

July 19, 2023

Michael G. Livingston  
Town Engineer / Planner  
Town of Wells  
208 Sanford Road  
Wells, ME 04090  
207-646-5187

**RE: Chicks Crossing Village Subdivision  
Stormwater Management Review Comments**

Dear Michael,

On behalf of our client, Seacoast Land Acquisitions, LLC., we offer the following responses to staff review comments received from you via email on July 7, 2023. The original comments are shown in bold/italic text, with each response directly following. We have only included comments that require changes to the plan/model in our responses.

#### **MODEL RECOMMENDATIONS / COMMENTS PRE-DEVELOPMENT**

1. ***Basin 1S/2S: Wetlands and site walk observations indicate that flow travels northwesterly. Contours based on Lidar data. Field elevations needed to determine flow direction and Basin limits. It appears approximately 105,000 sf of area from 2S should be part of 1 S and travel path revised. See plan markup.***

Response: We have updated the areas between 1S and 2S as well as the travel paths for these watersheds. We have also updated the HydroCAD model and plans to reflect these changes. We have also updated the stormwater management report. The stormwater report, calculations and updated plans are included for review.

#### **MODEL RECOMMENDATIONS / COMMENTS POST-DEVELOPMENT**

2. **Basin 1 S/2S: Wetlands and site walk observations indicate that flow travels northwesterly. Contours based on Lidar data. Field elevations are needed to determine flow direction and Basin limits. It appears approximately 29,000 sf of area**

**from 13S should be modeled as a separate Basin, receiving flow from Pond BR-2. The culvert under the proposed road and channel to AP-1 should be modelled as Reaches, and travel path revised. See plan markup.**

Response: We have updated the area for Basin 13S and added the reaches to AP-1. We have updated the plans and HydroCAD to reflect these changes. The stormwater report, calculations and updated plans are included for review.

### **MODEL RECOMMENDATIONS / COMMENTS**

3. ***Corrections to Pre (1S/2S) and Post (10S/13S) to be made or survey ground elevation data collected and provided to confirm flow direction.***

Response: We have updated 1S, 2S (pre) and 10S, 13S (post). The stormwater report, calculations and updated plans are included for review.

4. ***AP-1 changes to be evaluated if model revised.***

Response: We have updated the HydroCAD model to reflect the aforementioned changes.

5. ***AP-2 changes to be evaluated if model revised.***

Response: We have updated the HydroCAD model to reflect the aforementioned changes.

6. ***Analysis of the off-site basins is not needed due to not having an impact in the areas to be developed, but significant area west of Chick Crossing Road supports the recommended requirement for a drainage easement across Lot 1 from the 18" culvert to the abutting property, see attached highlighted plan.***

Response: Noted, we did model the offsite watershed tributary to the 18" culvert and have included that into the HydroCAD model as well as creating an offsite watershed plan.

### **RESULTS**

7. ***Quantity calculations indicate no increase in estimated peak flow rates for the 2-, 10-, 25- and 100-year storm events for AP 1, 2 and 3, see Table in report, page 6. Results to be revised and re-evaluated if ground elevations confirm Basin limit revisions are needed.***

Response: We have re-evaluated the peak flow rates for all storm events at AP-1, AP-2, and AP-3. There is no increase in the peak rate of runoff from all study points and for all

storm events with the exception of AP-1 during the 2-year storm event. The model indicates a 0.2 cfs increase during this storm event. We feel this is an insignificant increase based on the size of the offsite watershed and the property.

Regards,

*Jason A Vafiades*

Atlantic Resource Consultants, LLC  
Jason Vafiades, PE, Principal