NOVATECH
Engineers, Planners & Landscape Architects

May 27, 2025

Municipality of Mississippi Mills
Development Services and Engineering Department
14 Bridge Street, PO Box 40000
Almonte, Ontario K0A 1A0

Attention: **Melanie Knight, Director of Development Services & Engineering**

Reference: **Hannan Hills Subdivision**
Response to Second Submission Comment Letter
County File 09-T-21002
Our File: 118201

Novatech has filed concurrent Draft Plan of Subdivision and Zoning Amendment applications in relation to the above note subdivision in 2021. A revised application package was submitted in June 2024. This letter, along with the revised documents provided and listed below, respond to Municipality comments regarding our second submission, the last of which were received on September 9, 2024. The comments and responses are provided below in **bold** text and numbered according to the numbering sequence in which they were received.

Please find the following documents enclosed:

- Planning Rationale, dated May 2025, prepared by Novatech
- Serviceability and Conceptual Stormwater Management Report, dated May 2025, prepared by Novatech
- Hydrologic Impact Assessment, dated May 2025, prepared by Novatech
- Environmental Impact Study, dated May 2025, prepared by CIMA+
- Geotechnical Memo, dated November 25, 2024, prepared by Paterson Group

MUNICIPALITY OF MISSISSIPPI MILLS

Planning Department

1. As no parkland is proposed, cash-in-lieu of parkland will be required based on the Municipality's Parkland By-law 15-73.

   Novatech Response: **Noted.**

2. It is noted that the proposed four single detached lots exceed the minimum lot area of the R1 zone consideration could be given to providing additional single detached lots in this area.

   Novatech Response: **The four single detached lot remain on the revised draft plan. No additional single detached units have been included.**

3. Based on the Concept Plan, there are no lots with 13 metre frontages. Please clarify the lot frontages of the single detached lots and note that consideration should be given to proposing more single detached or semi-detached dwellings.

   Novatech Response: **The lot frontage has been revised as a result of minor revisions to the concept plan. The lot frontages have been measured as per the Zoning By-law definition.**

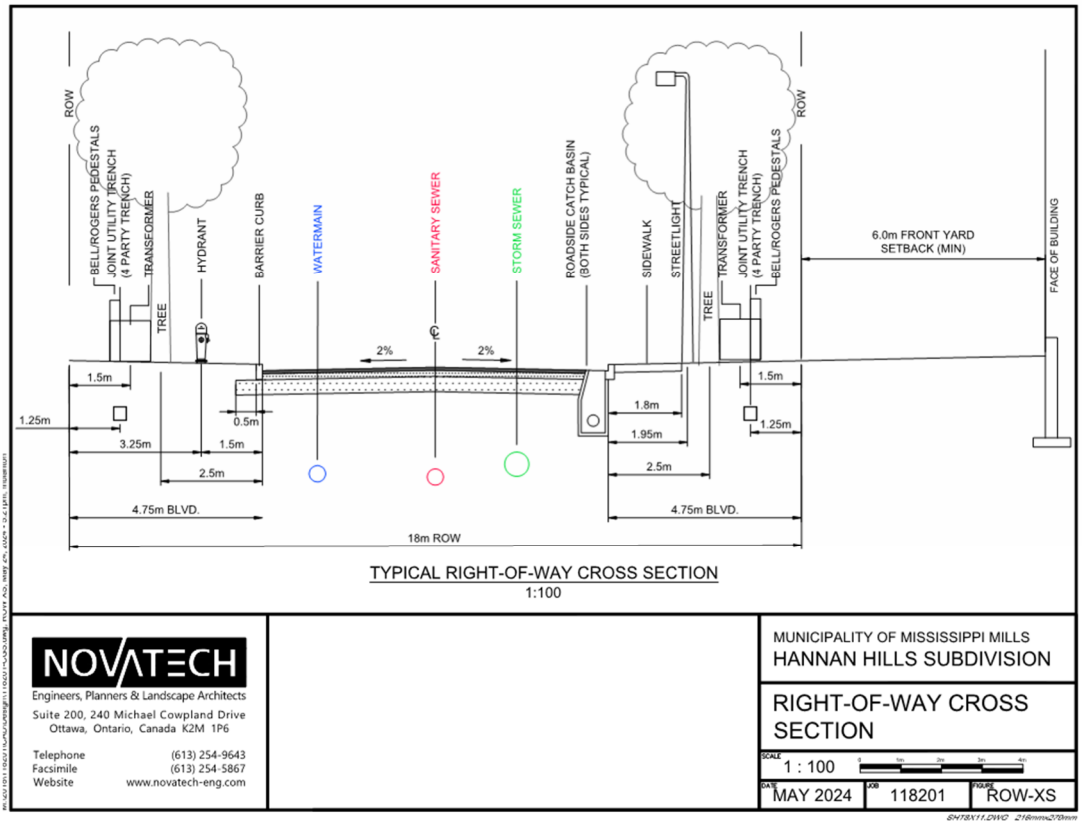
4. As noted in the Transportation Section below, right-of-way widths are proposed at 18 metres. Please amend Street One to a 20-metre right-of-way width. Based on the corner lot setbacks of Blocks and the large front yard setbacks of the for the back-to-back townhouses, there is area available to increase Street One to a 20-metre right-of-way width.

   Novatech Response: **The 18m right-of-way remains on the revised draft plan. It is understood that an 18m right-of-way is acceptable, based on the following rationale provided in Novatech's earlier memorandum dated March 21, 2025:**

   - Street 1 is approximately 300m in length and only provides localized access to 47 proposed residential dwellings. Street 1 is intended to move traffic from the development to the existing local street network and the 18m right-of-way is considered appropriate for this development context and density. In our experience, an 18m right-of-way is widely accepted as being suitable for low volume local roads. It is important to note that the internal streets have been indicated as 18m right-of-way on the concept presented at the initial pre-consultation meeting for this development and have been carried forward on the draft plan since the submission of the first draft plan application in 2021. Further, all plans and reports have been prepared on the basis of an 18m right-of-way.

   - While Table 21 in the 2024 MMTMP suggests a desired 20m ROW for local roads, the recommended Complete Street Standard Cross-Sections provided in Appendix K includes an 18m variant. The main difference between the 18m and 20m cross-sections is an increased road platform with of 9m for the 20m cross-section, compared to 8.5m for the 18m cross-section. While Ontario Traffic Manual (OTM) Book 18 recommends 4.5m lane widths for mixed vehicle/bike traffic lanes, it identifies that 4.3m lanes will provide sufficient space for vehicle passing cyclists under the Highway Traffic Act. The proposed cross-section is consistent with the 18m variant in the 2024 MMTMP and includes an 8.5m wide paved roadway (4.25m lane widths) with a 1.8m wide sidewalk on one side. As Street 1 provides localized access to 47 residential units with four routes to connect to Adelaide Street, traffic travelling on Street 1 is anticipated to be low and the proposed 18m right-of-way cross section is anticipated to operate acceptably from a transportation perspective.

   - The 18m cross-section included with the submission is shown below and demonstrates that the 18m width can meet both functional and operational requirements for servicing. The 18m cross-section accommodates the required sewers, watermain, hydrants, and utilities while still allowing for street parking, sidewalks and trees. Going from an 18m to a 20m cross section increases the pavement width to 9m and lengthens each driveway by 1m. The increase in paved areas negate the nominal increase in grassed boulevards area within the ROW for snow storage, in particular due to the ratio of driveways to lot frontage typical of a townhouse development.



- The stormwater management block has been sized on the basis of calculated storage requirements. The increase in right-of-way width to 20m would widen the paved road platform and require longer driveways that extend across the boulevard to the paved street. The resulting increase in imperviousness results in greater runoff volume leading to the pond which increase the storage requirements and reduces the softscaping which would otherwise help to provide infiltration for the required water balance. Narrowing of the SMW pond block by increasing the ROW width would require additional lands for the stormwater management block. From the perspective of stormwater management considerations, an 18m right-of-way width is desirable and appropriate.

- It is noted that the Adelaide and Florence Streets right-of-ways appear to have widths of 15m. While the proposed widening blocks shown on the draft plan will serve to widen these sections abutting the Hannan Hills development, the overall desired width would not be 20m without widening taken on the opposite sides of Adelaide and Florence.

- Section 4.6.4.2 of the Official Plan (as amended in 2019) states that generally, the right-of-way width for a local road should be 16m to 20m. The above-noted points justify the use of an 18m ROW under this development context.

- Notwithstanding the TMP recommendation for 20m, there are several examples of existing and recently-approved subdivision developments within the Town that include 18m right-of-ways, including the various phases within the Mill Run development, as well as the recently-approved Weaver's Way and Hilan Village developments. We are not aware of any

functional and operational challenges arising from an 18m right-of-way associated with an 18m cross-section.

- The draft plan has been amended to include a 14.8m municipal block to encompass the east-west section of drain north of Blocks 5 to Block 11, inclusive. The use of an 18m right-of-way would allow for a rear yard setback of at least 7.7m, in compliance with the requirement of the Zoning By-law. A 20m right-of-way would reduce the rear yard depth to 5.8m which would require rear yard zoning relief. A reduced rear yard setback would result in a smaller, less functional rear yard depth.

5. Please be advised that the Municipality prefers that the entire area of the buffers located in the rear yard of the lots are conveyed to the Municipality as opposed to being incorporated in the rear yards of the proposed lots. The Municipality has no objections to reduced rear yard setbacks/areas for the lots which abut the buffer areas and Municipal drains as a result of the conveyance of the buffer area to the Municipality.

   Novatech Response: **The draft plan has been revised to include the entire buffer area within a single block (Block 34) that is to be conveyed to the Municipality.**

6. Please be advised that due to the presence of Blanding's Turtles in the area, the stormwater management pond will be required to be fenced with turtle fencing to help prevent turtles from nesting in the stormwater pond over time.

   Novatech Response: **Noted. Turtle exclusion barrier has been shown on the Preliminary Grading and Servicing Plan.**

7. For all corner lots (townhouses and back-to-back townhouses) urban design features such as wrap around porches/balconies and additional fenestration (windows) and/or doors should be incorporated to ensure these corner lots are animated as much as possible.

   Novatech Response: **Noted.**

8. It is noted that the EIS notes that a 2024 field survey needs to be completed re: Butternut and Black Ash (page 28) and re-headed Woodpecker Chimney Swift, Loggerhead Strike, Bobolink, (page 44-45). A full review of the EIS will be completed once the results of the field survey are incorporated into the EIS.

   Novatech Response: **Noted. An updated EIS prepared by CIMA+ (dated May 27, 2025), is included with this submission.**

9. Page 34 of the EIS appears to have a reference missing.

   Novatech Response: **This has been corrected in the updated EIS.**

10. Please be advised that, as a standard, tree planting is required at a rate of one tree per lot and for corner lots two trees per lot. Based on the Geotechnical Study, please provide information regarding the planting of trees and if there are any impacts due to the existence of sensitive soils.

    Novatech Response: **See attached memo dated November 25, 2024 from Paterson Group.**

Engineering

Geotechnical

11. It is noted that the bedrock is shallow and is inferred as main bearing surface for development on land. Please confirm if this is accurate.

    Novatech Response: **See attached memo dated November 25, 2024 from Paterson Group.**

12. The Geotechnical Study identifies areas of the site with 65kpa bearing capacity. Please clarify what method of foundation is proposed for these areas. Will construction occur on top of the sensitive clay soils or will these sensitive soils be removed to access the bedrock bearing surface.

    Novatech Response: **See attached memo dated November 25, 2024 from Paterson Group.**

13. A condition in the draft conditions/subdivision agreement regarding sensitive soils may be required to advise future landowners that the area contains sensitive soils based on the response to #11 and 12 above.

    Novatech Response: **See attached memo dated November 25, 2024 from Paterson Group.**

14. Seasonally high ground water table was not identified. **Please note** that CLI ECA has substantial requirements for design of sewers and watermains which cannot be shown to be above the seasonally high ground water table.

    Novatech Response: **See attached memo dated November 25, 2024 from Paterson Group.**

Water

15. Information from the 2018 Water and Wastewater Master Plan Update has been used to show that the area of development can be serviced. All development applications requiring water and sewer connections are required to fill out a system capacity check form. Please submit ASAP the Municipality's system capacity check form **attached to this letter**. Please be advised that an invoice will be provided for the cost of this analysis.

    Novatech Response: **The system capacity check has been completed and is included in the updated Serviceability Report.**

16. Water demand calculations use 280L/Cap/Day, please be advised that 350L/Cap/Day is required to be used. Please amend accordingly.

    Novatech Response: **The demands have been revised in the updated Serviceability Report.**

17. Based on modeling in the new 2023-2024 Water and Wastewater Masterplan it is likely that a trunk watermain is required to run from Victoria Street up Florence Street to serve the proposed subdivision and future surrounding build areas. The Municipality would like to discuss a front ending arrangement with the developer on this matter.

Novatech Response: **Based on the capacity check provided by the Municipality, additional offsite trunk watermain is not required for the proposed subdivision. Additional offsite works under a front ending agreement would be discussed separately with the developer.**

Fire Flow

18. Please confirm through the system capacity design check (form attached) to determine if the required F.U.S fire flows are available.

    Novatech Response: **Based on the capacity check provided by the Municipality, the required FUS fire flows are available. Refer to Section 4.1 of the Serviceability Report.**

19. If the required F.U.S fire flows are not available, please be advised that necessary fire walls or fire suppression systems to lower the fire flow requirements will be required. Alternatively, system upgrades to the water supply may also be considered to improving fire flow availability.

    Novatech Response: **Based on the capacity check provided by the Municipality, the required FUS fire flows are available. Refer to Section 4.1 of the Serviceability Report.**

Wastewater

20. Note: The Municipal CLI ECA requires that sewers conform to the CLI design guidelines including measures for installing sewers in areas with a seasonally high ground water table. If no seasonally high ground water table is identified measures are to be installed in lieu of missing information.

    Novatech Response: **This would be incorporated in the detailed design.**

21. 280L/Cap/Day has been used for wastewater flow calculations. Please update these calculations using 350L/Cap/Day.

    Novatech Response: **The flows have been revised in Section 4.2 of the updated Serviceability Report.**

Stormwater

22. Please provide model information for the manufactured stormwater treatment device.

    Novatech Response: **A preliminary sizing for the manufactured stormwater treatment device has been provided in Section 5.2 and Appendix E of the Serviceability and Conceptual SWM Report. Sizing will be confirmed at detailed design.**

23. Please provide the source for the IDF rainfall data used to perform the calculations.

    Novatech Response: **The IDF data was taken from the City of Ottawa Sewer Design Guidelines and is specified in Section 4.3.1 for the Serviceability and Conceptual SWM Report.**

24. Please clarify which method was used for calculations. Both PCSWMM and Rational Method are referenced. This is likely for pre to post, but that is not clearly stated in the report.

Novatech Response: **Sewer sizing was performed using the Rational Method. All other sizing information (HGLs, ICDs, pre- to post- flows, etc.) was performed using PCSWMM. Any items discussed in Section 5.1: Hydrologic & Hydraulic Modeling (PCSWMM) were done using PCSWMM. Additional text was provided to clarify this (example – ICD sizing mentioned in 4.3.1 referenced PCSWMM.**

25. Pease be advised that basement sump pumps are required to have backup generators or batteries to run sump pumps during a power failure. Sump pump back up systems must be able to run the sump pump system for a minimum of 36 hours without power. These requirements will be included in the subdivision agreement.

    Novatech Response: **This would be incorporated into the detailed design.**

26. Easements in favour of the Municipality (2.4 metres wide) will be required on all rear yard swales for access, maintenance and to ensure that modifications are not permitted by future property owners.

    Novatech Response: **This would be incorporated into the detailed design.**

27. As per the Municipality's CLI ECA new developments are required to implement LID measures in storm water management design. Please provide an overview of what measures have been proposed which would increase the infiltration of water into the ground instead of flowing to the storm water management pond. It is recommended that perforated storm pipes in backyards are considered as one measure.

    Novatech Response: **Potential LID measures such as rear yard infiltration trench systems with perforated rear yard pipes and roof leaders directed to grassed areas have been noted in the Serviceability and Conceptual SWM report. This would be discussed further during the detailed design.**

    <u>Roads/Transportation</u>

28. The draft plan proposes 18 metre right of ways. This is in contravention with both the 2016 Transportation Master Plan and the 2023-2024 draft Transportation Master Plan. The minimum required right-of-way width for local streets in both Master Plans is 20 metres. Please amend Street One on the draft plan to a 20-metre right-of-way. The Department is willing to accept Streets Two and Three remaining at an 18-metre right-of-way due to their short length.

    Novatech Response: **See response to Comment #4.**

29. There is no sidewalk proposed on Florence Street. A sidewalk along Florence Street is required, please amend accordingly. Florence Street shall be constructed to full urban local standard.

    Novatech Response: **Noted. A sidewalk will be included on the detailed design drawings.**

30. There are no sidewalks shown on Adelaide Street. A sidewalk along Adelaide Street is required, please amend accordingly. Please be advised that Adelaide Street right-of-way is required to be constructed to a full urban local cross section as per the TMP.

Novatech Response: **Noted. A sidewalk will be included on the detailed design drawings.**

31. The development of Adelaide Street, including sidewalks and infrastructure, will be subject to a latecomer policy proposed in Official Plan Amendment 32, whereby the applicant who constructs any infrastructure that benefits other property owners is reimbursed by a developer prior to benefiting from the new infrastructure. Please provide an update on the financial agreement between this development and the proposed Menzie's subdivision.

    Novatech Response: **A Memorandum of Agreement, dated June 5, 2024, has been prepared and executed by both Cavanagh Developments and Ash Sharma (on behalf of 13165647 Canada Inc. (copy enclosed).**

32. The Florence Street right-of-way between Adelaide and Maude Streets will be required to be re-instated with a foot path for pedestrian connectivity approximately 6 metres wide. Pathway lighting is to be included. Please provide a conceptual design of the pathway for review and comment.

    Novatech Response: **The section of unopened right-of-way between Adelaide and Maude Street, including the existing pathway from Finner Court to Maude Street, will be re-instated to existing conditions. A conceptual design of the pathway and lighting should not be necessary in advance of draft approval and a pedestrian pathway will be included as part of the detailed design.**

33. The proposed connection to Honeybourne is required to be constructed to a full urban local cross section with a crossing of the municipal drain with a suitable structure. A gate shall be placed between Adelaide and Honeybourne to limit vehicle access and signage will be required stating that this area is a future road connection.

    Novatech Response: **We understand that a 3m wide MUP crossing to Mill Run would be acceptable rather than a street connection. Gating and signage would be provided. Crossing details are to be confirmed at detailed design.**

Building Department

34. Please be advised that based on additional information in the next resubmission, there may be requirements/restrictions at the building permit stage, such as low bearing capacity of soil or addressing frost susceptibility, identified in the Geotechnical Study.

    Novatech Response: **Noted**

35. Please be advised that based on additional information in the next submission, there may be requirements/restrictions at the building permit stage, such as the requirement for fire walls. If so, a map identifying the lots requiring additional fire protection at the building permit stage, will be required.

    Novatech Response: **Noted**

Please contact the undersigned if you have any questions.

Sincerely,

NOVATECH

Steve Pentz, MCIP, RPP
Senior Project Manager

cc: Koren Lam, County of Lanark
Julie Stewart, Cavanagh Developments