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19 October 2018

File: **14118**

**R.J. Burnside & Associates Limited**

15 Townline  
Orangeville, Ontario  
L9W 3R4

Attention: **Carly Dixon, P.Eng.**

Re: **Revised Functional Servicing Report  
Proposed Corseed Subdivision (22T-201601)  
Corseed Inc.  
Town of Grand Valley**

Further to your attached comments dated June 22, 2018, we enclose our updated Functional Servicing Report (Rev: October 2018) for your review. The report has been revised to address your comments and reflect our client's updated draft plan. We summarize our efforts to address your comments as follows:

**Lot Fabric & Draft Plan**

To be addressed by others under separate cover.

**Sanitary System**

1. to 4. No response required.

**Water System**

1. to 3. No response required.

**Stormwater System**

1. The GRCA (Nathan Garlan) has confirmed that although no quantity control is required for discharge directly to the Grand River, the subject site is located on a tributary to the Grand River (Boyne Creek) with known erosion issues. Quantity control is therefore requested by the GRCA. A copy of this email conversation is attached.
2. The SWM pond has been re-designed based on the revised draft plan. Based on the completed modelling, the pond is adequately sized to provide quality, quantity and erosion control.

A SWM Facility Operation and Maintenance manual will be provided during detailed design once the final SWM pond design has been approved.



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Infiltration trenches are proposed to infiltrate water from roof areas of the commercial and mixed use blocks (Blocks 5 & 6), and the rear yard areas of lots backing onto the SWM block or open space block (Lots 57-72), as shown on **Figure 4**. Specific sizing details for the proposed infiltration trenches will be provided at detailed design.

3. No response required.
4. Section 7.2 of the FSR has been revised to include the preliminary grading design which indicates that approximately 18,000 m<sup>3</sup> of fill is required within the subject site. This fill will be available as surplus material from the planned earthworks operations for the proposed Moco Subdivision which is in close proximity to the subject site. This volume of import can be readily accommodated and therefore no alternative designs need to be considered.

### **Traffic Impact study & Transportation**

1. & 2. To be addressed by others under separate cover.
3. Section 6.1 of the FSR has been revised to reflect the Town's minimum pavement structure for local roads and collector roads.
4. To be addressed by others under separate cover.

### **New Comments**

To be addressed by others under separate cover.

We trust that we have adequately addressed your concerns and that you will now be in a position to provide your clearance to the Town's Planning Division with respect to draft plan approval. Should you have any questions please do not hesitate to contact us.

Yours very truly,

**VALDOR ENGINEERING INC.**



**David Giugovaz, P.Eng.**  
Senior Project Manager

905-264-0054 x 224  
dgiugovaz@valdor-engineering.com

Enclosure

c: Darren Vella, Innovative Planning Solutions



June 22, 2018

**Via: Email**

Ms. Tracey Atkinson  
Planner  
Town of Grand Valley  
5 Main St. N.  
Grand Valley, ON L9W 5S6

Dear Tracey:

**Re: Corseed Inc.  
Proposed Draft Plan of Subdivision  
Project No.: 300036376.0000**

We are hereby providing our comments on the recent revised package provided in May 2018. Previous comments from July 6, 2017 have been retained with our comments on this submission in red.

**Lot Fabric and Draft Plan**

- The acute angle between Streets D and E is approximately 60 degrees, which is at least 10 degrees too sharp to comply with geometric standards, particularly when one of the streets is a Collector Road.

Addressed. No longer applicable.

- The minimum offset between local streets is typically set at 60 m, which is not met between Streets A and D.

Addressed. No longer applicable.

- A 26 m Collector Road was discussed at the pre-consultation meeting of October 7, 2014 as well as in June 2016. In our opinion the intent of a collector road in those discussions has not been fulfilled. We suggest that Streets A, B, and E could be linked to form a continuous 26 m wide collector road.

Revised concept has been proposed which does include a collector road. Based on GRCA comments, the draft plan is expected to be revised due to setback requirements from the wetland and further comments provided in this letter.

- It is not clear whether the current draft plan is supported by the EIS, as there have been changes to the SWM pond and road network in the area of the wetland. There are also ongoing requirements from GRCA that may affect the lot fabric of the subdivision.

**Not addressed.** Based on recent comments provided by the GRCA, the plan requires modification with respect to setbacks from the wetland. Any wetland blocks added to the plans for buffers should be combined with Block 1 (such as Block 2 and 4 for example). It should be confirmed if it is intended that Block 1 will be conveyed to the Town or GRCA. Please provide any responses provided by the MNR with respect to the Information Gathering Form being submitted.

- A 0.3 m reserve should be included on the plan where the Mixed Use blocks are adjacent to the County Road.

**Not addressed.** These blocks will not have entrances off the County Road and therefore the 0.3 m reserves are to be added to the plans.

- Further consideration should be given to the location and size of the parkland, in light of the revisions that are being made on the west side of the plan. There may be benefit in locating the park in the vicinity of the stormwater pond in an area that also has access to the rail trail. We note that its area proposed currently is less than the statutory reference to 5% of the area of the draft plan.

**Addressed.** There will be a draft plan condition requiring a trail to be constructed to the rail trail.

- The requirement for a fencing plan should be a condition of draft plan approval.

**No response required.**

- The labelling of "Other Lands Owned by Applicant" raises some questions:

**Not addressed.** No response to the comments below were provided. Clarification is needed.

- The key map depicts the Moco Farms lands as being owned by the same applicant, while we had been of the understanding that Moco and Corseed had related but different ownership. **This remains the same on the drawing.**
- According to our property mapping, Corseed Inc is the owner of the entire parcel located south of Block 79, but those lands are shown only as "Existing Agricultural Lands" on the Draft Plan. **This remains the same on the drawing.**
- Block 80 is labelled "Other Lands Owned by Applicant" which is unusual for a block that is internal to the plan. **Not applicable based on new layout.**

- The draft plan shows future road access to the south at a location that connects to the Existing Agricultural Lands that are also owned by Corseed. It is most likely that road access will first be required by the lands east of the Corseed property having frontage onto County Road 25.

Addressed. Revised concept proposed.

### Sanitary System

- 1** • Currently, the Town does not have available capacity at its wastewater treatment plant to accommodate this subdivision, as acknowledged in the Functional Servicing Report.

No response required.

- 2** • This subdivision is dependent on the construction of downstream sewers and a pumping station to be located on the Moco Farms subdivision lands, also as noted in the Functional Servicing Report.

No response required.

- 3** • Revise the sanitary sewer outlet grade from the rear of the subdivision (Lot 27) to County Road to 0.5% in order to reduce the depth of sewer at this intersection from 8 m to 6.2 m.

Addressed. This has been addressed however due to revised configuration of the road layout the depth of sewer will be 8 m-9 m.

- 4** • We do not expect the County will permit the sanitary sewer be constructed on the travelled portion of the roadway. This sewer will need to be designed and constructed and not disrupt traffic flow on the County Road.

No further response required. The location of the sanitary sewer will need to be finalized at the detailed design stage.

### Water System

- 1** • The Well Head Protection Area associated with existing municipal wells should be shown on the draft plan.

**Not Addressed.** We do acknowledge the boundary of the WHPA was included on the engineering plans. Each WHPA should (A, B, C, and D) should be shown on the draft plan.

- 2** • As discussed at the pre-consultation meeting on October 7, 2014 and as noted in the FSR, the Town has limited availability of water supply for new developments. The Corseed subdivision is one of a number of developments that are expected to ask the Town for

allocation of the available supply. The Town has now commenced a Master Plan Class EA to address its water supply needs.

No response required by the applicant.

- 3 • Also, as noted in the FSR, the Town also requires additional water storage and external water mains to service this development. The Town's Master Plan is also addressing this matter.

No response required by the applicant.

### Stormwater System

- 1 • The FSR indicates that Quantity Control requirements of the Town and GRCA require control of the 2-100 year design storms. I was unable to find such a requirement in the Grand Valley Engineering Standards. The GRCA criteria for developments draining into the Grand River upstream of control dams is not the same as in other places. The Town generally defers to GRCA on this matter, providing there has been consideration of the routing between the development and the river.

**Further clarification is required.** As no written response was provided to these comments we are still not sure if quantity control was required by the GRCA.

- 2 • The FSR predated the current draft plan and changes have been made in the area of the SWM pond, so no review of details was possible. These details can be sorted out when the fabric of the draft plan takes its final shape. Rough grading plans will be needed to examine the inter-relationships of the pond, wetland, and roads at the west end of the plan.
  - It does not appear that the pond block is large enough. The slope between the north property line and the top of pond is well above 33% and directly from the rear residential property lines there is a 20% slope to top of pond. In Section 6 of the Town standards (no. 15), a 5 m wide working platform (max 4% slope) is required around top of pond, to the berm between or in the ponds, and to any drainage structures that service the ponds.
  - Section 5.3.5 of the FSR includes a very general section on SWM Pond Inspection and Maintenance. It will be a requirement during detailed design to provide an Operation and Maintenance Manual for the SWM Facility.
  - Section 5.4.4 indicates that infiltration trenches will be needed to achieve water balance requirements. Appendices E notes a length of 497 m based on 1 m wide trenches. A number of lots would be impacted to achieve this requirement and therefore we request that the SWM block be expanded to accommodate infiltration requirements.

- 3 • The Town's Engineering Standards require storm sewers on Collector Roads to be designed for a 10 year storm frequency. Addressed. It has been noted as a requirement.



- 4 • The FRS requires a great amount of fill to be imported to the site, and in particular to the Mixed Use blocks because of the need to direct water to the storm water pond. The report should include consideration of alternatives. **Not Addressed.** The revised report does not include alternatives.

### Traffic Impact Study and Transportation

- The Traffic Study did not reflect the pre-submission consultation of October 7, 2014, which included the requirement for a 26 m Collector Road through the development.

Addressed. The report now includes the collector road.

- The TIS should look holistically at how the development fits into the community. The timing of the Mixed Use blocks is irrelevant to the impact they will have so the TIS should include the entire draft plan and should not defer consideration of the Mixed Use blocks to future independent studies.

A draft plan condition will require the developer to design and construct the intersection with County Road 25 to the satisfaction of the County of Dufferin and Town and may include, but not limited to turn lanes, signage, and signalization.

- Section 6.1 should be revised to bring the road base up to Town standards.

**Not Addressed.** Granular B will need to be increased. A draft plan condition should require an updated Geotechnical Report that includes recommendations for road structure that also meets the Town's minimum standards. Outlined below are the differences.

	In FSR	Local Town Standard	Collector Town Standard
Asphalt Concrete	90 mm	40 mm HL3 50 mm HL8	50 mm HL3 60 mm HL8
Granular "A"	175 mm	150 mm	150 mm
Granular "B"	350 mm	450 mm	600 mm

- The active transportation requirements will include the need to extend a sidewalk along County Road 25 and should also discuss access to the trail system.

The TIS notes that the County requested that no pedestrian connections be provided within the County Road Right of Way. The Town will require a connection to the existing sidewalk on Water Street (County Road 25). A 3 m block is to be provided fronting the subdivision so a sidewalk can be installed off the County ROW. For the remaining section off the subject property, a sidewalk will be required in the County ROW to provide a connection to the existing sidewalk. The County is aware that this connection is needed in their ROW and they will need to be satisfied with the drawings submitted at detailed design.

### **New Comments**

1. There is only one road access point to 52 houses. A second road connection is requested. This will also allow the 52 houses to be serviced by more than 1 watermain feed.
2. A draft plan condition will be required to ensure a temporary entrance is provided until the Hydro pole at Street 'A' has been relocated.
3. In the IPS letter dated May 17, 2018 there is a comment indicating Blocks 2 & 6 are park blocks. Only Block 6 is considered park block.

Please let us know if additional explanation or a meeting is required.

Yours truly,

**R.J. Burnside & Associates Limited**



Carley Dixon, P.Eng.  
GF:sgd



## Oliver Beaudin

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**From:** Nathan Garland <ngarland@grandriver.ca>  
**Sent:** July 7, 2017 3:12 PM  
**To:** Oliver Beaudin  
**Subject:** RE: 14118\_Corseed Proposed Development

Yes, it is still required. It might be documented somewhere, but as Stormwater is typically required to be controlled up to and including the 100 Year and the decision to waive is only typical on the Grand River and has been our practice. GRCA had issued a permit 398/13 for repairs to the area next to the trail way culvert on the upstream location due to the erosion occurring on site, so we're aware that the area and infrastructure downstream has erosion issues in the past. From my understanding the discharge is to Boyne Creek and not the Grand River. I can ask, but if there was a Geomorphology Study done on Boyne Creek it might be able to demonstrate the modifications or control may or may not be necessary, but it would be up to the proponent to demonstrate that. If you were to go that route we would recommend the proposed crossing be included in the study scope to help coordinate some time and level of effort.

Regards,

Nathan Garland  
Resource Planner  
Grand River Conservation Authority

[ngarland@grandriver.ca](mailto:ngarland@grandriver.ca)  
Direct Line: 519.621.2763 x 2236  
Office: 1.866.900.4722  
Fax: 519.621.4945

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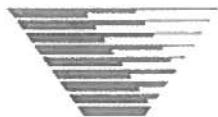
**From:** Oliver Beaudin [mailto:[OBeaudin@Valdor-Engineering.com](mailto:OBeaudin@Valdor-Engineering.com)]  
**Sent:** July 7, 2017 2:55 PM  
**To:** Nathan Garland  
**Subject:** RE: 14118\_Corseed Proposed Development

Thanks, Nathan,

So to confirm, we ARE required to provide quantity control up to the 100-year storm? Is the decision to not waive that condition due to erosion concerns documented, and if so, can you share that documentation with us? We are still making changes to the draft plan, and we'd like to ensure we are not oversizing the pond if it is not strictly required.

Regards,

**Oliver Beaudin, B.Eng.**  
*Project Manager, Water Resources*



### VALDOR ENGINEERING INC.

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**From:** Nathan Garland [<mailto:ngarland@grandriver.ca>]  
**Sent:** Friday, July 07, 2017 2:51 PM  
**To:** Oliver Beaudin <[OBeaudin@Valdor-Engineering.com](mailto:OBeaudin@Valdor-Engineering.com)>  
**Subject:** RE: 14118\_Corseed Proposed Development

Hi Oliver,

I want to say that we typically don't require quantity control on developments close to or directly adjacent to the Grand, but I don't believe we had waived that condition in this case as we know there is erosions issues along Boyne Creek and therefore quantity controls would be implemented. I've looked through Engineering's review notes and they seem satisfied with the approach.

Regards,

Nathan Garland  
Resource Planner  
Grand River Conservation Authority

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**From:** Oliver Beaudin [<mailto:OBeaudin@Valdor-Engineering.com>]  
**Sent:** July 7, 2017 2:32 PM  
**To:** Nathan Garland  
**Subject:** 14118\_Corseed Proposed Development

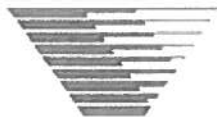
Hi Nathan,

We have just received comments from the Town of Grand Valley with regards to the proposed Corseed development. One of the comments calls into question the stormwater management quantity control requirements, indicating that the criteria for developments draining to the Grand River upstream of control dams might be different than the standard criteria.

Can you please confirm the SWM criteria that this development is subject to?

Thank you,

**Oliver Beaudin, B.Eng.**  
*Project Manager, Water Resources*



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