q3 | Inspection Date | 07/17/2020 | | |
| Weather conditions during inspection | ditions during Cloudy, 61°F Inspection start time 10:00 AM Inspection end time 11:45 AM | | | | | | | |
| Inspector Name, Title Contact Information | | Mira Betros, E.I.T., (508) 697-3191 Ext. 162 | | | | | | |
| Present Phase of Co | nstruction | Construction of the main car | npus building, roa | dway and site grading, and | utility installatior | 1. | | |
| Inspection Location inspections are requ specify location whe inspection is being conducted) | ired, | Salmon Health and Retireme 261 Village Street Medway, MA 02053 | ent Community | | | | | |
| Standard Frequency | Inspection Frequency (Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply) Standard Frequency: | | | | | | | |
| Increased Frequenc Every 7 days a or Tier 3) | | 24 hours of a 0.25" rain (for areas | of sites discharging t | o sediment or nutrient-impairec | I waters or to water | rs designated as Tier 2, Tier 2.5, | | |
| Twice during fire Twice during fire Once per mon | Reduced Frequency: Twice during first month, no more than 14 calendar days apart; then once per month after first month; (for stabilized areas) Twice during first month, no more than 14 calendar days apart; then once more within 24 hours of a 0.25" rain (for stabilized areas on "linear construction sites") Once per month and within 24 hours of a 0.25" rain (for arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought) Once per month (for frozen conditions where earth-disturbing activities are being conducted) | | | | | | | |
| | | y a 0.25" storm event? 🔳 Yes | | | | | | |
| If yes, how did y Rain gauge | | ined whether a 0.25" storm even Weather station represented | | weather station source: | | | | |
| | | | | | | | | |
| Total rainfall am | ount that tr | iggered the inspection (in inches | 5): .38" | | | | | |
| | | y the occurrence of runoff from s | snowmelt sufficient to | o cause a discharge? 🗌 Yes | No No | | | |
| Unsafe Conditions for Inspection Did you determine that any portion of your site was unsafe for inspection per CGP Part 4.5? Yes No If "yes", complete the following: - Describe the conditions that prevented you from conducting the inspection in this location: | | | | | | | | |
| - Locatio | - Location(s) where conditions were found: | | | | | | | |

| | Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2) (see reverse for instructions) | | | | | | | |
|---|---|------------------------------------|---|--|--|--|--|--|
| Type/Location of E&S Control [Add an additional sheet if necessary] | Maintenance Needed?* | Corrective Action Required?* | Date on Which Maintenance or Corrective Action First Identified? | Notes | | | | |
| 1. Silt Fence/Compost Sock | ∎Yes □No | Yes No | 8/17/2019 | The slope at the back of basin 3 washed into the compost sock and silt fence. Sediment build up against the compost sock should be removed and any damaged compost sock should be repaired (18 in Photo Log) | | | | |
| 2. Compost Sock | ■Yes □No | □Yes ■No | 5/15/2020 | Compost sock has deteriorated along the western side of Willow Pond Circle and should be replaced (4 in Photo Log). | | | | |
| 3. Silt Fence/Compost Sock | □Yes ■No | □Yes ■No | 6/19/2020 | Erosion controls have been removed along the eastern length of Waterside Run per MCC direction (20, 21, and 22 in Photo Log). | | | | |
| 4 . Silt Fence | ∎Yes □No | Yes No | 6/26/2020 | Silt fence around the outlet east of the Pavilion building and should be repaired (20 in Photo Log). | | | | |
| 5. Silt Fence/Compost Sock | ■Yes □No | □Yes ■No | 6/26/2020 | Coneco recommends that erosion controls remain in place and should not be removed along the southeastern edge of Willow Pond Circle leading to the Waterside Run Crossing per MCC direction (10, 14, and 15 in Photo Log). | | | | |
| 6. Silt Sacks | ■Yes □No | □Yes ■No | 7/2/2020 | Recent storm events have cause flooding along the eastern side of Waterside Run. Silt sacks should continue to be maintained and slopes should be stabilized to prevent clogging of the system (21 and 22 in Photo Log). | | | | |
| 7. Silt Fence/Compost Sock | ∎Yes □No | Yes No | 7/2/2020 | Compost sock and silt fence in need of repair (7, 12, 17, and 20 Photo Log) Additional silt fence has been placed along Willow Pond Circle above a steep slope (8 in Photo Log). Additional silt fence should be placed along the top of the retaining wall along southwestern edge of Willow Pond Circle leading to the Waterside Run Crossing (13 in Photo Log). | | | | |
| 8. Compost Sock/Channeling | ∎Yes □No | Yes No | 7/10/2020 | Compost sock has been buried under stone (5 in Photo Log) and sediemnt (9 in Photo Log) and should be uncovered. Runoff channels should be repaired. | | | | |
| 9. Construction Entrance | Yes No | Yes No | 7/17/2020 | The construction entrance of Waterside Run has been removed and it has been paved (23 in Photo Log). | | | | |
| 10.Silt Fence/Compost Sock | ∎Yes □No | □Yes ■No | 7/17/2020 | Compost sock and silt fence had been removed in several places (16, 30, and 31 in Photo log). | | | | |

* Note: The permit differentiates between conditions requiring routine maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition. Corrective actions are triggered only for specific conditions, which include: 1) A stormwater control needs repair or replacement (beyond routine maintenance) if it is not operating as intended; 2) A stormwater control necessary to comply with the permit was never installed or was installed incorrectly; 3) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1; 4) One of the prohibited discharges in Part 1.3 is occurring or has occurred; or 5) EPA requires corrective actions as a result of a permit violation found during an inspection carried out under Part 4.8. If a condition on your site requires a corrective action, you must also fill out a corrective action form found at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. See Part 5 of the permit for more information.

| Condition and Effectiveness of Pollution Prevention (P2) Practices (CGP Part 2.3) (see reverse for instructions) | | | | | | | |
|---|-------------------------|------------------------------------|---|-------|--|--|--|
| Type/Location of P2 Practices [Add an additional sheet if necessary] | Maintenance Needed?* | Corrective Action Required?* | Date on Which Maintenance or Corrective Action First Identified? | Notes | | | |
| 1. | □Yes □No | □Yes □No | | | | | |
| 2. | □Yes □No | □Yes □No | | | | | |
| 3. | □Yes □No | □Yes □No | | | | | |
| 4. | □Yes □No | □Yes □No | | | | | |
| 5. | □Yes □No | □Yes □No | | | | | |
| 6. | □Yes □No | □Yes □No | | | | | |
| 7. | □Yes □No | □Yes □No | | | | | |
| 8. | □Yes □No | □Yes □No | | | | | |
| 9. | □Yes □No | □Yes □No | | | | | |
| 10. | □Yes □No | □Yes □No | | | | | |

* Note: The permit differentiates between conditions requiring routine maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition. Corrective actions are triggered only for specific conditions, which include: 1) A stormwater control needs repair or replacement (beyond routine maintenance) if it is not operating as intended; 2) A stormwater control necessary to comply with the permit was never installed or was installed incorrectly; 3) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1; 4) One of the prohibited discharges in Part 1.3 is occurring or has occurred; or 5) EPA requires corrective actions as a result of a permit violation found during an inspection carried out under Part 4.8. If a condition on your site requires a corrective action, you must also fill out a corrective action form found at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. See Part 5 of the permit for more information.

| Stabilization of Exposed Soil (CGP Part 2.2.14) (see reverse for instructions) | | | | | | | |
|---|----------------------|--------------------------------------|--|--|--|--|--|
| Stabilization Area [Add an additional sheet if necessary] | Stabilization Method | Have You Initiated Stabilization? | Notes | | | | |
| 1. Stockpiles | Hydro-seeding | ■ YES □ NO If yes, provide date: | Stockpiles that are not actively in use have been hydro-seeded to prevent erosion of the piles. Hydroseeded inactive stockpiles have established vegetation and have no apparent signs of erosion. Many stockpiles are in activ use and will not be hydro-seeded. | | | | |
| Finished areas behind retaining walls | Hydro-seeding | ■ YES □ NO If yes, provide date: | Areas between retaining walls and erosion control line have been hydro-seeded to prevent erosion. | | | | |
| 3 . Infiltration Basins | Hydro-seeding | ■ YES □ NO If yes, provide date: | The slopes of basins 1 & 3 have been hydro-seeded to prevent erosion. | | | | |
| 4. Exposed Soils | Hydro-seeding | ■ YES □ NO If yes, provide date: | Completed areas with exposed soils have been hydro-seeded to prevent erosion. | | | | |
| 5. Bridge abutments | Rip rap protection | ■ YES □ NO If yes, provide date: | The base of the bridge abutments parallel with the stream have been stabilized with rip rap. | | | | |

| Was a stormwater discharge or other discharge occurring from any part of your site at the time of the inspection? Yes No If "yes", provide the following information for each point of discharge: | | | | | | |
|--|--|--|--|--|--|--|
| ischarge Location Observations Add an additional sheet if necessary] | | | | | | |
| 1. | Describe the discharge: At points of discharge and the channels and banks of waters of the U.S. in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? Yes No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue: | | | | | |
| 2. | Describe the discharge: At points of discharge and the channels and banks of waters of the U.S. in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? Yes No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue: | | | | | |

Contractor or Subcontractor Signature and Certification (see reverse for instructions) "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." Signature of Contractor or Subcontractor: M.Betros, EIT

| Operator | Signature | and | Certification |
|----------|-------------|--------|---------------|
| (see | reverse for | instru | uctions) |

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

| Signature of Operator or "Duly Authorized Representative": | Date: |
|--|-------|
| | |

Printed Name and Affiliation:



Photo 1 (looking southeast) View of Willow Pond Circle construction entrance.



Photo 2 (looking south) Compost sock and silt fence along the end of the swale near Willow Pond Circle entrance.



Photo 3 (looking south) Compost sock and silt fence at the outlet of basin 1.



Photo 4 (looking southeast)

Compost sock and silt fence along the western side of Willow Pond Circle. Compost sock has deteriorated and should be replaced.



Photo 5 (looking south)

Compost sock northwest of the campus building is buried and should be cleared of stone.



Photo 6 (looking northwest) Second compost sock and silt fence had been added to the of the retaining wall near to the northern side of Lilac Path.



Photo 7 (looking southwest)

The double compost sock and silt fence along the western side of Lilac Path has been torn and should be repaired.



Photo 8 (looking southwest)

Regraded slope west of the main campus building. A double silt fence has been in place at the bottom of the slope. Additional silt fence has been added along the top of the slope after recent storm events caused erosion. Coneco has recommended the silt fence is extended further along the top of the slope. The slope should be stabilized per the plan as soon as possible to prevent further erosion.



Photo 9 (looking southwest) Rip rap plunge pool at outlet to southern infiltration chamber system.



Photo 10 (looking east)

Coneco does not recommend that the compost sock along the retaining wall south of the future main campus building should be removed per Medway Conservation Commission direction. Stormwater travels along the side and back of the wall in this area. During large storm events sediment is held on site by the silt fence and compost sock. Built up sediment along and on top of the compost sock should be removed.



Photo 11 (looking south)

Flow paths have formed south of the campus building. Channels should be repaired, and compost sock should be cleared of sediment.



*Photo 12 (looking southeast)

The silt fence at the end of the eastern sewer easement has fallen and should be repaired. It is recommended that the construction zone for the eastern sewer line structure installation shall have additional moveable compost filter sock placed at the bottom of the site slope to mitigate erosion due to high flows to the sewer easement area.



*Photo 13 (looking northwest)

Coneco recommends that silt fence should be added along the top of the retaining wall leading to the southern side of Waterside Run Crossing to prevent sediment flowing over the top of the wall.



Photo 14 (looking northwest)

Compost sock and silt fence had been added behind the retaining wall at the southern side of Waterside Run crossing. Compost sock and silt fence behind the retaining wall will be removed per Medway Conservation Commission direction.



Photo 15 (looking north)

Silt fence and some compost sock has been removed from the southern side of Waterside Run Crossing per Medway Conservation Commission direction. Coneco recommends that the compost sock and silt fence should continue to be used in this area. Extreme storm events have caused stormwater to flow over the retaining wall.



Photo 16 (looking east)

Seeding along the southern abutment of the waterside crossing. Compost sock and silt fence had been removed per Medway Conservation Commission direction.



Photo 17 (looking east)

Compost sock and silt fence around the outlet east of the Pavilion. Silt fence should be reset/stapled.



Photo 18 (looking west)

The slope at the back of basin 3 washed into the compost sock and silt fence. Slope should be repaired, and soil should be removed from in front of the sock.



Photo 19 (looking south) The compost sock and silt fence around the outlet for basin 3.



*Photo 20 (looking south) The compost sock and silt fence around outlet east of the Pavilion building. Silt fence should be repaired.



Photo 21 (looking north)

Erosion control has been removed along the eastern length of Waterside Run. During the recent storm events Rubicon indicated excessive ponding in this area. Coneco believes stormwater flow was impeded by the silt sacks within the catch basins, along with the elevated grate due to finish grade not being established in this area and did not flow as freely as the drainage system had been designed. Coneco recommends that additional cleaning of the silt sacks is maintained throughout the completion of the project. Grade should be established and stabilized as soon as possible to prevent sediment from entering the system. Additional compost socks have been added as check dams in several places at the eastern length of Waterside Run, Waterside Run has been paved.



Photo 22 (looking north)

Erosion control has been removed along the eastern length of Waterside Run. During the recent storm events Rubicon indicated excessive ponding in this area. Coneco believes stormwater flow was impeded by the silt sacks within the catch basins, along with the elevated grate due to finish grade not being established in this area and did not flow as freely as the drainage system had been designed. Coneco recommends that additional cleaning of the silt sacks is maintained throughout the completion of the project. Grade should be established and stabilized as soon as possible to prevent sediment from entering the system.



Photo 23 (looking southeast) View of Waterside Run entrance. This entrance has been paved.



Photo 24 (looking north)

Compost sock and silt fence have been removed per the Medway Conservation Commission as indicated by Marois. Soils in this area should be stabilized once construction in this area has been completed.



Photo 25 (looking southwest)

Compost sock and silt fence at the outlet along the western side of Waterside Run across from Narragansett Street.



Photo 26 (looking south) Compost sock and silt fence along the western side of Waterside Run at the outlet across from Mohawk Street.



Photo 27 (looking west)

Silt fence along the western side of Waterside Run leading to the outlet across from Massasoit Street.



Photo 28 (looking south) A second line of silt fence had been added along the western side of Waterside Run but has not been toed under.



Photo 29 (looking southwest) Silt fence along the western side of Waterside Run at the outlet across from Iroquios Street.



Photo 30 (looking west)

Compost sock and silt fence along the northern side of the bridge abutments at the Waterside Run crossing had been removed per Medway Conservation Commission direction. Exposed soils have been seeded. Erosion is not expected in this area during this time.



Photo 31 (looking north)

Compost sock and silt fence had been remover per Medway Conservation Commission direction behind the retaining wall at the eastern side of the Campus Building.



Photo 32 (looking northwest) Compost sock and silt fence along the north side of Walnut grove.

| Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752 | FIELD | REPORT | | |
|--|---------------|--------|-----------------|-------------|
| Project | | | Date | Report No. |
| Salmon Health and Retirement Community | (The Willows) | | 7/14/2020 | 42 |
| Location | | | Project No. | Sheet 1 of |
| Village Street, Medway, MA | | | 143-21583-15011 | 2 |
| Contractor | | | Weather | Temperature |
| Rubicon Builders (General Contractor) | | | A.M. CLOUDY | А.М. 75°F |
| Marois Brothers, Inc. (Site Contractor) | | | P.M. | P.M. |
| FIELD OBSERVATIONS | | | | |

On Tuesday, July 14, 2020, Bradley M. Picard, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and observe construction progress. The report outlines observations made during the site visit.

1. OBSERVATIONS

- A. Site Conditions/Erosion Controls: The western portion of the site along Willow Pond Circle is firm, location downgradient of CB-30 that encountered erosion control breaches have been repaired and hydroseed has been placed in disturbed areas. Additional silt fencing has been installed at the top of the slope along the western edge of Willow Pond Circle. 3/8" stone has also been placed at the toe of the newly installed silt fence barrier. Swales at the location along Waterside Run that were also impacted during the recent flash flood emergency have been reinforced with compost filter tube check dams at approximately 20' intervals upstream of DCB-1 (low point in the area). Contractor has erosion control blankets on-site, installation to be completed along slope adjacent to DCB-1. Highpoint of the swale between DCB-1 and DCB-5 has been lowered to an elevation below the abutters' basements as proposed in the last site visit (6/30/2020). Stockpiled construction materials, crushed stone, and soil are present throughout the main open portion of the site but appear to be properly protected from erosion. Water truck on-site to reduce dust migration.
- B. Upon arrival, Aggregate Industries is on-site grading the roadway at approximate STA 11+00 (Waterside Run) working towards the bridge. Grade stakes are present throughout the length of Waterside Run, referencing proposed finish grade elevations and proposed subbase elevations. Structure covers and grates within the roadway have been lowered under the subbase to make the paving effort easier. Aggregate Industries also has a spotter assisting the operator hit proposed grades. To measure the cross slope of the roadway and to ensure the crown of the road is properly built, spotter utilizes a level string stretched perpendicular to the roadway layout. Spotter then measures the

| CONTRACTOR'S FORCE AND EQUIPMENT | | | | | WORK DON | E BY OTHERS | |
|----------------------------------|-----------|-------------------------------|----|----------------------|----------|------------------------|------------------------|
| Sup't | 1 | Bulldozer | | Asphalt Paver | | Dept. or Company | Description of Work |
| Foreman | 1 | Backhoe | | Asphalt Reclaimer | | Aggregate Industries | Fine Grading |
| Laborers | 3 | Loader | 1 | Vib. Roller | 1 | | |
| Drivers | 1 | Rubber Tire Backhoe/Loader | | Static Roller | | | |
| Oper. Engr. | 2 | Skid Steer | | Vib. Walk Comp. | 1 | | |
| Carpenters | | Hoeram | | Compressor | | | |
| Masons | | Excavator | 1 | Jack Hammer | | | |
| Iron Workers | | Grader | 1 | Power Saw | | | |
| Electricians | | Crane | | Conc. Vib. | | | |
| Flagpersons | | Scraper | | Tack Truck | | | |
| Surveyors | | Conc. Mixer | | Man Lift | | | |
| | | Conc. Truck | | Skidder | | OFFICIAL VISITORS TO J | |
| | | Conc. Pump Truck | | Compact Track Loader | | | |
| | | Pickup Truck | 5+ | Water Truck | | | |
| | | Tri-Axle Dump Truck | | Crane Truck | | | |
| | | Trailer Dump Truck | | Lull | | | |
| | | Art. Dump Truck | 1 | BOMAG Remote Comp. | | | |
| Police Details: N/A | | | | | | RESIDENT REPRE | ESENTATIVE FORC |
| Contractor's Hours of W | ork: 7:00 |) A.M. to 3:30 P.M. | | | | Name | Time on-site |
| | | | | | | Bradley M. Picard, EIT | 9:00 A.M. – 11:00 A.M. |

| Project | Date | Report No. |
|--|-----------------|------------|
| Salmon Health and Retirement Community | 7/14/2020 | 42 |
| Location | Project No. | Sheet 2 of |
| Village Street, Medway, MA | 143-21583-15011 | 2 |
| | | - |

FIELD OBSERVATIONS CONTINUED

vertical distance between the string and each gutter line, and then from the string to the centerline of the road. Necessary adjustments (cuts or fills) are made as needed based on these measurements. As proposed subbase grades are met, compaction of the roadway is performed.

C. As fine grading is taking place, Contractor is installing light post foundations and electrical conduit along the shoulders of Waterside Run.

2. SCHEDULE

- A. Contractor to begin binder paving tomorrow (7/15) along Waterside Run. Once paving is complete on that side of the project, the contractor will begin installing the bridge at the Willow Pond Circle wetland crossing.
- B. Contractor to install erosion control blankets along slope adjacent to DCB-1.
- C. TT will maintain communication with contractor and will inspect the site as construction progresses.

3. NEW ACTION ITEMS

A. N/A

4. PREVIOUS OPEN ACTION ITEMS

A. Contractor to generate a plan which details mitigation efforts for high-intensity storms in these two areas of concern as well as addressing other potential areas which may be affected by intense storm events.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. Erosion control blankets

| Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752 | FIELD F | REPORT | |
|--|---------------------|-------------|-------------|
| Project | | Date | Report No. |
| Salmon Health and Retirement Commu | unity (The Willows) | 7/15/2020 | 43 |
| Location | | Project No. | Sheet 1 of |
| Village Street, Medway, MA | | 143-21583-1 | 5011 2 |
| Contractor | | Weather | Temperature |
| Rubicon Builders (General Contractor) | | A.M. CLOUDY | A.M. 75°F |
| Marois Brothers, Inc. (Site Contractor) | | P.M. | P.M. |
| FIELD OBSERVATIONS | | | · |

On Wednesday, July 15, 2020, Bradley M. Picard, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and observe construction progress. The report outlines observations made during the site visit.

1. OBSERVATIONS

A. Site Conditions/Erosion Controls: The western portion of the site along Willow Pond Circle is firm, location downgradient of CB-30 that encountered erosion control breaches have been repaired and hydroseed has been placed in disturbed areas, the Developer and contractor are currently working with the Medway Conservation Commission related to this item. Stockpiled construction materials, crushed stone, and soil are present throughout the main open portion of the site but appear to be properly protected from erosion. Water truck on-site to reduce dust migration.

Upon arrival, Aggregate Industries on-site prepping Waterside Run for binder placement. Contractor is sawcutting entrance of Waterside Run from Village Street to provide clean transition between new asphalt and existing asphalt on Village Street. Police detail present assisting with traffic control. Thompson & Lichtner (T&L) on-site to perform compaction testing prior to binder course placement, no concerns were identified by T&L representative. Trucks carrying bituminous concrete asphalt arrive to the site at approximately 7:50 A.M, paving begins at the west side of the timber bridge to provide a gradual transition (approx. 50 feet in length) from current fill elevations in the center portion of the site to the timber bridge deck elevation. Paving crew then travels northbound towards Village Street. Contractor placed 3 $\frac{1}{4}$ " (loose) of bituminous concrete asphalt to achieve a final compacted depth of 2 $\frac{1}{2}$ ". Binder course temperatures range from 260°F - 300°F out of the paver screed.

B. As paving operations take place, Contractor is prepping location between Waterside Run entrance and eastern abutter for fence installation.

| CO | NTRA | CTOR'S FORCE AN | ND EQ | UIPMENT | | WORK DON | E BY OTHERS |
|--|-----------|-------------------------------|-------|----------------------|---|-------------------------|------------------------|
| Sup't | 1 | Bulldozer | | Asphalt Paver | 1 | Dept. or Company | Description of Work |
| Foreman | 2 | Backhoe | | Asphalt Reclaimer | | Aggregate Industries | Binder Placement |
| Laborers | 5+ | Loader | 1 | Vib. Roller | 3 | Thompson & Lichtner Co. | Compaction Testing |
| Drivers | 5+ | Rubber Tire Backhoe/Loader | | Static Roller | | | |
| Oper. Engr. | 3 | Skid Steer | | Vib. Walk Comp. | 1 | | |
| Carpenters | | Hoeram | | Compressor | | | |
| Masons | | Excavator | 1 | Jack Hammer | | | |
| Iron Workers | | Grader | 1 | Power Saw | 1 | | |
| Electricians | | Crane | | Conc. Vib. | | | |
| Flagpersons | | Scraper | | Tack Truck | | | |
| Surveyors | | Conc. Mixer | | Man Lift | | | |
| | | Conc. Truck | | Skidder | | OFFICIAL VIS | SITORS TO JOB |
| | | Conc. Pump Truck | | Compact Track Loader | | | |
| | | Pickup Truck | 5+ | Water Truck | 1 | | |
| | | Tri-Axle Dump Truck | 5+ | Crane Truck | | | |
| | | Trailer Dump Truck | | Lull | | | |
| | | Art. Dump Truck | 1 | BOMAG Remote Comp. | | | |
| Police Details: 7:00 A.M | to 3:30 l | P.M.; Badge No. 12 | | | | RESIDENT REPRE | ESENTATIVE FORCE |
| Contractor's Hours of Work: 7:00 A.M. to 3:30 P.M. | | | | | | Name | Time on-site |
| | | | | | | Bradley M. Picard, EIT | 7:00 A.M. – 11:00 A.M. |

| Project | Date | Report No. |
|--|-----------------|------------|
| Salmon Health and Retirement Community | 7/15/2020 | 43 |
| Location | Project No. | Sheet 2 of |
| Village Street, Medway, MA | 143-21583-15011 | 2 |
| | | • |

FIELD OBSERVATIONS CONTINUED

C. TT spoke with the contractor regarding stormwater runoff mitigation now that the roadway is paved. The contractor plans to have their surveyor out to the site in the beginning of next week to locate all structures and structures will be raised throughout the week. Bituminous berm will be installed at the end of the week to provide control of runoff from the roadway which should alleviate issues along the eastern side of Waterside Run.

2. SCHEDULE

- A. Contractor to begin construction of bridge at the Willow Pond Circle Wetland Crossing.
- B. Contractor to install erosion control blankets along slope adjacent to DCB-1 as grading is completed.
- C. Contractor to raise structures next week along Waterside Run and install bituminous berm along the roadway by the end of the week.
- D. TT will maintain communication with contractor and will inspect the site as construction progresses.

3. NEW ACTION ITEMS

A. N/A

4. PREVIOUS OPEN ACTION ITEMS

A. Contractor to generate a plan which details mitigation efforts for high-intensity storms in the two areas of concern as well as addressing other potential areas which may be affected by intense storm events.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. Bituminous concrete asphalt for binder course.



July 28, 2020 Medway Planning & Economic Development Board Meeting

Environmental Regulations

- Revised Draft dated 7-27-20
- Email dated 6-22-20 from resident John Lally based on a previous draft. NOTE – I forwarded the 7-27-20 draft to John Lally on 7-27-20.

7.3. ENVIRONMENTAL STANDARDS

- A. **Purpose**. The intent of this section is to provide standards for uses that may generate impacts that are potentially hazardous, harmful to the environment, disturbing, offensive <u>or</u> <u>objectionable</u>. The Zoning Bylaw, § 5.2, Prohibited Uses, expressly prohibits all uses in any zoning district that pose a present or potential hazard to human health, safety, welfare, or the environment through the emission of smoke, particulate matter, noise or vibration, or through fire or explosive hazard, or light and shadow flicker. Furthermore, the Zoning Bylaw, § 5.2, Prohibited Uses, B.14 prohibits any use that produces "disturbing or offensive" noise, vibration, smoke, gas, fumes, odors, dust or other objectionable or hazardous features. For the purposes of this section, "disturbing, offensive or objectionable" impacts are those that a reasonable person with normal sensory sensitivities would find objectionable, as interpreted by the Building Commissioner or designee.
- B. **Enforcement**: The Zoning Bylaw, § 3.1, Enforcement, Violations, and Penalties authorizes the Building Commissioner, or designee, to interpret and enforce the Bylaw. At the discretion of the Building Commissioner, a technical consultant may be engaged by the Town of Medway to investigate and document violations pursuant to this section.
- C. **Definitions** For purposes of this section of the Bylaw, the following terms shall be defined as follows:

Ambient Noise: The sound pressure level at a given location produced by everything else excluding the source of sound being monitored, analyzed, or evaluated. Also referred to as background noise. Ambient noise would include environmental noises from sources such as traffic, aircraft, waves, alarms, animals or noise from existing mechanical devices such as air conditioning, power supplies, or motors that are present prior to introduction of a new intrusive sound source that is being evaluated.

(Hz)Hertz: A unit of frequency of change in the cycle of a sound wave

(dB)Decibel: A unit of measurement of the intensity of sound

(dBA)A weighted decibel: An expression of the relative loudness of sound in the air as perceived by the human ear.

Octave Band: A frequency band where the highest frequency is twice the lowest frequency.

Sensitive Receptor: An occupied residence or facility whose occupants are more susceptible to the adverse effects of noise and odor including but not limited to hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.

Odor Plume: The cloud of odor created when odor molecules are released from their source and are expanded through air movement.

Commented [SA1]:

New section. Let's define Hz, dB, and dBA and octave band so that a regular person may have some idea what this all means!?!?

SAC – I drafted these. They were reviewed by Caroline Wells at Weston and Sampson. She provided the definitions for octave band, odor plume and sensitive receptors. Caroline notes that some of the recognized definitions, when found, are so complicated/scientific that most people would not understand them. I emailed noise consultant Jeff Komrower and he provided the now included definition.

Commented [BSA2]: Where do these definitions come from? We want to use the recognized definitions; otherwise, putting in a definition could have unintended consequences. For example, the DEP Noise Policy defines ambient as "the background A-weighted sound level that is exceeded 90% of the time measured during equipment operating hours." Inserting our own definition could lead to difficulties in interpretation and enforcement.

Commented [SA3R2]:

1

Commented [SA4]: Caroline notes she has not found an official definition for odor plume.

- D. **Standards.** The following standards shall apply to all zoning districts. and shall be determined at the location of use:
 - Smoke, Fly Ash, Dust, Fume, Vapors, Gases, Other Forms of Air Pollution: Medway The Zoning Bylaw, § 5.2, Prohibited Uses, 14, prohibits any use "that produces disturbing or offensive noise, vibration, smoke, gas, fumes, odors, dust or other objectionable or hazardous features." In addition, all activities involving smoke, fly ash, dust, fume, vapors, gases, other forms of air pollution, as defined in <u>CMR 310, § 7</u>, Air Pollution Control Regulations, as amended, which can cause damage to human health, to animals or vegetation, or other forms of property, or which cause any excessive soiling at any point are prohibited.
 - Noise Disturbance: The Building Commissioner may determine that a noise source is subject to investigation, development and implementation of corrective measures, violations, and/or penalties.
 - a. Standards. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully negligently, or through the failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment of a condition of noise pollution. In addition, all activities involving noise must also meet the standards of 310 CMR § 7.10, Air Pollution Control Regulations, as amended, which regulates outdoor noise. Section 7.10 (1) of this regulation prohibits any person owning, leasing, or controlling a source of sound to "cause, suffer, allow, or permit unnecessary emissions from said source of sound that may cause noise."
 - 1) **Continuous Noise.** For the purposes of this bylaw, continuous noise restrictions apply to permanent non-residential uses and home-based businesses where noise is a by-product of business operations (such as from exhaust equipment). Maximum permissible sound pressure levels measured at the property line of the noise source for noise radiated continuously from the noise source shall not exceed the values specified in the table below where Daytime is defined as between the hours of 7:00 a.m. and 9:00 p.m. and Nighttime is defined as between the hours of 9:00 p.m. and 7:00 a.m.

| Octave Band Center Frequency (Hz) | Daytime (dB) 7:00 a.m. – 9:00 p.m. | Nighttime (dB) 9:00 p.m. – 7:00 a.m. |
|--------------------------------------|---------------------------------------|---|
| 63 | 72 | 55 |
| 125 | 60 | 48 |
| 250 | 53 | 42 |
| 500 | 47 | 39 |
| 1000 | 43 | 36 |
| 2000 | 40 | 33 |
| 4000 | 37 | 30 |
| 8000 | 33 | 27 |

Commented [SA5]: Barbara suggests removing this language as being unnecessary.

Commented [SA6]: See added NOTE after a. 3) on next page.

EDITS - 7-27-20

| Overall Level (dBA) 52 42 |
|---------------------------|
|---------------------------|

Compliance with all octave band limits is required. If the Building Commissioner determines that the noise source contributes significantly to ambient noise levels at any distance from the property, sound levels may be measured in those locations beyond the source property line.

- 2) Temporary Noise. For the purposes of this bylaw, non-continuous noise restrictions apply to permanent non-residential installations and home-based businesses where noise is periodically produced. No person shall use or cause the use of any noise-producing equipment or tool (such as for construction, repair, or demolition operations) between the hours of 9:00 p.m. and 7:00 a.m.
- 3) Construction Noise. Work at construction sites and in the operation of construction equipment including start-up and movement of trucks, vehicles, and machines shall commence no earlier than 7:00 a.m. and shall cease no later than 6:00 p.m., Monday through Saturday. No construction shall take place on Sundays, federal holidays or state legal holidays without the advance written approval of the Building Commissioner.

Advisory Note – State regulations authorize municipal police departments, fire departments, and board of health officials to enforce noise standards that are based on certain sections of <u>310</u> Code of Massachusetts Regulations (CMR), § 7, Air Pollution Control Regulations. Such regulations are distinct and separate from the Town's zoning regulations for noise.

b. **Investigation.** The Building Commissioner may determine that the noise source is subject to investigation, development and implementation of corrective measures, violations, and/or penalties. If the Building Commissioner determines that an investigation is warranted, he or she or a designee, may undertake a noise study to determine if a non-compliant noise exists. at the applicant's expense. At the discretion of the Building Commissioner, a technical noise consultant may be engaged by the Town to assist in the investigation including measurements and documentation of violations. Such noise study including sound measurements shall be conducted by a qualified acoustical consultant (INCE board certification or equivalent experience) in accordance with industry best practices. Depending on the particular site and noise generators, the noise study shall include, at a minimum, measurements of:

- Ambient noise (Daytime and Nighttime) and
- Operational noise levels (Daytime and Nighttime) at the facility property line and at Sensitive Receptors located within _____ feet of the facility property line.

Commented [SA7]:

Barbara advises that we cannot require someone to pay for a study that could document they are in violation. This will trigger the need for theh Building Department to have consulting funds to hire such technical experts to conduct a noise study.

Commented [SA8]:

How to pay for the technical noise consultant? This will trigger the need for supplemental funds for the Building Department to use for consulting services to hire technical consultant to undertake an odor investigation.

Commented [SA9]: Or "may"

Commented [SA10]: We need to determine a suitable distance for location of "sensitive receptors"

The Building Commissioner may provide the noise study to the Town's noise consultant for peer review, comment, and recommendations. at the owner or operator's expense pursuant to GL. c. 44, § 53G.

- c. Noise Control Plan. If the Building Commissioner determines that there is a violation, he or she may order the owner or operator to come into compliance. The owner and/or operator of the noise producing use shall provide a noise control, abatement and mitigation plan to the Building Commissioner for review and approval. The plan shall address how the site will become compliant. Compliance shall be achieved through industry best practices and suitable mitigation measures The plan shall be prepared by a qualified acoustical consultant whose qualifications include Institute of Noise Control Engineering (INCE) board certification or equivalent experience. If the Town requires consulting assistance to evaluate the plan, all costs will be borne by the owner or operator pursuant to <u>G.L. c. 44, § 53G.</u>
- d. Corrective Measures Non-residential uses that produce non-compliant noise must install and maintain noise reducing equipment in accordance with the approved noise control plan to meet the requirements of this section. The Building Commisioner may require the provision of reports of ongoing noise compliance.

e. Exemptions

- Noise caused by agricultural, farm-related, or forestry-related activities as defined by <u>G.L., c 128, Agriculture, § 1A</u>, as amended, is exempt from this restriction when such activities follow generally accepted practices (Right to Farm Bylaw, <u>G.L., c 111,</u> <u>§125A</u>).
- Noise caused by construction, demolition, or repair work on public improvements authorized by a governmental body or agency and emergency utility work and repairs, are exempt.

3. Vibration:

- a. **Standards** No vibration which is discernible to the human sense of feeling for three minutes or more in any hour between 7:00 a.m. and 9:00 p.m. or for thirty seconds or more in any one hour from 9:00 p.m. to 7:00 a.m. shall be permitted. No vibration at any time shall produce an acceleration of more than 0.1g or shall result in any combination of amplitude and frequencies beyond the "safe" range on the most recent edition of Table 7, U.S. Bureau of Mines Bulletin NO. 442 (U.S. Department of the Interior).
- b. **Exemptions** Vibrations resulting from construction, demolition, or repair work on public improvements authorized by a governmental body or agency and emergency utility work and repairs that occurs between 7:00 a.m. and 6:00 p.m. are exempt from these restrictions.

Commented [SA11]: Barbara questions whether consultant fees can be paid in this fashion. Normally, 53G is used with consultants for permitting.

Commented [SA12]: Link to the document has been installed.

- **4. Odors**: The Building Commissioner may determine that an odor source detectable at the property line and/or within 2500 feet of the property line is subject to investigation, development and implementation of corrective measures, violations, and/or penalties.
 - a. Standards Disturbing, offensive or objectionable odors as defined in Paragraph A above shall not be produced in any zoning district or impact any space where people live, work or assemble in a way that unreasonably interferes with the comfortable enjoyment of life or the use of property. Failure to meet either the Reasonableness Standard or the Measurement Standard listed below shall constitute a violation of this section.
 - Sensorial Reasonableness Standard The Building Commissioner, or designee, may determine, using only her or her sense of smell, that an odor is one which is disturbing, offensive or objectionable to a reasonable person with normal olfactory sensitivity.
 - 2) Measurement Standards No disturbing, offensive or objectionable odor greater than that caused by the lowest odor detection thresholds as listed in the most recent edition of the <u>American Industrial Hygiene Association (AIHA) Odor Thresholds</u> for Chemicals with Established Occupational Health Standards, Reported Odor <u>Thresholds (EG Table 6.3 in 2nd Edition)</u> shall be permitted. Due to the potential of odorant mixtures causing more intense odors than individual odorant compounds in isolation, nothing in this Bylaw shall be interpreted as allowing for any disturbing, offensive or objectionable odor at or above the cited detection thresholds.

b. Investigation.

1

- 1) Assessment Area The Building Department shall investigate odor complaints from:
 - a) Immediate Impact Zone Any resident, occupant, or owner of property located within 300 feet of the property line of the property with a source generating and emitting the objectionable or offensive odor, as measured from property line to property line.
 - b) Secondary Impact Zone A collection of complaints from five or more residents, occupants, or owners of property located within 2500 feet of the property line of the property with a source generating and emitting the objectionable or offensive odor as measured from property line to property line.
- 2) The Building Commissioner may also investigate possible odor violations upon request of Town officials and staff or by public complaint that does not meet requirements of D. 4. b. 1 herein.
- 3) If the Building Commissioner determines that an investigation is warranted, he or she or a designee, may undertake an odor observation to determine if an objectionable

Commented [SAC13]: Perhaps provide alink. Commented [WC14R13]: Inserted link and downloaded document for reference.

Commented [MJH15]: What is an Odor Observation? Is this what is defined in the next section?

5

odor exists. At the discretion of the Building Commissioner, a technical odor consultant may be engaged by the Town to assist in the investigation including odor observation and documentation of violations. As a component of the investigation, measurements may be done in the field as follows: by using one or more means and methods including but not limited to:

- a) Undiluted odor field observations (i.e. sniffing) or odor sampling shall be performed at a frequency, duration, and locations appropriate for the odor source under investigation and the locations of odor complaints that have been received by the Town including those beyond the source property lines. The purpose is to detect and assess the presence of recognizable odors linkable to a specific source in ambient air.
 - i. Grid method of analysis Odor hours for a geographic area of evaluation to establish an odor hour frequency measurement.
 - Plume method of analysis Measurement of extent of the area where an odor plume originating from a specific odor source can be perceived and recognized under specific meteorological and operating conditions.

The following other forms of measurement may be used as supplemental methods to evaluate persistent problems or higher intensity odors as a way to determine the severity of the situation:

b) Field Olfactometry - A method to quantify odors in ambient air by means of a portable odor detecting and measuring device known as a field olfactometer. A field olfactometer measures odor strength and persistence using a Dilution-to-Threshold (D/T) ratio. The Dilution-to-Threshold ratio is a measure of odor concentration by determining the number of carbon filtered air dilutions needed to make the odorous ambient air non-detectable. The formula for calculating D/T with a field olfactometer is:

 $D/T = \frac{\text{Volume of Carbon Filtered Air}}{\text{Volume of Odorous Air}}$

- c) Chemical Analysis Instrumental methods of characterizing odor involving the identification and quantification of chemical compounds in an odor sample by means of gas chromatography coupled with mass spectrometry, analysis of hydrocarbon molecules, and analysis of single gases such as ammonia and hydrogen sulfide.
- d) Instrumental Odor Monitoring Instruments designed to mimic human olfaction in the detection and characterization of simple or complex odors. Also referred to as electronic (E) - noses.

Commented [SA16]:

How to pay for the technical odor consultant? Barbara advises that our standard practice of compensating consultants is associated with permits and not with enforcement. This will trigger the need for supplemental funds for the Building Department to use for consulting services to hire technical consultant to undertake an odor investigation.

EDITS - 7-27-20

- c. Odor Control Plan If, based on the investigation, the Building Commissioner determines that there is a violation, the owner and/or operator of the odor-producing use shall be required to provide an odor control, abatement and mitigation plan to the Building Commissioner for review and approval. The plan shall address how the site will become compliant. Compliance shall be achieved through industry best practices and suitable mitigation measures. the plan shall be prepared by a certified environmental engineer or certified environmental professional with experience in odor management, abatement and mitigation technologies. If the Town requires consulting assistance to evaluate the plan, all costs will be borne by the owner or operator pursuant to G.L. c. 44, § 53G. The Building Commisioner may require the provision of reports of ongoing odor compliance.
- d. **Corrective Measures** Non-residential uses that produce non-compliant odors shall be required to install and maintain odor-eliminating equipment in accordance with the approved odor control plan to meet the requirements of this section. This may include reports of ongoing odor compliance monitoring.

e. Exemptions

- 1) **Farming.** Odors resulting from farming practices as defined in Medway General Bylaws, Article XXXI 31, § 2, Right to Farm, are exempt from these restrictions when such activities follow generally accepted practices (<u>G.L., c 111, §125A</u>).
- Residential Uses. Periodic odors resulting from residential activities such as but not limited to barbecues, wood stove exhaust, driveway paving, and house painting are exempt from these restrictions.
- 3) Repair and infrequent maintenance activities. Repair and infrequent maintenance activities such as but not limited to those for septic and sewer systems shall be exempt from these restrictions.
- E. Special Permits A non residential use that does not comply with the environmental standards herein shall only be allowed by special permit from ______. Special permits granted hereunder shall be based upon the criteria in Section _____ of this Bylaw. Nothing in this Bylaw prevents the special permit granting authority from attaching additional conditions to its approval of a special permit application.

Commented [SA17]: Barbara notes that this is usually associated with permitting, not enforcement.

Susan Affleck-Childs

| From: | Lally, John - 0666 - MITLL <jlally@ll.mit.edu></jlally@ll.mit.edu> |
|----------|--|
| Sent: | Monday, June 22, 2020 7:38 AM |
| То: | Susan Affleck-Childs |
| Subject: | Env Update Discussions. |

Good morning Susy,

I want to pass along some lingering concerns I have, and some language that attempts to address them. Can you please forward this email to those involved in the discussions so it gets considered during the next Environmental Update Discussions.

As I indicated during the last discussions, I could support and vote for odor updates that retain the existing odor performance level in the current Medway Zoning Bylaw (detection threshold at odor source property lines), augmented with additional compliance locations. Provided, they don't rely on Medway residents to do monitoring, or logging. However, I'm concerned that years from now with a different PEDB member composition a persuasive applicant will appeal to folk's common sense with an argument that goes something like this:

"...Listen, if a facility complies at all source property lines it will always comply at all remote locations. Therefore, the intent of the Bylaw can't possibly mean that compliance is required at remote locations and at all the source property lines too..."

If this argument were to get traction it could open the door to excluding the source property lines from compliance, leaving compliance only at remote locations. As we have experienced with 2 Marc Rd, when compliance moves away from the source property lines, verifying and enforcing compliance becomes exceedingly difficult, and risks exposing Medway residents to nuisances.

In general, the most reliable compliance locations are at the source property lines and so they should always be included in the compliance locations. I know what it's like to have ones quality of life wrecked and would hate for that to happen again or happen to others. To close the door to the extent possible on this sort of argument I'd like folks to consider including the following language in the updates:

- "Compliance at all applicable locations is required."
- "All source property lines in the Town of Medway are always applicable."

In the event folks want to simplify the above by making all locations in the Town of Medway outside of and at the source property lines applicable, the language becomes:

• "Compliance is required at all locations in the Town of Medway outside of and at all source property lines."

In addition to the above I also remind folks to please consider adding language to Section 2 – Definitions of the Medway Zoning Bylaw for defining an objectionable odor as:

"An objectionable odor is defined as any odor at or above the detection threshold."

Please Note: The detection threshold is an industry standard that is equally applicable to sensorial and instrument based methods, so no need to get into a bunch of complicated "if-then-else" definitions.

Have to say folks, coming to the conclusion that the odor updates might be getting a little too complicated. Most (if not all) the complicated odor methods in the literature are generally intended for locations without the protective odor measures Medway has had on the books for over 40 years (assuming the current odor Bylaw was adopted in the 1970's). I really do think the existing odor Bylaw could be brought up to date while maintaining the existing odor protections afforded Medway residents by including the following language & deleting the outdated performance criteria altogether. It's understood the below only applies within the Town of Medway:

- 1.) "An objectionable odor is defined as any odor at or above the detection threshold."
- 2.) "Objectionable odors are prohibited outside of and at all odor source property lines."
 - a. However, include: Maintenance (septic, sewer etc.) & residential use (barbecues, wood stove exhaust, etc.), & agricultural exclusions.
- 3.) "Odor compliance is required outside of and at all odor source property lines."
- 4.) Language that addresses border-line odor issues or a Building Commissioner with an atypical olfactory sense by identifying 2 additional Town Officials as odor assessors (perhaps the Code Compliance Officer & Health Director) that can verify the Building Commissioners findings.
 - a. Didn't realize we had a Code Compliance Officer, perhaps they should be the primary Odor Assessor & others be the additional for verification?
- 5.) Language that authorizes Town Officials to compel violators into compliance, including: Hiring of consultants and performing any and all field and laboratory work related thereto. All expenses to be paid by the violator.

Then, if an objectionable odor exists it's up to the impacted resident(s) to make a complaint. Town officials should have the latitude to use any and all lawful means to resolve the issue.

Finally, I need to be very clear that while I could support additional compliance locations beyond the source property lines, I could not support requiring the sort of citizen involvement described in the Citizen Science section of the reference Tom sent: "How Can odors Be Measured? An Overview of Methods and Their Applications".

All odor complaints should be investigated by Town officials, with basic information supplied by the complainant, e.g. when and where the odor event occurred. Experienced Town Officials should be able to dispense with baseless complaints without much difficulty.

As you folks are aware, I have firsthand experience with Citizen Science and am in a position to know that it is unreasonable to put the burden of monitoring and logging odors upon Medway residents. If a resident does that of their own volition that's one thing, but for the Town to require it would be quite another, and I would not support that.

Respectfully submitted, John Lally, Resident. 35 Coffee Street. Medway, MA 02053

Susan Affleck-Childs

| From: | Lally, John - 0666 - MITLL <jlally@ll.mit.edu></jlally@ll.mit.edu> |
|--------------|--|
| Sent: | Tuesday, July 28, 2020 1:27 PM |
| То: | Susan Affleck-Childs |
| Subject: | RE: Medway - Environmental Regulations |
| Attachments: | EnvUpdates_JL_Annos_OdorOnly_28Jul2020.docx; Odor info from Bruce Straughan.pdf; |
| | ASTM_E0679.pdf; EN1375_2003.pdf |

Hi Susy,

Attached please find my inputs to the continued discussions Re: Environmental Updates.

Had a very hard time converting from pdf to MS-Word, ultimately had to copy just the odor section and annotate that. This is the attached MS-Word doc.

I did a quick sanity check scan of the other sections (i.e. non-odor related) and didn't find anything unexpected.

My updates reference two industry standards (ASTM-E679 & EN 13725) and Bruce's prior odor info to us, all three of those are also attached.

-John

From: Susan Affleck-Childs <sachilds@townofmedway.org> Sent: Monday, July 27, 2020 11:40 AM To: Lally, John - 0666 - MITLL <jlally@ll.mit.edu> Subject: RE: Medway - Environmental Regulations

We still have work to do on this . . review by the Building Commissioner and Health Agent, Town Counsel and Town Manager Mike Boynton and then the associated refinements . . .

Susy

From: Lally, John - 0666 - MITLL <<u>ilally@ll.mit.edu</u>>
Sent: Monday, July 27, 2020 11:38 AM
To: Susan Affleck-Childs <<u>sachilds@townofmedway.org</u>>
Subject: RE: Medway - Environmental Regulations

Thank you Susy,

I'll try to carve out some time to review, will be tough though, work is ridiculously difficult these days.

Do plan on Zooming in for tomorrow's meeting unless something very unexpected happens.

Thanks again, -John

From: Susan Affleck-Childs <<u>sachilds@townofmedway.org</u>> Sent: Monday, July 27, 2020 11:29 AM To: Lally, John - 0666 - MITLL <<u>jlally@ll.mit.edu</u>> Subject: Medway - Environmental Regulations Hi John,

In the evolving story of trying to develop updated environmental regulations, see attached. I have just sent this to PEDB members.

I expect there will be some discussion at Tuesday night's meeting. No specified time. I have also attached the meeting agenda with the ZOOM instructions at the end.

Take care.

Susy

Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053 508-533-3291

Edits offered by John Lally - July 28, 2020

C. Definitions – For purposes of this section of the Bylaw, the following terms shall be defined as follows:

Ambient Noise: The sound pressure level at a given location produced by everything else excluding the source of sound being monitored, analyzed, or evaluated. Also referred to as background noise. Ambient noise would include environmental noises from sources such as traffic, aircraft, waves, alarms, animals or noise from existing mechanical devices such as air conditioning, power supplies, or motors that are present prior to introduction of a new intrusive sound source that is being evaluated.

(Hz)Hertz: A unit of frequency of change in the cycle of a sound wave (dB)Decibel: A unit of

measurement of the intensity of sound

(dBA)A weighted decibel: An expression of the relative loudness of sound in the air as perceived by the human ear.

Octave Band: A frequency band where the highest frequency is twice the lowest frequency.

Sensitive Receptor: An occupied residence or facility whose occupants are more susceptible to the adverse effects of noise and odor including but not limited to hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.

Odor Plume: The cloud of odor created when odor molecules are released from their source and are expanded through air movement.

Objectionable Odor: Any Odor at or above the detection threshold of a person with a normal olfactory sensitivity.

- 4.) Odors: The Building Commissioner may determine that an odor source detectable at the source property line and/or anywhere within 2500 feet outside of the source property line is subject to any or all of: investigation, development and implementation of corrective measures, violations, and/or penalties.
 - a. Standards Disturbing, offensive or objectionable odors as defined in Paragraph A above shall not be produced in any zoning district or impact any space where people live, work or assemble in a way that unreasonably interferes with the comfortable enjoyment of life or the use of property. Failure to meet either the Reasonableness Standard or the Measurement Standard listed below shall constitute a violation of this section.
 - Sensorial Reasonableness Standard The Building Commissioner, or designee, may determine, using only her or her sense of smell, that an odor is one which is disturbing, offensive or objectionable to a reasonable person with normal olfactory sensitivity.
 - 2) Measurement Standards No disturbing, offensive or objectionable odor greater than that caused by the lowest odor detection thresholds as listed in the most recent edition of the American Industrial Hygiene Association (AIHA) Odor Thresholds for Chemicals with Established Occupational Health Standards, Reported Odor Thresholds (e.g. Table 6.3 in 2nd Edition) shall be permitted. Due to the potential of odorant mixtures causing more intense odors than individual odorant compounds in isolation, nothing in this Bylaw shall be interpreted as allowing for any disturbing, offensive or objectionable odor at or above the cited detection thresholds.
 - b. Investigation.

The Building Department shall investigate all odor complaints unless and until proven without merit or resolved to the satisfaction of the Building Commissioner.

- 1) Assessment Area The Building Department shall investigate odor complaints from:
 - a) Immediate Impact Zone Any resident, occupant, or owner of property located within 300 feet (1000 feet) of the property line of the property with a source generating and emitting the objectionable or offensive odor, as measured from property line to property line.
 - b) Secondary Impact Zone A collection of complaints from five or more residents, occupants, or owners of property located within 2500 feet of the property line of the property with a source generating and emitting the objectionable or offensive odor as measured from property line to property line.

Commented [LJ-0-M1]: Propose adding definition of Objectionable odor to relieve Building Commissioner or designee from having to guess what an objectionable odor is. This is the same definition as in the existing MZBL 7.3.D Odor section.

This should make it clear to business concerns that the odor updates are no more restrictive than the existing odor Bylaw.

And make it equally clear to resident concerns that the odor updates will afford no less protections than the existing odor Bylaw.

Commented [LJ-0-M2]: 1.) Found this language confusing especially the use of "and/or". Proposed changes attempt to clarify. 2.) Important to specify the property line is the "source"

property line.

Commented [LJ-0-M3]: See proposed definition of objectionable odor added in C.) Definitions.

Commented [LJ-0-M4]: 1.) Odors can indicate a serious danger is present to human life, health, and property.

 Were the Town to be in receipt of an odor complaint and not investigate, it could result in serious injury or damage to property. Were that to occur, it will likely expose the Town to being the subject of litigation.
 To prevent injury to human life, health, and property, as well as limit the Towns legal exposure should any of these occur, it is highly advisable for all odor complaints to be investigated.

4.) Even Denver investigates all odor complaints. The Qty=5 odor complaints threshold is only used to override the D/T criteria to cause a violation. i.e. 5 odor complaints cause a violation regardless of the D/T findings. Denver had to add this in 2008 to compensate for the inadequacy of the D/T criteria.

a. Please see pg 5 of the attached doc. from Bruce our odor consultant that describes this.

Commented [LJ-0-M5]: 1.)Unlikely I'll find my way to supporting not investigating all odors. However, if support remains for that, please increase the Immediate Impact Zone to 1000 feet. Experience has shown 300 feet is insufficient to include directly impacted residents from odor sources.

2.) Think most if not all of the direct neighbors to 2 Marc Rd are further away than 300ft and they are in mutually exclusive wind directions from the facility, and there's a small number of them, with one (Heidi Sia) particularly impacted more than others, so highly unlikely the qty=5 Secondary Impact Zone would have been triggered.
3.) For the odors from 2 Marc Rd to have gone uninvestigated and unmitigated would continue to detrimentally impact the quality of life of the direct neighbors.

- The Building Commissioner may also investigate possible odor violations upon request of Town officials and staff. or by public complaint that does not meet requirements of D. 4. b. 1 herein.
- 3) If the Building Commissioner determines that an investigation is warranted, he or she or a designee, may undertake an odor observation to determine if an objectionable odor exists. At the discretion of the Building Commissioner, a technical odor consultant or odor assessor trained in the practices of ASTM-E679 and meeting the selection criteria of EN 13725 may be engaged by the Town to assist in the investigation including odor observation and documentation of violations. As a component of the investigation, measurements may be done in the field as follows: by using one or more means and methods including but not limited to:
 - a) Undiluted odor field observations (i.e. sniffing) or odor sampling shall be performed at a frequency, duration, and locations appropriate for the odor source under investigation and the locations of odor complaints that have been received by the Town including those beyond the source property lines. The purpose is to detect and assess the presence of recognizable odors linkable to a specific source in ambient air.
 - i. Grid method of analysis Odor hours for a geographic area of evaluation to establish an odor hour frequency measurement.
 - ii. Plume method of analysis Measurement of extent of the area where an odor plume originating from a specific odor source can be perceived and recognized under specific meteorological and operating conditions.

The following other forms of measurement may be used as supplemental methods to evaluate persistent problems or higher intensity odors as a way to determine the severity of the situation:

b) Field Olfactometry - A method to quantify odors in ambient air by means of a portable odor detecting and measuring device known as a field olfactometer. A field olfactometer measures odor strength and persistence using a Dilution-to- Threshold (D/T) ratio. The Dilution-to-Threshold ratio is a measure of odor concentration by determining the number of carbon filtered air dilutions needed to make the odorous ambient air non-detectable. The formula for calculating D/T with a field olfactometer is:

D/T = (Volume of Carbon Filtered Air)/ (Volume of Odorous Air)

Due to the inherent inaccuracies of diluted odor measurements, D/T may only be used to assess the severity of the situation. All determinations of whether or not an odor is objectionable shall be done undiluted.

- c) Chemical Analysis Instrumental methods of characterizing odor involving the identification and quantification of chemical compounds in an odor sample by means of gas chromatography coupled with mass spectrometry, analysis of hydrocarbon molecules, and analysis of single gases such as ammonia and hydrogen sulfide.
- Instrumental Odor Monitoring Instruments designed to mimic human olfaction in the detection and characterization of simple or complex odors. Also referred to as electronic (E) - noses.

e) Any other method determined to be appropriate by the Building Commissioner.

- c. Odor Control Plan If, based on the investigation, the Building Commissioner determines that there is a violation, the owner and/or operator of the odor-producing use shall be required to provide an odor control, abatement and mitigation plan to the Building Commissioner for review and approval. The plan shall address how the site will become compliant. Compliance shall be achieved through industry best practices and suitable mitigation measures. the plan shall be prepared by a certified environmental engineer or certified environmental professional with experience in odor management, abatement and mitigation technologies. If the Town requires consulting assistance to evaluate the plan, all costs will be borne by the owner or operator pursuant to G.L.e.44.53G. The Building Commissioner may require the provision of reports of ongoing odor compliance.
- d. Corrective Measures Non-residential uses that produce non-compliant odors shall be required to install and maintain odor-eliminating equipment in accordance with the approved odor control plan to meet the requirements of this section. This may include reports of ongoing odor compliance monitoring.
- e. Exemptions
 - Farming. Odors resulting from farming practices as defined in Medway General Bylaws, Article XXXI 31, § 2, Right to Farm, are exempt from these restrictions when such activities follow generally accepted practices (G.L., c 111, §125A).

Commented [LJ-0-M6]: Propose defining the qualifications of odor assessors that can be used. These are the industry standard method for weeding out atypically sensitive or atypically insensitive odor assessors. Attached are ASTM-E679 & EN 13725

Commented [LJ-0-M7]: I'm ok with including D/T as a measurement option, provided it is unambiguously clear it can only be used as a method of assessing the severity of the situation, and not for determining if an objectionable odor is present.

Commented [LJ-0-M8]: 1.) There does not yet exist an instrument more accurate, sensitive, and reliable than the human nose for making odor measurements.

2.) The state-of-the-art in odor measurement is constantly evolving and may yet reach the point where instruments alone are effective in odor measurements. E.g. like with noise.

 Propose we not hamstring our Building Commissioner by limiting the types of methods that may be used to investigate odors.

- Residential Uses. Periodic odors resulting from residential activities such as but not limited to barbecues, wood stove exhaust, driveway paving, and house painting are exempt from these restrictions.
 Repair and infrequent maintenance activities. Repair and infrequent maintenance activities such as but not limited to those for septic and sewer systems shall be exempt from these restrictions.

March 4, 2020

Susan Affleck - Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053 508-533-3291 Email: <u>sachilds@townofmedway.org</u>

Re: Odor Standards

Dear Ms. Affleck - Childs:

This letter documents the findings from my review of the Environmental Standards section of the Medway Zoning Bylaw (Section C, 4 Odors) and general recommendations for odor standards based on my research and experience, and my conversations with City of Denver building officials who work in odor standards enforcement.

Discussion:

The Nasal Ranger olfactometer has been used for years in Denver and other cities as a tool in determining odor levels from facilities in various odor producing industries. Denver uses the 7:1 dilution threshold level, which is one of the six settings on a Nasal Ranger. This is slightly more stringent than the 8:1 dilution threshold level used by the State of Colorado. The experience in Denver has been that the Nasal Ranger and 7:1 standard has worked well when applied to certain industrial facilities such as pet food factories and coffee roasters. However, it has not worked well when applied to facilities producing cannabis odors, because it has proven to be difficult to get viable readings with this method.

The chemicals that produce the "skunky" odor from cannabis plants occur in such tiny quantities that they can barely be detected by the most advanced scientific instruments. But the human nose is very sensitive to these chemicals – even at very minute concentration levels. For this reason, I cannot at this time recommend any certain dilution threshold level that would be appropriate for determining that a cannabis facility is in compliance with an odor standard. A cannabis facility could be in compliance with the 7:1 standard and still omit odors at levels objectionable to the community. However, the 7:1 standard can still be used to identify cannabis facilities that are blatant odor offenders that need to be investigated by city inspectors.

In addition to the 7:1 standard to trigger inspections, I recommend an additional trigger such as a certain number of odor complaints received by the city over a certain time. In Denver, the complaint threshold is five or more legitimate complaints from individuals representing separate households or businesses within a 30-day period. If a facility is found to be in violation of either the dilution threshold or the complaint threshold, then inspections are done to determine if the facility is in compliance with their odor control plan. Since odor is detected by human noses, I recommend that inspections are done together by two individuals who are trained in this to give more confidence to the findings.

Straughan Forensic, LLC

Forensic Mechanical Engineering

Finally, experience has shown it is very important to maintain engagement between the local government, businesses, and the community. An open channel of communication should be kept open to help ensure the best outcome for all stakeholders.

Respectfully,

Bruce Straugh

Bruce Straughan, PE Straughan Forensic, LLC

Standards and Measurement: We engaged in a discussion on how to determine how much odor control is enough, and how to establish a balance that would allow a business some certainty that they would not repeatedly have to redesign and re-install odor control measures, while at the same time allowing for some ability to require additional control if the installed system is problematic and does not effectively control odors. The group recognized that odor control is an emerging issue, without a great deal of available research and standards. In addition, the technical research and literature is limited regarding marijuana-generated odors, the chemical compounds making up these odors, and the levels as which these chemicals would need to be controlled in order to prevent these odors. The group also recognized the importance of putting odor control features in place in a timely manner, in order to address community impacts. As discussed at our last meeting, there are three general frameworks within which to establish a standard of performance for odor control. These include performance standards, prescription of specific technologies and design, or establishing a standard of professionalism required for development of the OCP.

- a. Performance standards: In general, for industries where odors are of concern, there is not scientific consensus on what compounds should be measured, what concentration levels are of concern, and what level of control is reasonably achievable. In addition, these compounds, concentrations, and control measures will be different depending on the industry type and manufacturing process. While we would hope to eventually be at a place where performance can clearly be measured, additional research and investigation is needed to reach consensus on how best to establish performance-based standards. At the same time, there is clear concern in the affected communities that odor control measures need to be put in place, before this research and investigation can be completed.
- b. Prescriptive design specifications: Another alternative would be to establish prescriptive requirements for technical and design factors for odor control. For example, it may be possible to identify specific volumes of activated carbon needed per volume of exhaust air leaving a facility. However, there can be

a large number of factors to be considered, such as the types of carbon, the "tightness" of the building or rooms under control, the amount of odor generation expected from various stages of plant growth, etc. We have concern that development of these prescriptive requirements could be time-consuming as well, require a high level of expertise and support for the process, and may not account for the flexibility needed for variability between different businesses or the need for businesses to make changes through time as their operations grow or change.

c. Professional standard: Often, professions have a standard of performance that requires that they undertake work only when qualified by education and experience in the specific technical field involved, and that they are competent in that subject matter. These professions require licensure which is contingent upon demonstration of this education, experience, and competence, which licensure could be put in jeopardy should the professional approve a design or operation that does not meet the competency requirements. While this approach does not provide explicit measures of performance for each OCP, it can be adopted immediately and establish an expectation for professional expertise. The group discussed these options, and generally agreed upon a phased approach. For the initial rule-making, a professional standard requiring use of a known workable technology (activated carbon for the marijuana)

cultivation industry) and preparation of the OCP by a licensed professional engineer or certified industrial hygienist would be required. Subsequent to the rule-making, the parties would work together to move forward research and data gathering that would move toward development of performance standards or prescriptive design specifications that would be adopted in a subsequent rule-making. This would allow for more innovation, evaluation of alternate technologies, and mechanisms to demonstrate performance. Some other states are beginning to develop testing protocols to look at specific pollutants and pollutant removal efficiencies. For individual businesses that choose not to use the known workable technology, additional review of the OCP and system performance would be required.

Regulation

Denver's Department of Environmental Health (DEH) is responsible for regulating nuisance odors as defined under Denver Revised Municipal Code, Chapter 4 – Air Pollution Control, Section 4-10. Denver's ordinance specifies odors as a nuisance issue, as opposed to a health issue, to address reasonable and comfortable use and enjoyment of property.

The city ordinance for odor intensity is based upon the Colorado State law, and includes an odor definition, specific occurrences that result in a violation, affirmative defenses to a violation, and exemptions. Colorado State's Odor Control Regulation sets standards for allowable odor contaminants for different land-use areas in the state and outlines control measures that can be taken to bring violators into compliance.

Investigating Odor Complaints

Denver investigates all odor complaints received on questionable odors. This includes identifying the source, independently verifying the odor, responding to the complainant and the source, and issuing a citation if necessary.

When an odor complaint is made, an inspector contacts the complainant to gather specific information on the odor and source. As part of the investigation, the inspector may attempt to identify and determine the odor intensity using a portable odor-measuring device, called the Nasal Ranger. The Nasal Ranger provides a scientific method of quantifying odor strength in terms of 'dilution to threshold' (D/T) ratios. To make a D/T measurement, carbonfiltered air is mixed with specific volumes of odorous ambient air. The D/T ratio is a measure of the number of dilutions needed to take the odorous air to a threshold that can be detected by the odor evaluator.

While all odor complaints are investigated, administrative citations can only be issued under the following circumstances:

- If the odorous contaminants are detected and meet the threshold of the 7/1 dilution standard.
- When DEH receives five or more complaints from individual residents representing separate households within a 12-hour period and the complaints are related to a single odor source.

In 2008, the City's ordinance was modified to include the added provision of requiring five complaints from separate households to offer an additional mechanism for dealing with odors that are a significant source of complaints, but do not exceed the intensity threshold.

If multiple complaints have been filed on a single source, but the intensity threshold (D/T or complaint standard) is not met, the inspector will contact the owner/operator of the source to discuss odor mitigation measures. If the D/T or five complaints within 12 hours threshold is met and confirmed, the owner/operator will receive an administrative citation. The penalty assessed for an odor citation is based on a range of criteria, including actual or threatened impacts to public health and the environment, history of previous violations, willingness of cooperation, and other factors. The minimum penalty is \$150, maximum is \$2,000.

Marijuana Odors

Odor regulation is a complex issue. The following information is related to marijuana-specific odor complaints:

• Odor Regulation Includes All Sources - While the city regulates odors based on its own ordinance, this ordinance is based on the State's odor ordinance to regulate industrial sources such as manufacturing. Denver's ordinance is actually more stringent than state standards. To ensure a balanced approach to enforcement, all odors, including marijuana, are regulated according to the same standards.

- Grow vs. Retail (smoking) Complaints Overall, the majority of the city's odor complaints arise from various manufacturing industries. Most marijuana-related complaints arise from grow facilities rather than a dispensary, since the odor from grow facilities are more pungent and tends to linger. Under the city's existing odor ordinance, it is unlikely that most non-industrial industries, including grow facilities, will exceed the 7/1 dilution standard.
- Identifying A Single Source Where Multiple Exist The ordinance requires a single source to be clearly
 identified to violate the ordinance (dilution threshold or through complaints). Given that there are often
 multiple industries (including marijuana grow operations) in one area, this can be challenging as odors are
 transient and not limited to normal working hours, made up of several different chemical combinations, and
 at times located outside Denver's borders.

Next Steps

With the legalization of recreational marijuana on January 1, DEH expects to see an increase in marijuana-related odor complaints. Denver's existing odor regulations are limited in the ability to adequately address both existing sources and this new source of odor complaints.

To address the current and upcoming challenges, DEH has implemented the following next steps:

January 2014

- Hire a marijuana grow facility inspector to focus on managing all environmental aspects of marijuana, including odor education and mitigation.
- Develop marijuana facility recommended Best Practices Guide to include regulated facility and community outreach goals.

April 2014

• Complete a comprehensive research study on community odor issues.

June 2014

• Develop recommendations on a path forward to address odor issues, using information from research study.



Standard Practice for Determination of Odor and Taste Thresholds By a Forced-Choice Ascending Concentration Series Method of Limits¹

This standard is issued under the fixed designation E679; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The obtaining of odor and taste thresholds requires the sensory responses of a selected group of individuals called panelists. These thresholds may be determined in order to note the effect of various added substances on the odor and taste of a medium. They may also be determined in order to characterize and compare the odor or taste sensitivity of individuals or groups.

It is recognized that precise threshold values for a given substance do not exist in the same sense that values of vapor pressure exist. The ability to detect a substance by odor or taste is influenced by physiological factors and criteria used in producing a response by the panelist. The parameters of sample presentation introduce further variations. Thus, the flowrate of a gaseous, odorous sample has an influence on the detectability of an odor. However, a concentration range exists below which the odor or taste of a substance will not be detectable under any practical circumstances, and above which individuals with a normal sense of smell or taste would readily detect the presence of the substance.

The threshold determined by this practice is not the conventional group threshold (the stimulus level detectable with a probability of 0.5 by 50 % of the population) as obtained by Practice E1432, but rather a best estimate not far therefrom. The bias of the estimate depends on the concentration scale steps chosen and on the degree to which each panelist's threshold is centered within the range of concentrations he or she receives. The user also needs to keep in mind the very large degree of random error associated with estimating the probability of detection from only 50 to 100 3-AFC presentations.

1. Scope

1.1 This practice describes a rapid test for determining sensory thresholds of any substance in any medium.

1.2 It prescribes an overall design of sample preparation and a procedure for calculating the results.

1.3 The threshold may be characterized as being either (a) only *detection* (awareness) that a very small amount of added substance is present but not necessarily recognizable, or (b) *recognition* of the nature of the added substance.

1.4 The medium may be a gas, such as air, a liquid, such as water or some beverage, or a solid form of matter. The medium may be odorless or tasteless, or may exhibit a characteristic odor or taste per se.

1.5 This practice describes the use of a multiple forcedchoice sample presentation method in an ascending concentration series, similar to the method of limits. 1.6 Physical methods of sample presentation for threshold determination are not a part of this practice, and will depend on the physical state, size, shape, availability, and other properties of the samples.

1.7 It is recognized that the degree of training received by a panel with a particular substance may have a profound influence on the threshold obtained with that substance (1).²

1.8 Thresholds determined by using one physical method of presentation are not necessarily equivalent to values obtained by another method.

2. Referenced Documents

- 2.1 ASTM Standards:³
- D1292 Test Method for Odor in Water

E544 Practices for Referencing Suprathreshold Odor Intensity

E1432 Practice for Defining and Calculating Individual and

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¹ This practice is under the jurisdiction of ASTM Committee E18 on Sensory Evaluation and is the direct responsibility of Subcommittee E18.04 on Fundamentals of Sensory.

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² The boldface numbers in parentheses refer to the list of references at the end of this practice.

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

Group Sensory Thresholds from Forced-Choice Data Sets of Intermediate Size

- 2.2 CEN Standards:⁴
- EN 13725 Air Quality—Determination of Odour Concentration Using Dynamic Dilution Olfactometry

2.3 ISO Standards:⁵

ISO 13301 Sensory Analysis—Methodology—General Guidance for Measuring Odour, Flavour and Taste Detection Thresholds by a Three Alternative Forced Choice (3–AFC) Procedure

3. Terminology

3.1 Definitions:

3.1.1 *sample*—a material in any form that may or may not exhibit an odor or taste, depending on the amount of odorous or sapid components that it may contain.

3.1.2 *medium*—any material used to dissolve, disperse, or sorb odorous or sapid material whose threshold is to be measured.

3.1.3 *blank sample*—a quantity of the medium containing no added odorous or sapid material.

3.1.4 *test sample*—the medium to which an odorous or sapid material has been added at a known concentration.

3.1.5 *detection threshold*—the lowest concentration of a substance in a medium relating to the lowest physical intensity at which a stimulus is *detected* as determined by the best-estimate criterion.

3.1.6 *recognition threshold*—the lowest concentration of a substance in a medium relating to the lowest physical intensity at which a stimulus is *recognized* as determined by the best-estimate criterion.

3.1.7 *best-estimate criterion*—an interpolated concentration value, but not necessarily the concentration value that was actually presented. In this practice it is the geometric mean of the last missed concentration and the next (adjacent) higher concentration.

3.1.8 *panelists*—individuals whose odor or taste thresholds are being evaluated, or who are utilized to determine the odor or taste threshold of the substance of interest.

3.1.9 ascending scale of concentrations—a series of increasing concentrations of an odorous or sapid substance in a chosen medium.

3.1.10 *scale steps*—discrete concentration levels of a substance in a medium, with concentrations increased by the same factor per step throughout the scale.

3.1.11 3-alternative forced choice (3-AFC) presentation—a set consisting of one test sample and two blank samples (as applied to this practice).

3.1.12 geometric mean—the nth root of the product of terms. In this method, the terms are concentration values.

4. Summary of Practice

4.1 A series of test samples is prepared by dispersing the substance whose threshold is to be determined in the medium

of interest. This concentration scale should increase in geometric increments so that any two adjacent concentration steps are separated by a constant factor. At each concentration step, two blank samples consisting of the medium only are made available to the panelist. The blank and test samples are encoded so that there is no visual, audible, tactile, or thermal difference between the samples other than code designators (2).

4.2 The panelist starts at the lowest concentration step, which should be two or three concentration steps below the estimated threshold. Each sample within the set of three is compared with the other two.

4.3 The panelist indicates which of the three samples is different from the other two. A choice must be made, even if no difference is noted, so that all data can be utilized.

4.4 Individual best-estimate values of threshold are derived from the pattern of correct/incorrect responses produced separately by each panelist. Group thresholds are derived by geometrical averaging of the individual best-estimate thresholds.

5. Significance and Use

5.1 Sensory thresholds are used to determine the potential of substances at low concentrations to impart odor, taste, skinfeel, etc. to some form of matter.

5.2 Thresholds are used, for example, in setting limits for air pollution, in noise abatement, in water treatment, and in food systems.

5.3 Thresholds are used to characterize and compare the sensitivity of individual or groups to given stimuli, for example, in medicine, in ethnic studies, and in the study of animal species.

6. Preparation of Concentration Scale

6.1 The concentration levels of the test substance in a medium should begin well below the level at which the most sensitive panelist is able to detect or recognize the added substance, and end at (or above) the concentration at which all panelists give a correct response.

6.2 The increase in concentration of the test substance per scale step should be by a constant factor. It is desirable to obtain a scale step factor that will allow the correct responses of a group of nine panelists to distribute over three to four concentration steps (see Appendix X1-Appendix X3). This will allow more accuracy in determining the group threshold value based on the geometric mean of the individual panelists.

6.3 Good judgment is required by the person in charge in order to determine the appropriate scale step range for a particular substance. This might involve the preparation of an approximate threshold concentration of the odorous or sapid substance in the medium of choice. The concentration of the substance may be increased two to three times for odorants or 1.5 to 2.5 times for sapid substances depending on how the perceived intensity of odor or taste varies with the concentration of the substance providing the sensory response. For example, if x represents an approximate odor threshold concentration, then a series of concentration steps would appear as follows if a step factor of "3" were used:

... x/27, x/9, x/3, x, 3x, 9x, 27x...

⁴ Available from British Standards Institution (BSI), 389 Chiswick High Rd., London W4 4AL, U.K., http://www.bsigroup.com.

⁵ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

6.4 In actual practice, the various concentrations are obtained by starting at the highest concentration and diluting three times per step, thus providing a series of dilution factors, $"V_i"$ being the initial volume:

\dots 729 V_{i} , 243 V_{i} , 81 V_{i} , 27 V_{i} , 9 V_{i} , 3 V_{i} , V_{i} , ...

6.5 At each selected concentration or dilution, a 3-AFC sample set consisting of one test and two blank samples is presented to panelists in indistinguishable fashion (3). It is desirable to have all samples prepared and ready for judging before the evaluation session begins. (Reference (2) contains sound practices for coding the samples, rotating the positions of these test and blank samples as the test proceeds, etc.)

6.6 If the samples are arranged in a left-center-right, or an above-center-below order, care must be taken that the test sample is presented in one third of the presentations in the left (top) position, one third in the center position, and one third in the right (bottom) position to eliminate positional bias.

6.7 If only one sample at a time is available, the test and blank samples may be presented one after another in units of three presentations, with the test sample being randomized to be the first, the second, and the third, and requesting the response after all three samples in the set have been presented. Better results, however, are obtained if the test and the two blank samples are available for a direct comparison, so that the panelist may sniff or taste back and forth at ease until a decision is reached.

7. Judgment Procedure

7.1 The panelist begins judging with that set which contains the test sample with the lowest concentration (highest dilution) of the odorous or sapid substance, takes the time needed to make a selection, and proceeds systematically toward the higher concentrations.

7.2 Within each set, the panelist indicates that sample which is different from the two others (detection threshold) or which exhibits a recognizable odor or taste of the substance (recognition threshold). If the panelist cannot readily discriminate, a guess must be made so that all data may be utilized.

7.3 The judgments are completed when the panelist either (1) completes the evaluation of all sets of the scale, or (2) reaches a set wherein the test sample is correctly identified, then continues to choose correctly in higher concentration test sample sets.

8. Data Evaluation

8.1 The series of each panelist's judgments may be expressed by writing a sequence containing (0) for an incorrect choice or (+) for a correct choice arranged in the order of judgments of ascending concentrations of the added substance.

8.2 If the concentration range has been correctly selected, all panelists should judge correctly within the range of concentration steps provided. Thus, the representation of the panelists' judgments as in 8.1 should terminate with two or more consecutive plusses (+).

8.3 Because there is a finite probability that a correct answer will occur by chance alone, it is important that a panelist continues to take the test until there is no doubt by that person of the correctness of the choice. 8.4 The best-estimate threshold concentration for the panelist is then the geometric mean of that concentration at which the last miss (0) occurred and the next higher concentration designated by a (+).

8.5 The panel threshold is the geometric mean of the best-estimate thresholds of the individual panelists. If a more accurate threshold value of an individual panelist is desired, it may be obtained by calculating the geometric mean of the best-estimate threshold of all series administered to that person.

9. Report

9.1 Successful completion of the foregoing procedure provides either the detection or recognition threshold of the substance in the medium of interest in accordance with this practice.

9.2 The threshold value is in concentration or dilution units appropriate for the substance tested (4).

9.3 For enhanced understanding of the threshold results, the following information is recommended:

Threshold of: Procedure: ASTM Practice E679 (Rapid Method) Presentation: Number of scale steps: Dilution factor per step: Temperature of samples: Panelist selection: Number of times test given: Type of threshold (detection or recognition): Best-estimate threshold: Individual: Panel:

9.4 Refer to Appendix X1-Appendix X3 for examples of the calculations and reporting requirements.

10. Precision and Bias

10.1 Because sensory threshold values are functions of sample presentation variables and of individual sensitivities, interlaboratory tests cannot be interpreted statistically in the usual way, and a general statement regarding precision and bias of thresholds obtained by this practice cannot be made. However, certain comparisons made under particular circumstances are of interest and are detailed below.

10.2 When 4 panels of 23 to 35 members evaluated butanol in air (5), the ratio of the highest to the lowest panel threshold was 2.7 to 1; when the same panel repeated the determination on 4 days, the ratio was 2.4 to 1. For 10 panels of 9 members evaluating hexylamine in air, the ratio was 2.1 to 1.

10.3 When 26 purified compounds were tested for threshold by addition to similar beers by 20 brewery laboratories (each compound was tested by 2 to 8 laboratories), the ratios of the highest to the lowest panel threshold varied from less than 2.0 to 1, to 7.0 to 1 or more (6). The lowest variability was found with simple compounds of high threshold (sugar, salt, ethanol), and the highest with complex compounds of low threshold (eugenol, hop oil, geosmin).

10.4 When 14 laboratories determined the threshold of purified hydrogen sulfide in odorless air (7), the ratio of the highest to the lowest laboratory threshold was 20 to 1. Interlaboratory tests with dibutylamine, isoamyl alcohol, methyl acrylate and a spray thinner for automobile paint gave

somewhat lower ratios. Although the methods used vary somewhat from this practice, the results are comparable.

10.5 A discussion of the likely bias of results by this practice compared to a true threshold can be found in references (5), (8) and (9).

11. Keywords

11.1 air pollution; ascending method of limits; odor; panel; sensory evaluation; taste; threshold; water pollution

APPENDIXES

(Nonmandatory Information)

X1. EXAMPLE NO. 1—DIFFERENCE THRESHOLD OF ETHYL ACETATE ADDED TO BEER

X1.1 The difference threshold of purified ethyl acetate added to a bland reference beer was to be determined. The reference beer contained 20 mg/L endogenous ethyl acetate.

X1.2 The purest commercial ethyl acetate obtainable was further purified by passage through columns of selected absorbants. Ten concentrations of the purified compound were prepared by addition to the reference beer. Sixteen panelists experienced in threshold testing each received five or six sets of 3-AFC presentations spaced by a factor of 2.0. The sets had been chosen by preliminary testing aimed at finding an optimal range of concentrations, such that the panelists would be able to easily detect the highest concentration, but unable to detect the lowest concentration. The preliminary testing also served to familiarize the panelists with the flavor of added ethyl acetate. Each panelist performed the test a minimum of two times after their optimal range had been established.

X1.3 The results listed in Table X1.1 were obtained.

X1.4 Details of calculation are as follows:

X1.4.1 For panelist 01, the best-estimate threshold is: $\sqrt{60 \times 120} = 84.8 \text{ mg/L}$ added ethyl acetate. For panelist 02, the best estimate threshold is $\sqrt{20 \times 40} = 28.3 \text{ mg/L}$. All other values follow these same calculations.

X1.4.2 In Table X1.1, different panelists received different concentration sets. Not all concentrations were spaced at a constant factor of 2.0. The best estimate thresholds were calculated per 8.4 above using the exact concentrations received by each panelist.

X1.5 *Report*—The report shall include the following information:

Difference threshold: Purified ethyl acetate added to a bland beer containing 20 mg/L endogenous ethyl acetate

Procedure: Practice E679

Presentation: three-glass 3-AFC presentations (two identical controls and one glass containing the added substance). Weakest concentrations were presented first

Number of scale steps: ten available, five or six used for each panelist

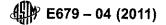
Dilution factor per step: two

| Panelist | | | Best-Estimate Threshold (BET) | | | | | | | | | |
|-------------|-------------------------------|-------|----------------------------------|---------|-----|----|-------|-------|-------|-------|--|-------------------------------|
| | 10 | 15 | 20 | 30 | 40 | 60 | 80 | 120 | 160 | 240 | Value | log ₁₀ of value |
| 01 | | 0 | | + | | 0 | | + | | + | 84.8 | 1.93 |
| 02 | + | | 0 | | + | | + | | + | | 28.3 | 1.45 |
| 04 | 0 | | 0 | | · + | | + | • • • | + | | 28.3 | 1.45 |
| 07 | + | | . + | • • • • | .0 | | + | | + | ••• | 56.5 | 1.75 |
| 09 | + | | + | | + | | + . | | + | | 7.1 | 0.85 |
| 10 | | 0 | | + | | 0 | | + | | + | 84.8 | 1.93 |
| 11 | | ÷ | | Ó | | 0 | | + | • • • | + | 84.8 | 1.93 |
| 12 | • • • | | | 0 | ••• | + | | | | • • • | 42.4 | 1.63 |
| 13 | + | | 0 | | 0 | | + | | + | | 56.5 | 1.75 |
| 17 | | 0 | | + | | + | | + | | + | 21.2 | 1.33 |
| 18 | 0 | • • • | 0 | + | | 0 | | + | | ÷ | 84.8 | 1.93 |
| 19 | + | | 0 | | 0 | | 0 | | + | | 113 | 2.05 |
| 20 | 0 | | + | | + | , | + | | + | | 14.1 | 1.15 |
| 23 | 0 | | + | | 0 | | + | | + | | 56.5 | 1.75 |
| 24 | | + | | 0 | | + | | + | | + | 42.4 | 1.62 |
| 27 | • • • | 0 | | + | | 0 | • • • | 0 | ••• | + | 169.7 | 2.23 |
| Group BET = | geometric me ndard deviati | | yl acetate | | | | | ·. | | | $\begin{array}{l} \Sigma \log_{10} \rightarrow \\ 46.8 \leftarrow \end{array}$ | 26.73 1.67 0.36 |

TABLE X1.1 Example of Difference Threshold for an Added Substance

⁴ "0" indicates that the panelist selected the wrong sample of the set of three. "+" indicates that the panelist selected the correct sample.

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Temperature: samples at 15°C, room at 23°C Panelist selection: brewery panelists experienced in threshold determinations by the Practice E679 method Number of panelists: 16 - each panelist continued testing until convinced of the correctness of his or her choice: "added compound present" or "I am guessing"

Type of threshold: difference Best-estimate threshold:

BET = 46.8 mg/L $\log_{10} BET = 1.67$ Log standard deviation = 0.36

X2. EXAMPLE NO. 2-ODOR THRESHOLD DETERMINATION

X2.1 The odor threshold of an odorous air sample was to be determined.

X2.2 Six different concentrations of the odorous sample in air were prepared. Each of these was presented in conjunction with two samples of nonodorous air. The concentrations were increased by a factor of three per concentration step. Nine randomly selected panelists participated. Each proceeded from the lower to higher concentrations. At each concentration level, panelists compared the three samples—two blanks and one diluted odorous sample—and indicated which sample was different from the other two.

X2.3 The results listed in Table X2.1 were obtained.

X2.4 Details of calculation are as follows:

X2.4.1 For Panelist 1, the best-estimate threshold is $\sqrt{135 \times 45} = 78$, or at a dilution by a factor of 78 (one volume of the odorous air sample diluted with nonodorous air to occupy 78 volumes in total). For Panelist 2, the threshold is at $\sqrt{1215 \times 405} = 701$.

TABLE X2.1 Example of Odor Threshold

Note 1—This example has been selected to represent both extremes. Panelist 4 missed even at the highest concentration. Panelist 6 was correct even at the lowest concentration and continued to be correct at all subsequent higher concentrations.

| | | Judgments ^A | | | | | | | | | | | |
|-----------|--|------------------------|----------|--------|----|----------------------|--------------------------------|-------|--|--|--|--|--|
| Panelists | | Di | lution F | actors | | Best-Es Threshold | | | | | | | |
| | (concentrations increase \rightarrow) | | | | | Malua | log10 of | | | | | | |
| | 3645 | 1215 | 405 | 135 | 45 | 15 | Value | Value | | | | | |
| 1 | 0 | + | + | 0 | + | + | 78 | 1.89 | | | | | |
| 2 | + | 0 | + | + | + | + | 701 | 2.85 | | | | | |
| 3 | 0 | + | 0 | 0 | + | + | 78 | 1.89 | | | | | |
| 4 | 0 | 0 | 0 | 0 | + | 0 | 9 | 0.94 | | | | | |
| 5 | + | 0 | 0 | + | + | + | 234 | 2.37 | | | | | |
| 6 | ÷ | + | + | + | + | + | 6313 | 3.80 | | | | | |
| 7 | 0 | + | ÷ | 0 | + | + | 78 | 1.89 | | | | | |
| 8 | + | 0 | 0 | + | + | + | 234 | 2.37 | | | | | |
| 9 | + | 0 | + | 4 | + | + | 70 | 2.85 | | | | | |
| Group BET | r geome | tric mear | | | | | $\Sigma \log_{10} \rightarrow$ | 20.85 | | | | | |
| _ | | | | | | | 209 ← | 2.32 | | | | | |
| Star | ndard de | viation | | | | | | 0.81 | | | | | |

^A "0" indicates that the panelist selected the wrong sample of the set of three. "+" indicates that the panelist selected the correct sample.

X2.4.2 Panelist 4 missed at the highest concentration, where the dilution is only by a factor of 15. It is assumed that he would have been correct at a higher concentration level, where the dilution would have been a factor 15/3 = 5.

X2.4.3 Consequently, an estimate of his threshold is $\sqrt{15 \times 5} = 9$. The underlying assumption is that since the thresholds of the other panelists were within the presented scale range, his threshold should not be far away from the range if he belongs to the same statistical population. If the test were to establish the sensitivity of the panelists, this panelist would have been retested, with a scale range extended to the right of the results in Table X2.1.

X2.4.4 Panelist 6 represents the opposite extreme. The estimate is based on the assumption that a miss would have occurred at a dilution of $3 \times 3645 = 10$ 935; the best-estimate threshold is then $\sqrt{10}$ 935 \times 3645 = 6313.

X2.4.5 In Table X2.1, dilutions change exactly by a factor of three per scale step. Experimentally, small deviations from such equal spacing occur, and the actual dilutions or concentrations should be used in calculating the best-estimate thresholds from two adjacent values in the table.

X2.5 *Report*—The report shall include the following information:

Odor threshold: Odorous Air Sample XX Procedure: ASTM Practice E679 Presentation: at 500 ml/min (dynamic dilution olfactometer) Number of scale steps: six Dilution factor per step: three Temperature: 25° C (room and samples) Panelist selection: random Number of panelists: nine Type of threshold: detection Best-estimate threshold: $Z_{ox} = 209$

$$Z_{OL} = 209$$

$$\log_{10} Z_{OL} = 2.32$$

Standard log deviation = 0.81

NOTE X2.1— The symbol Z represents a dilution factor proposed to designate a dimensionless measure of sample dilution needed to reach some target effect (10).⁶ For threshold work, the subscript "OL" represents the dilution at which the odor reaches a limit that corresponds to the best-estimate threshold.

 $^{^{6}}$ The dilution factor, Z, is used in modest honor of H. Zwaardemaker, a Dutch scientist and early investigator in olfactometry. Alternate terminology in use: Dilution-to-Threshold Ratio (D/T or D-T); Odor Unit (OU); Effective Dose (ED).



X3. EXAMPLE NO. 3-ODOR THRESHOLD DETERMINATION

X3.1 The odor threshold of an odorous air sample was to be determined.

X3.2 Fourteen different concentrations of the odorous sample in air were prepared using a dynamic dilution olfactometer. Each of these was presented in conjunction with two samples of nonodorous air. The concentrations were increased by a factor of two per concentration step. Five panelists were selected at random from a pool of assessors who meet the selection criteria set forth in EN 13725. Each panelist proceeded from the lower to higher concentrations. At each concentration level, panelists compared the three samples (two blanks and one diluted odorous sample) and indicated which sample was different from the other two. Each panelist performed the test two times.

X3.3 The results listed in Table X3.1 were obtained.

X3.4 Details of calculation are as follows:

X3.4.1 For Panelist 1, the best estimate threshold is $\sqrt{4096 \times 2048} = 2896$, or at a dilution by a factor of 2896 (one volume of the odorous air sample diluted with nonodorous air to occupy 2896 volumes in total). For Panelist 2, the threshold is at $\sqrt{2048 \times 1024} = 1448$. All other values follow these same calculations.

X3.4.2 In Table X3.1, dilutions change exactly by a factor of two per scale step. Experimentally, small deviations from

such equal spacing occur, and the actual dilutions or concentrations should be used in calculating the best-estimate thresholds from two adjacent values in the table.

X3.5 *Report*—The report shall include the following information:

Odor threshold: Odorous Air Sample XX

Procedure: Practice E679 and EN 13725

Presentation: at 20 L/min (dynamic dilution olfactometer)

Number of scale steps: 14 available (five used)

Dilution factor per step: two

Temperature: 25°C (room and samples)

Panelist selection: random selection from pool of assessors who meet EN 13725 selection criteria

Number of panelists: five - each panelist observed each sample twice

Type of threshold: detection Best-estimate threshold:

$$Z_{OL} = 2188$$
$$\log_{10} Z_{OL} = 3.34$$
Log standard deviation = 0.15

X3.6 Additional examples—References (11-21) contain examples of thresholds determined according to this practice or by equivalent methods.

TABLE X3.1 Example of Odor Threshold

Note 1---This example shows only six of the available fourteen dilution levels. All panelists observed the sample two times.

| | | Judgments ^A | | | | | | | | | | |
|---------------|-------------|------------------------|----------------------------------|-----------|-----------|----------|--------------------------------|-------------------------------|--|--|--|--|
| Panelists | | | Best-Estimate Threshold (BET) | | | | | | | | | |
| | 3 16 384 | 4 8192 | 5 4096 | 6 2048 | 7 1024 | 8 512 | Value | log ₁₀ of value | | | | |
| 1 | ••• | 0 | 0 | + | + | | 2896 | 3.46 | | | | |
| 2 | | 0 | 0 | 0 | + | + | 1448 | 3.16 | | | | |
| 3 | | 0 | 0 | 0 | + | ÷ | 1448 | 3.16 | | | | |
| 4 | | 0 | 0 | + | + | | 2896 | 3.46 | | | | |
| 5 | • • • | 0 | 0 | + | + | J | 2896 | 3.46 | | | | |
| 1 | | 0 | 0 | + | + | | 2896 | 3.46 | | | | |
| 2 | | 0 | 0 | 0 | + | + | 1448 | 3.16 | | | | |
| 3 | | 0 | 0 | + | + | | 2896 | 3.46 | | | | |
| 4 | | 0 | 0 | + . | + | | 2896 | 3.46 | | | | |
| 5 | ••• | 0 | 0 | 0 | + | + | 1448 | 3.16 | | | | |
| Group BET geo | metric mean | | | | | | $\Sigma \log_{10} \rightarrow$ | 33.40 | | | | |
| | | | | | | | 2188 ↔ | 3.34 | | | | |
| Standard | deviation | | | | | | | 0.15 | | | | |

A "0" indicates that the panelist selected the wrong sample of the set of three. "+" indicates that the panelist selected the correct sample.

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- (16) Engen, T., Perceptual and Motor Skills, Vol 10, p. 195, 1960.
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- (18) Cederlöf, R., Edfors, M. L., Friberg, L., and Lindvall, T., Journal of the Technical Association of the Pulp and Paper Industry, Vol 48, p. 405, 1965. (thresholds in air)
- (19) Meilgaard, M. C., Technical Quarterly, Master Brewer's Association of the Americas, Vol 12, p. 151, 1975. (thresholds in beer)
- (20) Salo, P., Nykänen, L., and Suomalainen, H., Journal of Food Science, Vol 37, p. 394, 1972. (thresholds in alcohol-water mixture)
- (21) Guidelines for Odor Sampling and Measurement by Dynamic Dilution Olfactometry, A&WMA EE-6 Odor Committee, Air & Waste Management Association, Pittsburgh, PA, 2003.

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Irish Standard I.S. EN 13725:2003

Air quality - Determination of odour concentration by dynamic olfactometry

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July 28, 2020 Medway Planning & Economic Development Board Meeting

Salmon Construction Account

- Salmon Construction Services Project Accounting Report dated 7-14-20
- Updated Tetra Tech construction services estimate dated 7-28-20

The Salmon construction services consultant account needs to be replenished.

| | | | TION ACCOUNTING | | | | | | | | |
|--------------|-------------|-----------|-------------------------------|--------------|-----------------|--------------|--------------|----------|---------------|----------------|-------------|
| DATE: July 1 | I | willows a | iu wiitiley Place | | | | | | | | |
| JATE. July 1 | 4, 2020 | | | | | | | | | | |
| Date | | | | Date | Consultant's | | Consultant's | | Time | Date | |
| Check | | | | Submitted to | Construction | Consultant's | Invoice | Invoice | Period | Submitted to | |
| Received | Amount | Check # | Payment Source | Treasurer | Observation Fee | Name | Date | Number | Covered | Town Act. | Balance |
| | | | | | | | | | | | |
| 8/1/2017 | \$5,000.00 | 1135 | Medway Land Venture | 8/21/2017 | | | | | | | \$5,000.00 |
| | | | | | \$720.00 | Tetra Tech | 9/27/2017 | 51223980 | thru 9/22/17 | to ml 10/5/17 | \$4,280.00 |
| | | | | PARTIAL | \$1,178.81 | Tetra Tech | 2/23/2018 | 51285687 | thru 2/9/18 | to ml 3/6/18 | \$3,101.19 |
| | | | | | \$480.00 | Tetra Tech | 3/29/2018 | 51206281 | thru 3/23/18 | 4/9/2018 | \$2,621.19 |
| | | | | | \$210.00 | Tetra Tech | 6/22/2018 | 51324751 | thru 6/1/18 | to ml 7/12/18 | \$2,411.19 |
| | | | | | \$210.00 | Tetra Tech | 7/11/2018 | 51330884 | thru 7/6/18 | to ml 7/12/18 | \$2,201.19 |
| | | | | | \$280.00 | Tetra Tech | 11/21/2018 | 51380476 | thru 11/9/18 | to ks 11/29/18 | \$1,921.19 |
| 12/28/2019 | \$26,345.00 | 13459 | Continuing Care Management | 1/3/2019 | | | | | | | \$28,266.19 |
| | | | | | \$1,935.14 | Tetra Tech | 5/24/2019 | 51444084 | thru 05/10/19 | to so 07/25/19 | \$26,331.05 |
| | | | | | \$4,406.75 | Tetra Tech | 6/28/2019 | 51458299 | thru 06/14/19 | to so 07/26/19 | \$21,924.30 |
| | | | | | \$1,792.76 | Tetra Tech | 7/26/2019 | 51468714 | thru 07/12/19 | to so 08/20/19 | \$20,131.54 |
| | | | | | \$2,586.02 | Tetra Tech | 8/20/2019 | 51478679 | thru 08/09/19 | to so 08/27/19 | \$17,545.52 |
| | | | | | \$2,922.19 | Tetra Tech | 9/27/2019 | 51495375 | thru 09/06/19 | to so 10/11/19 | \$14,623.33 |
| | | | | | \$3,115.57 | Tetra Tech | 10/21/2019 | 51505988 | thru 10/04/19 | to so 11/15/19 | \$11,507.76 |
| | | | | | \$1,344.55 | Tetra Tech | 11/22/2019 | 51523967 | thru 11/01/19 | to so 12/23/19 | \$10,163.22 |
| | | | | | \$1,776.53 | Tetra Tech | 12/19/2019 | 51533814 | thru 11/30/19 | to so 12/23/19 | \$8,386.68 |
| | | | | | \$38.70 | Tetra Tech | 1/16/2020 | 51542214 | thru 1/4/20 | to SO 2-4-20 | \$8,347.98 |
| | | | | | \$112.00 | Tetra Tech | 3/23/2020 | 51568644 | thru 3/6/20 | to SO 4/1/20 | \$8,235.98 |
| | | | | | \$1,445.13 | Tetra Tech | 4/16/2020 | 51576307 | thru 4/3/20 | to SO 4/16/20 | \$6,790.85 |
| | | | | | \$2,406.21 | Tetra Tech | 5/14/2020 | 51587569 | thru 5/1/20 | to SO 5/14/20 | \$4,384.64 |
| | | | | | \$974.44 | Tetra Tech | 6/2/2020 | 51595551 | thru 5/31/20 | to SO 6/3/20 | \$3,410.20 |
| | | | | | \$3,528.12 | Tetra Tech | 7/6/2020 | 51607643 | thru 6/30/20 | to SO 7/6/20 | -\$117.92 |
| | \$31,345.00 | | | | \$31,462.92 | | | | | | -\$117.92 |
| | Total | | | | Total | | | | | | Balance |
| | Paid by | | | | Cons. Obsrvtn. | | | | | | |
| | Applicant | | | | Fees | | | | | | |

| TŁ TET | The Willows TETRATECH Construction Administration Budget July 27, 2020 | | | | | | | | | | | | |
|-----------------------|--|----------------|-----------------------------|-------|----------|--|--|--|--|--|--|--|--|
| Item No. ¹ | Inspection | Site Visits | Hrs/Inspection ² | Rate | Total | | | | | | | | |
| 1 | Periodic Erosion Control/O&M Inspections | 12 | 2 | \$116 | \$2,784 | | | | | | | | |
| | Roadway Gravel | 1 | 4 | \$116 | \$464 | | | | | | | | |
| 3 | Permeable Pavement Installation | 2 | 4 | \$116 | \$928 | | | | | | | | |
| | Roadway Binder | 1 | 6 | \$116 | \$696 | | | | | | | | |
| | Curb/Berm | 1 | 4 | \$116 | \$464 | | | | | | | | |
| | Sidewalk Gravel | 1 | 4 | \$116 | \$464 | | | | | | | | |
| | Sidewalk Binder | 1 | 4 | \$116 | \$464 | | | | | | | | |
| | Roadway Top | 2 | 6 | \$116 | \$1,392 | | | | | | | | |
| | Sidewalk Top | 1 | 4 | \$116 | \$464 | | | | | | | | |
| | Drainage: 16 Subsurface Systems | 16 | 4 | \$116 | \$7,424 | | | | | | | | |
| | Landscape/Plantings/Site Stabilization | 1 | 8 | \$116 | \$928 | | | | | | | | |
| 12 | Punch List Inspections ³ | 1 | 8 | \$116 | \$928 | | | | | | | | |
| 13 | Bond Estimates | 1 | 8 | \$116 | \$928 | | | | | | | | |
| 14 | As-Built Plans ⁴ | 1 | 6 | \$116 | \$696 | | | | | | | | |
| | Meetings (PEDB/Misc. Site) | 12 | 1 | \$148 | \$1,776 | | | | | | | | |
| 16 | Admin | 1 | 6 | \$69 | \$414 | | | | | | | | |
| 17 | Drainage Modification Review (Fall 2019) ⁵ | 1 | 34 | \$143 | \$4,862 | | | | | | | | |
| | SWPPP Modification Review (Summer 2020) ⁶ | 1 | 12 | \$148 | \$1,776 | | | | | | | | |
| | Subtotal | | | | \$27,852 | | | | | | | | |
| | Expenses | | | 5.0% | \$1,393 | | | | | | | | |
| | TOTAL | | | | \$29,24 | | | | | | | | |

Notes:

¹ Each item includes site visit, inspection and written report and is based on current TT/Medway 2020 rates.

² If installation schedule is longer than that assumed by engineer for any item above, or if additional inspections are required due to issues with the contract work, additional compensation will be required.

³ Punch List Inspections include a substantial completion inspection and Punch List memo provided to the town. It also includes one final inspection to verify that comments from the list have been addressed.

⁴ This item includes one review of as-built plans and review email correspondence.

⁵ This item includes review of proposed modification to the Stormwater Design related to the Main Building roof drain infiltration trenches. Design review, appurtenant letters and meetings with Medway PEDB and Conservation Commission occurred in Fall of 2019. This scope has been completed and cost reflects rates for that period.

⁶ This item includes site inspections and review of proposed modification to the SWPPP related to flooding impacts/erosion control breaches during intense storm events. This scope has been completed to date.

Date Approved by Medway PEDB_____

Certified by:

Susan E. Affleck-Childs Planning and Economic Development Coordinator Date