
MEETING TYPE AND DATE: REGULAR COUNCIL – NOVEMBER 16, 2021
AUTHOR: CORINE (CORY) GAIN, MANAGER OF PLANNING
SUBJECT: **DP2020-028-C + DVP2020-019 (LAKESTONE SUMMIT PHASE) –
DEVELOPMENT PERMIT (VARIOUS) & DEVELOPMENT VARIANCE PERMIT
(RETAINING WALLS, ROAD DESIGN SPEED AND CROSS SECTION AND
LENGTH OF CUL-DE-SAC)**

ESSENTIAL QUESTION:

To consider each a Development Permit (Hillside; GHG Reduction & Resource Conservation; Stability, Erosion & Drainage Hazard; Natural Environment; Wildland Fire Hazard) and a Development Variance Permit to vary provisions of both the Zoning Bylaw and the Subdivision and Development Servicing Bylaw concurrently for the proposed 57-lot Summit Phase of the Lakestone development. To determine whether the development as proposed meets established guidelines and the requested variances are an appropriate response to site conditions.

OPTIONS:

- A. THAT DP2020-028-C for property located at Beacon Hill Drive, legally described as Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be approved;
AND THAT Development Variance Permit DVP2020-019 for property located at Beacon Hill Drive, legally described as Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 to vary Zoning Bylaw 561, 2007 as follows:
- A. Development Variance Permit DVP2020-019 for Lakestone Summit Phase (Tyndall Road) legally described above to amend Zoning Bylaw 561, 2007, as follows:
- (a) Section 8.5 Fences and Retaining Wall Subsection 8.5.8 to vary the height of retaining walls on all residential lots, except those required as a condition of subdivision approval from a maximum height of 1.5m measured from grade on the lower side to the heights described in Table A forming part of DVP2020-019.
 - (b) Construction of the retaining walls shall be in locations substantially in compliance with the site plan contained in Schedule A attached to and forming part of this permit: Lakestone Summit Phase, Lakestone Master Planned Community, Key Plan – Retaining Walls, Drawing No. 1, Sheet 1 of 3, Rev. 1 dated 2020/10/30; Lakestone – Summit Phase, 9295 Okanagan Center Road West, Plan & Profiles – Retaining Walls 1 & 2, Drawing 2, Sheet 2 of 3 Rev. 01 dated 2020/11/09; and Lakestone – Summit Phase, 9295 Okanagan Center Road West, Plan & Profiles – Retaining Walls 3 & 4, Drawing 3, Sheet 3 of 3 Rev. 01 dated 2020/11/09, all prepared by prepared by Alpine Civil Engineering; and
- B. Subdivision and Development Servicing Bylaw 1121, 2020 as follows:
- (a) Section Q Table Q-1 Highway Cross Section Requirements and Amenities be varied to a modified Cross-section along Beacon Hill Drive into the Summit Phase, including wider pavement widths.

- (b) Section G Table Q-2-Design Speed for a Hillside Collector (C) Road be varied from 50 km/h to 30 km/h, with a radius of 37 metres and a 2% crossfall, for that portion of Beacon Hill Drive within the Summit Phase of the Lakestone subdivision highlighted yellow on the diagram in Schedule B attached to and forming part of DVP2020-019.

Section G.6 Cul-de-sac, Subsection G.6.1, cul-de-sac length be varied by 800 metres to a total of 1,100 metres and Subsection G.6.4 requirement for an emergency exit be waived.be approved.

- B. THAT DP2020-028-C for property located at Beacon Hill Drive, legally described as Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be denied;
AND THAT Development Variance Permit DVP2020-019 for property located at Beacon Hill Drive, legally described as Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 to vary Zoning Bylaw 561, 2007 and Subdivision and Development Servicing Bylaw No. 1121, 2020 be denied; OR
- C. THAT DP2020-028-C and DVP2020-019 for property located at Beacon Hill Drive, legally described as: Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be deferred pending receipt of additional information as identified by Council;
- D. THAT DP2020-028-C and DVP2020-019 for property located at Beacon Hill Drive, legally described as: Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be referred back to staff to work with the applicant to revise the site plan and proposed variances as identified by Council; OR
- E. THAT any combination of the above be approved.

EXECUTIVE SUMMARY:

Development Permit DP2020-028-C was first considered by Council on April 6, 2021, again on June 1, 2021, and again on August 24, 2021. At the August 24, 2021 meeting, Council directed staff via Resolution 21.08.188 to process the application in accordance with the consolidated version of the Subdivision and Development Servicing Bylaw 1121, 2020 as summarized in the Works and Services Application Process as set out in Figure 2-B. The applicant has submitted the required information as noted above, for review by District staff except for information for a varied cul-de-sac length. This report includes information from this review to support consideration of each permit in response to Council's resolution.

Development permits are one of the tools the District of Lake Country uses to guide subdivision and development in the community. DP2020-028-C deals with both technical and form and character aspects of the development and specifies the measures required by the applicable DP Area Guidelines to protect development from hazardous conditions and protect the natural environment, its ecosystems and biological diversity.

This Development Permit and the associated Development Variance Permit do not permit any development related construction activity to take place. A Certificate to Commence Construction for infrastructure and Building Permits for home construction is required prior to commencing any development related construction activity.

The proposed Summit Phase development area is approximately 8.9 ha (22 ac). The proposal is to create 57 urban residential lots along an extension of Beacon Hill Drive, the main collector road and access to the proposed water reservoir, and wildfire mitigation of parks and open space areas. DVP2020-019 outlines requested variances for retaining wall height for walls that will be constructed as part of subdivision works to support the proposed subdivision layout; highway cross section design for the extension of Beacon Hill Drive; design speed for a portion of Beacon Hill Drive; and the length of the cul-de-sac from the intersection of Beacon Hill Drive and Long Road to the southerly end of the proposed Summit Phase or alternately the intersection of Beacon Hill Drive and Tyndall Road to the southerly end of the proposed Summit Phase of the Lakestone development as shown on Figure 3.

Since DVP2020-019 was considered by Council on the June 1st, 2021 and August 24, 2021, District Engineering staff have worked with the applicant's design team to assist them with completing the rationale for the design elements required to meet Council's resolution. The applicant's design package has provided enough information for District Engineering staff review. Therefore, the Engineering Department's assessment as requested by Council is now complete and as a result the District Engineer is able to support variances regarding road cross section and design speed and provide sufficient information for Council to give due consideration to the cul-de-sac length variance.

BACKGROUND/HISTORY:

Application Type	Development Permit (DP), Development Variance Permit (DVP) and Subdivision	
File Number:	DP2020-028-C; DVP2020-019 and S2020-027	Folio: 2117000; 2224015; 2224020
Legal Description:	012-274-551 BLOCK B SECTION 3, 4 AND 9 TOWNSHIP 20 ODYD PLAN 521 EXCEPT PART ON PLAN EPP86639 012-274-305 THAT PART OF LOT 87 SHOWN ON PLAN B13454; SECTION 9 TOWNSHIP 20 ODYD PLAN 521 EXCEPT PLANS H18660, EPP74823 AND EPP86639 012-274-283 THAT PART OF LOT 86 SHOWN ON PLAN B13454; SECTION 9 TOWNSHIP 20 ODYD PLAN 521 EXCEPT PLAN H18660 AND EPP86639	
Civic Address:	Extension of Beacon Hill Drive [Lakestone Summit Phase]	
OCP Designation:	Urban Residential (Guided by Lakestone Master Plan)	
Zoning Designation:	DC-3 Direct Control (Lakestone) Zone	
Land Use Contract	No	
ALR:	No	
Parcel Size of Parent Properties:	103.25 Hectares (255.13 Acres) 1.13 Hectares (2.8 Acres) = ~105 ha. Total Area .78 Hectares (1.95 Acres) Summit Phase = 22.1 ha (54.8ac)	
DP Area(s):	Hillside; GHG Reduction & Resource Conservation; Stability, Erosion & Drainage Hazard; Natural Environment; and Wildland Fire Hazard	
Water Supply:	Municipal	
Sewer:	Municipal	
Site Summary:	Zoning: DC3 – Direct Control (Lakestone)	Use: Vacant
<i>North:</i>	RU1 – Single Family Housing RR1 - Rural Residential 1	Vacant
<i>East:</i>	DC3 - Direct Control 3 (Lakestone) RR1 – Rural Residential	Residential Vacant
<i>South:</i>	DC3 - Direct Control 3 (Lakestone)	Vacant
<i>West:</i>	RU1 – Single Family Housing RM-2 Low Density Row Housing RR1 - Rural Residential 1 DC3- Direct Control 3 (Lakestone)	Residential Vacant

Map 1: Location Map with Orthophoto

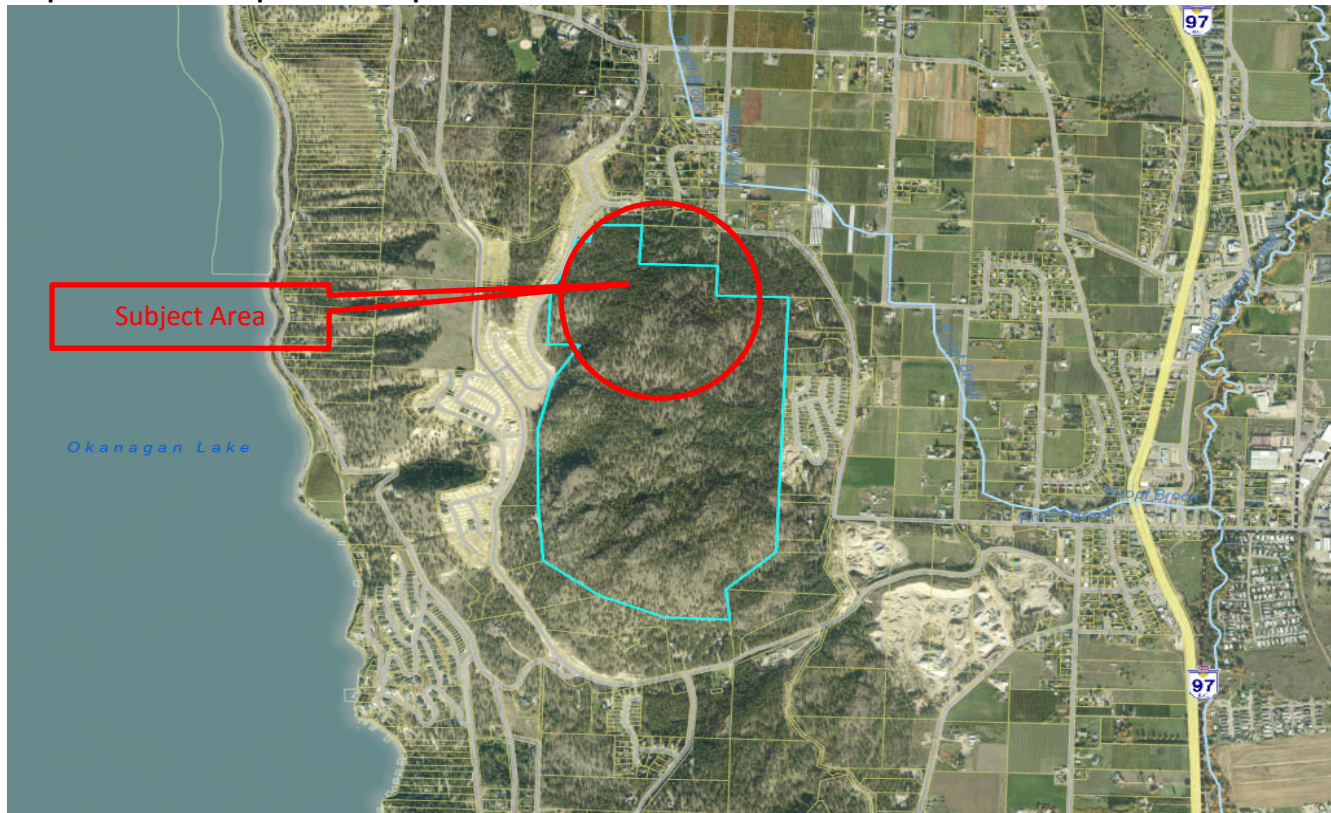


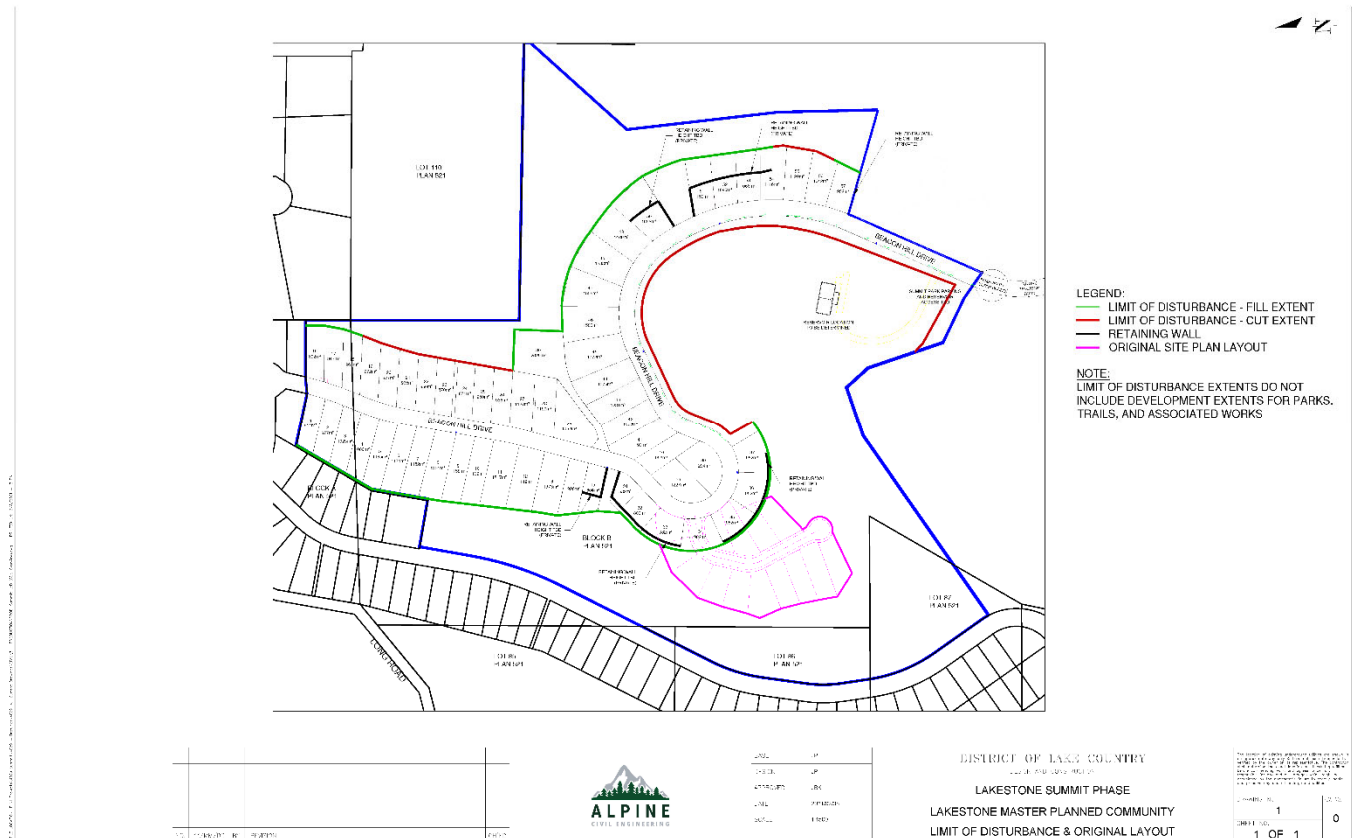
Figure 1: Proposed Site Plan:



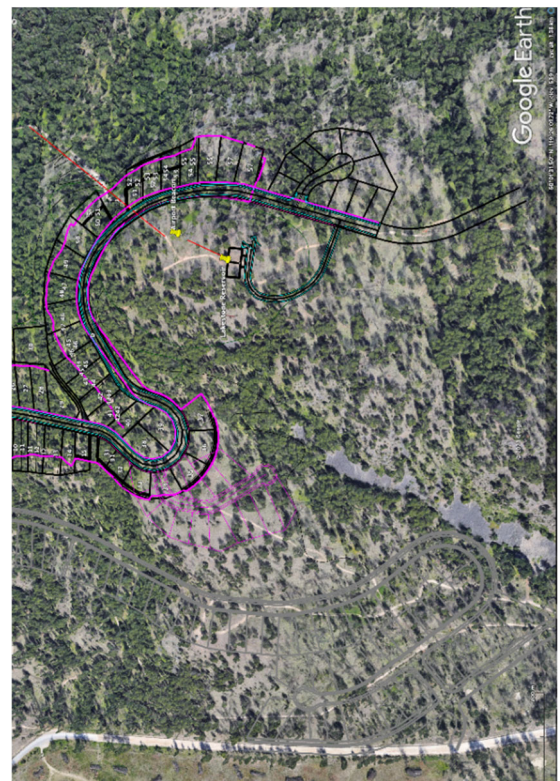
Figure 2: Examples of Proposed Retaining Walls



Diagram 1: Summit Phases Layout Comparison of 2012 Master Plan to 2021 Subdivision Proposal



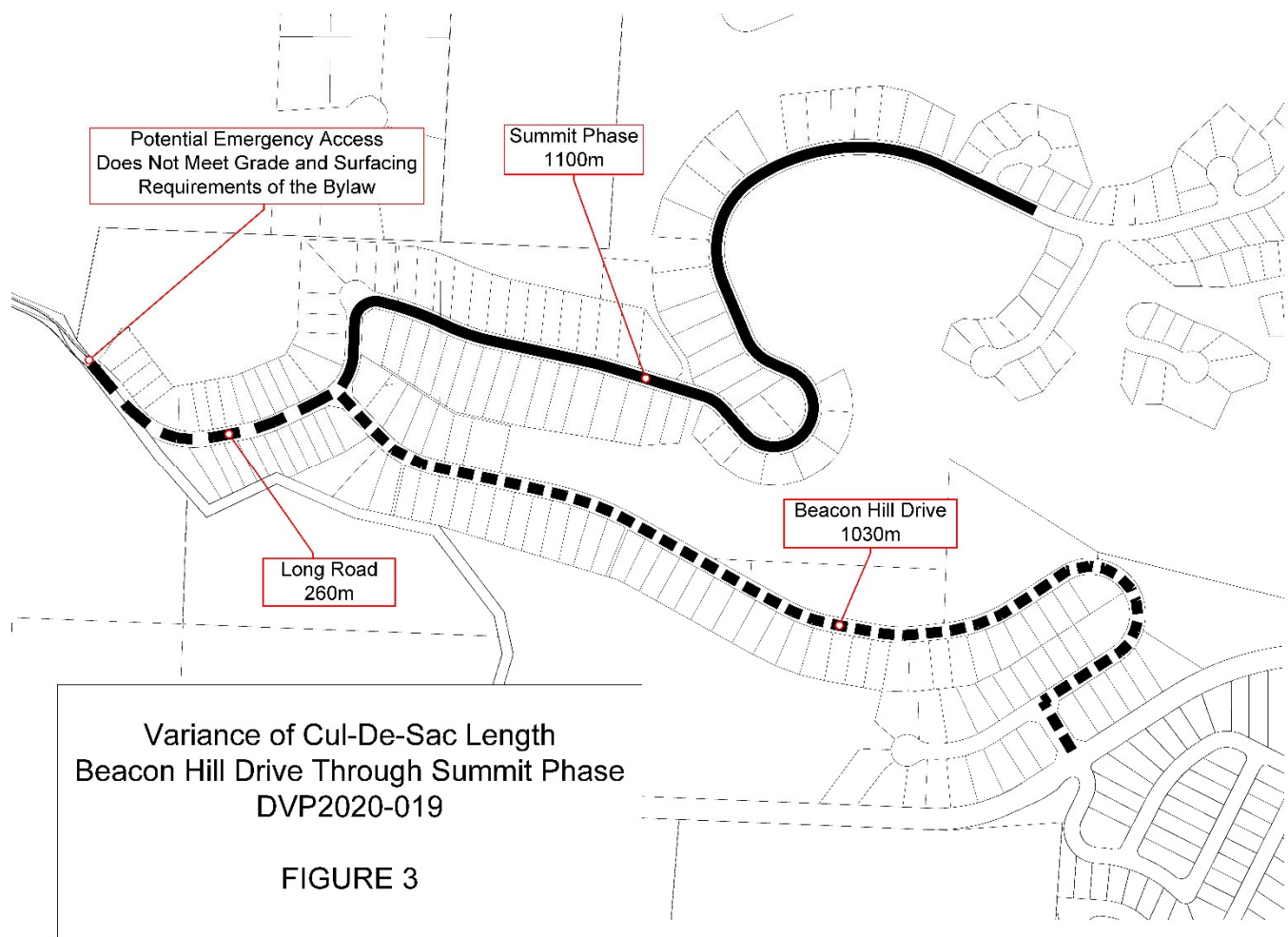
Google Earth Image:



CHRONOLOGY:

<i>Date:</i>	<i>Event:</i>
2017-10-18	Original subdivision application (formerly identified as Phases 5.2 & 6.1)
2020-11-23	Application reactivation, new file number assigned, Revised layout removed lots in pink west of the hairpin turn (see Figure 1)
2020-12-11	Detailed Application Review
2020-12-17	Core Team Meeting
2021-01-28	External Referrals
2021-04-06	Council initial consideration of DP2020-028; Resolution 21.04.058 directed next steps
2021-05-11	Strategy Session to introduce Lakestone Master Plan 2021 updates
2021-05-18	Notification for DVP2020-019
2021-06-01	Council reconsideration of DP2020-028 and initial consideration of DVP2020-019
2021-08-24	Council reconsideration of DP2020-028 and reconsideration of DVP2020-019
Concurrent	Approving Officer consideration of S2020-027

Figure 3:



DISCUSSION/ANAYLSIS:

Development Permit DP2020-028-C was initially considered by Council on April 6, 2021. A copy of the report is available at Item 10 of the agenda package or:

<https://lakecountry.civicweb.net/FileStorage/548A63EFCB0046B2A697F985C0028114-DP2020-028.pdf>. The minutes of the meeting are available at: [District of Lake Country - Document Center \(civicweb.net\)](#).

Development Permit DP2020-028-C was reconsidered, and Development Variance Permit DVP2020-019 initially considered, by Council, on June 1, 2021. A copy of the reports is available as Item 9 of the Agenda package or:

[District of Lake Country - Document Center \(civicweb.net\)](#)

A copy of the Minutes, including input and resolutions can be found at:

<https://calendar.lakecountry.bc.ca/meetings/Detail/2021-06-01-1900-Regular-Council-Meeting/0b5953d1-3595-484b-80bd-ad3d00d6793c> beginning on page 3.

Development Permit DP2020-028-C and Development Variance Permit DVP2020-019 were reconsidered by Council on August 24, 2021. A copy of the reports is available as Item 9.2 on the Agenda package or:

<https://calendar.lakecountry.bc.ca/meetings/Detail/2021-08-24-1900-Regular-Council-Meeting2/23b5ba7e-8df2-4353-b52d-ad8d00cf7f8e> Please note per the Minutes Agenda item 9.2 on the Agenda package was moved to follow item 11.3 and a copy of the Minutes, including input and resolutions can be found at:

<https://calendar.lakecountry.bc.ca/meetings/Detail/2021-08-24-1900-Regular-Council-Meeting2/1eb33f18-5251-49fa-a970-ad9400e515eb>, beginning at the bottom of page 4.

The Lakestone Master Plan 2012, as amended, guides the overall development; applications for Development Permit and subdivision address the details of each phase on a phase-by-phase basis. Where necessary, Development Variance Permits are requested to address site-specific solutions to challenges encountered. The Subdivision and Development Servicing Bylaw - Schedule Q – DESIGN AND CONSTRUCTION OF HILLSIDE DEVELOPMENT AREAS, contains specifications specifically designed for addressing the challenges of constructing on hillsides. As such, any variance requested to Schedule Q is requesting a change to the standards that already compensates for these conditions. This report addresses these issues for the next, Summit Phase, of the Lakestone Development and the issues outlined in Council Resolution 21-04-058.

Overview

The application submission included a project description/rationale for each of the Development Permit (Attachment A) and Development Variance Permit (Attachment B). Attachment C1 contains the Development Permit Area Checklists submitted by the applicant to complement the information provided in the first two attachments and to demonstrate further how the proposal respects applicable Official Community Plan DPA guidelines including additional explanatory material submitted in response to Council's comments at the April 6th meeting (C2).

Development Permit (DP)

Development Permit DP2020-028-C addresses Hillside; GHG Reduction & Resource Conservation; Stability, Erosion & Drainage Hazard; Natural Environment and Wildland Fire Hazard Development Permit Area guidelines as applicable based on Development Permit Area (DPA) mapping contained in the District's Geographic Information System (GIS) and shown in Attachment D as pages D-1 and D-2. Attachment D also includes the "Hillside DP – Original Ground" (D-3) and "Hillside DP - Proposed Ground" (D-4) drawings showing the conceptual grading plan proposed for the site to be completed as part of the subdivision works. The grading plan is provided for information only and needs to be approved through additional technical review and approval by the District. Nothing in the Development Permit provides exemption or relieves the applicant of the responsibility to comply with the technical standards and processes contained within the Subdivision and Development Servicing Bylaw. The applicant must obtain a Certificate to Commence Construction prior to commencing any development related construction activities and Building Permits for home construction.

The DP and schedules contained in Attachment E outline the details of how the proposed development addresses site conditions. Site development must follow the recommendations contained in the technical reports contained in the schedules attached to and forming part of the permit, specifically with respect to drainage, environmental and wildfire mitigation. While each of the Technical DPs could be considered and issued by the Director of Planning and Development, a single comprehensive DP has been presented for Council consideration.

Development Variance Permit (DVP)

Zoning Bylaw Variance - Retaining Wall Height

Attachment F contains proposed DVP2020-019 outlining variances to Zoning Bylaw 561, 2007 and Subdivision and Development Servicing Bylaw No. 1121, 2020. The proposal is to vary Zoning Bylaw section 8.5 Fences and Retaining Wall subsection 8.5.8 to allow for construction of walls greater than 1.5m in height on twelve lots as identified in Schedule A of the DVP. Details of the location and profiles of the proposed walls are also contained in the schedule. Proposed walls are consistent with those constructed in previous phases to respond to challenging topography. The retaining wall height is directly linked to the road alignment and gradient and therefore any alteration to the retaining wall height also impacts the grading of the site, road design and associated underground utilities.

Subdivision and Development Servicing Bylaw Variances

The application proposes to vary the following Subdivision and Development Servicing Bylaw sections:

- Highway Cross Section Requirements and Amenities;
- Design Speed for a Hillside Collector Road from 50 km/hr to 30 km/hr.
- Allow for a temporary cul-de-sac with a length in excess of that permitted in the bylaw and without an emergency exit.

The Development Variance Permit DVP2020-019 was considered by Council during a Regular Council Meeting on Tuesday, June 1, 2021, the following resolution was passed:

THAT DP2020-028-C and DVP2020-019 for property located at Beacon Hill Drive, legally described as: Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be referred back to staff pending receipt of the following additional information:

- *a safety, functional and operational assessment of the following information from the Engineering and Environmental Services Department:*
 - *a complete engineering design submission generally including the items listed on page 13 of the report from Planning and Development dated June 1, 2021, once received from the applicant;*
 - *the designation of minor collector road versus local road;*
 - *drainage issues;*
 - *rollover curbs versus barrier curb standards;*
 - *the implications and cost impacts of increased retaining wall height and the resulting sanitary sewer depth.*

The Development Variance Permit DVP2020-019 was again considered by Council during a Regular Council Meeting on Tuesday, August 24, 2021, the following resolution was passed:

THAT DP2020-028-C and DVP2020-019 for property located at Beacon Hill Drive, legally described as: Block B Sections 3, 4 and 9 Township 20 ODYD Plan 521 Except Part on Plan EPP86639; That Part of Lot 86 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 31 Except Plan H18660 and EPP86639 and That Part of Lot 87 Shown on Plan B13454; Section 9 Township 20 ODYD Plan 521 Except Plans H18660, EPP74823 and EPP86639 for a 57-lot residential subdivision be deferred to staff to be processed in accordance with the consolidated version of the Subdivision and Development Servicing Bylaw 1121, 2020 as summarized in the Works and Services Application Process as set out in Figure B-2.

Additional information has been submitted by applicant since the last time the variances were considered by Council. District Engineering staff have determined that there was sufficient information to satisfy the Council's resolution and for staff to undertake an assessment of the safety, functional and operational aspects of the proposed variances to the Subdivision and Development Servicing Bylaw (SDDS) contained within DVP2020-019. It is imperative that any future road designs created by the applicant look beyond the boundaries of this phase to ensure a full and holistic understanding of how the transportation network will function and integrate with the completed subdivision and the surrounding community. While this portion of the work has not proceeded to conclusion, it has identified a number of issues that will need to be addressed as part of the issuance of the PLR and Detailed Design review that will lead to approval of the Summit Phase and the issuance of a Certificate to Commence Construction.

The outstanding actions the applicant will be required to complete, as part of the detailed design, in order to meet the Subdivision and Development Servicing Bylaw requirements are:

- Complete a holistic and detailed transportation design for the entire road corridor between Tyndall Road and Chase Road.
- Identify all transportation engineering constraints, impacts and challenges, including determining the extent of any residual risk and the appropriate mitigation measures to ensure public safety, especially vulnerable road users such as pedestrians and cyclists.

- Make application for, and receive, Detailed Design approval for the Summit Phase through the process required in the proposed Subdivision and Development Servicing Bylaw Figures B-1 and B-2.
- Address the drainage outfall for Phases 4 & 5.1 prior to the construction of any additional drainage system infrastructure that connects to this same system.

Tree Removal Plan

Council expressed some concern about the timing and extent of tree removal that would be required to accommodate the proposed road alignment and subdivision of residential lots, in particular the removal of two significant trees as shown in Figure 5 of the Environmental Report attached to and forming part of the DP. In response, the applicant engaged the Qualified Environmental Professional to prepare a follow-up report addressing the expressed concerns. A Technical Memorandum from the QEP dated April 27th is attached as Schedule F to the DP to address the tree removal protocol for the Summit Phase more specifically and address restorative measures to be implemented following completion of works.

Beyond the terms and conditions of the DP, with respect to timing for land clearing activities, the applicant has confirmed that tree removal will only take place within the approved “limits of disturbance”. Wherever possible, trees will be retained on the building lots when site grading permits. The extent of the tree removal on individual lots will be determined during construction. It is anticipated that some trees will remain at the rear of some residential lots.

Lakestone Master Plan 2012, as amended 2021

Council was provided a brief introduction to the proposed 2021 Master Plan revisions at a Strategy Session on May 11, 2021. The document was subsequently made available for detailed review and comment with the understanding that Section 3 – Infrastructure Planning & Design would be subject to further amendment based on work currently underway to resolve remaining issues.

Macdonald Communities Limited provided additional information to Council on May 12, 2021 in an effort to address expressed concerns. For transparency, this letter is contained in Attachment K to this report.

Additional work on the Master Plan, including Section 3, Infrastructure Planning and Design is underway with a focus on the road network.

Legislation & Applicable Policies

Local Government Act: Section 488 provides that an Official Community Plan may designate specific area as Development Permit Areas and requires that the guidelines for these areas be described and met by applications for Permits under this section. Sections 489-491 further explain how development permit areas shall be applied and what restrictions, requirements and conditions may be included in development permit areas.

Section 498 provides that: “(1) On application by an owner of land, a local government may, by resolution, issue a DVP that varies, in respect of the land covered in the permit, the provisions of a bylaw under any of the following: ... (b) Division 5 [Zoning Bylaws]”.

Official Community Plan Land Use Designation: The future land use designation of the property is Urban Residential; new purpose-built residential development is directed to this area. OCP section 5.10 describes Lakestone as follows:

“Lakestone is a continuously developing residential community in southwestern Lake Country. This master planned community will include a wide range of single unit, duplex and multiple unit residential components and neighbourhood service commercial elements. With the development of Lakestone and the expansion of the District infrastructure network, a whole new frontier was opened for development in Lake Country.”

The goal is to “develop Lakestone into a high-quality residential area while remaining accessible to the community at large”. The objective is to support neighbourhood service commercial and recreational development as part of

that plan consistent with the Lakestone Master Plan. The developer administers design guidelines that address context-sensitive buildings and landscape design. Parks and trails in the area make a significant contribution to the lifestyle aspects of the development.

Official Community Plan Development Permit Area (DPA) Designations: The subject property is subject to each of the Hillside; GHG Reduction & Resource Conservation and Natural Environment DPA guidelines. Small portions of the proposed development site are also subject to each of stability and drainage aspects of the Stability, Erosion & Drainage Hazard as shown in Attachment D to this report. As such, the affected areas have been addressed by suitably qualified professionals.

DP2020-028 Schedules A through E contain the technical reports submitted to address the DPA guidelines as they apply specifically to the proposed development site. Recommendations contained in each of the technical reports form part of the terms and conditions of the permit.

Schedule A to the permit contains the Drainage Review prepared by Beacon Geotechnical Ltd. with respect to the impact of site grading plan on an existing natural drainage channel as identified by the DPA mapping. The review indicates the encroachment is limited and that “the risks from a geotechnical perspective to the natural environment below can be minimized by using best practices” and “will be within acceptable levels”.

Schedule B to the permit contains the Drainage Corridor Development Permit Engineering Assessment prepared by Alpine Consultants to address potential disruption to natural drainage flow and associated corridors; it provides confirmation that the proposed subdivision layout and engineering design has been coordinated with the Qualified Environmental Professional (QEP) and Geotechnical Engineer (as per Schedule A). The report further advises that there is a progressive rainwater management strategy for the area impacted which will be secured by the Servicing Agreement as part of the subdivision process.

Schedule C to the permit contains the Environmental Assessment & Mitigation Plan prepared by Ecoscape Environmental Consultants Ltd. specifically for the Summit Phase. The report format and content are consistent with regional best practices; it includes a thorough review of the proposed works, an environmental assessment, an impact assessment and recommendations for mitigation measures, environmental monitoring, restoration and performance bonding and confirms that the proposed subdivision layout has been informed by the findings of Ecoscape’s field survey and Environmental Sensitive Area (ESA) analysis. Existing terrestrial, riparian and wetland resource values are identified and the potential for rare and/or endangered species and habitats have been assessed. Recommendations to maintain the natural integrity of existing ecological communities through sensitive design are provided throughout the report and summarized in section 4.0 Mitigation Measures and Recommendations with more detailed directions in each twelve subsections as follows: Clearing and Grubbing; Tree Protection; Erosion and Sediment Control; Emergency Spill/Response Plan; Stormwater Management and Wetland Protection; Air Quality & Greenhouse Gas Reduction; Habitat Remediation and Enhancement; Rockfall Mitigation; Invasive Species Management; Site Clean Up; Environmental Monitoring; and Restoration, Performance and Maintenance Bonding. Of note is that the QEP indicates that the entire project area shows evidence of previous logging activities and disturbance. In any case, the report advises that impacts to environmental values are reduced by the proposed development through the retention of greenspace and the retention of significant features such as steep slopes and cliffs, wetlands, wildlife trees, existing trails and wildlife crossings. The QEP advises that it is anticipated that the project will result in a loss of 17% ESA 2 (High) and 23% ESA 3 (Moderate) within the project development area. Maintaining the bounds of the Limit of Disturbance area will be particularly important. If it is necessary to encroach on any area outside of the defined area, an amendment to the DP will be required. The applicant has clarified that clearing will only be conducted to the extent necessary to facilitate lot grading. Where natural areas can be left undisturbed, they will be. The QEP will make more definitive recommendations for any restorative or mitigative works that may be appropriate once the extent of clearing is determined in the field.

Schedules D contains Mosaic Forest Management’s Wildfire Threat Assessment conducted on October 31, 2020 and describes prescriptive measures for the area identified as “Open Area and Parks” (lands that will be in due course be dedicated to the District on subdivision) on the map attached to the report.

Schedule E contains a second report from Mosaic Forest Management confirming wildfire mitigation has been completed on several lots previously during work conducted in Phase 5.

Schedule F contains a Technical Memorandum prepared by Ecoscape Environmental Consultants Ltd. dated April 27, 2021 that address the Tree Removal Protocol for the Summit Phase specifically in response to Council's concerns.

An Environmental Monitor must be retained by the developer and be present on-site during construction activities to guide and document compliance with Best Management Practices, mitigation measures and all other recommendations contained in the Environmental Report Section 4.11 at their own cost. Prior to permit issuance the developer will be required to submit confirmation that the Qualified Environmental Professional hired to conduct the on-site monitoring is authorized to stop work should an incident arise that is causing undue harm (unforeseen or from lack of due care) to terrestrial resource values. No formalized landscape plan is required as the extent of development is limited to clearing for lot and road construction within the defined "Limit of Disturbance Area" (see Schedule C, Appendix 2). The primary concern for restoration involves returning exposed slopes back to their natural state by hydroseeding the cut and fill slopes with grass seed composed of 100% native grasses and approved by the QEP conducting monitoring prior to implementation.

Zoning Bylaw: The site is subject to DC3 – Direct Control (Lakestone) zone regulations and all Zoning Bylaw general regulations as applicable.

While the proposed plan of subdivision reflects the general layout contained in the Lakestone Master Plan the number of lots to be created in the Summit Phase has been reduced from 65 to 57 by topographical constraints. Even with this reduced lot yield the site grading required to accomplish the proposed plan of subdivision in this phase will result in retaining walls greater than 1.5m in height. As such, variance of section 8.5.8 is requested.

The applicant advises that the proposed retaining walls are consistent with those constructed in previous phases as demonstrated by the photos above in Figure 2. Walls in the proposed locations indicated facilitate the creation of home sites adjacent to the extended Beacon Hill Drive and effectively prevent further encroachment into environmental sensitive areas. All walls will be located to the rear of the homes on the proposed lots on private lands. Continuity in wall materials and colour with previous phases is proposed to maintain the established aesthetic.

Table A summarizes the maximum wall height requested by Lot number. Actual wall heights will be dependent on final site grading.

Table A:

Summit Phase Proposed Lot Number	Maximum height permitted
15	5.1m
31 to 33	10.3m
35 to 37	8.1m
50	6.7m
51 to 54	4.9m

Subdivision and Development Servicing Bylaw:

Subdivision and Development Servicing bylaw standards and requirements will be applicable at the time of subdivision or Building Permit application, as applicable.

If approved, the proposed retaining wall variances may result in the need for additional variances to Subdivision and Development Servicing Bylaw specifications for road design including, but not limited to, design speeds, centerline radii and right of way width/road cross-section in order to construct the proposed extension of Beacon Hill Drive. Through provisions of the bylaw, the District Engineer can address all but the design speed variance.

However, as previously mentioned, the variances are being presented to Council for consideration as a comprehensive package in this case.

Design Speed and Hillside Standard Cross-section

The additional technical design and analysis undertaken by the District's Engineering staff has confirmed the ability for the design vehicle to stay within their lane without having to encroach into the bicycle lane or the oncoming vehicle lane at some point. This was previously a concern that has been addressed through discussions with the Applicant's Engineer, supplemented by additional design review and reporting.

This road has been classified as a Minor Collector Street in the Mobility Master Plan and as a "Connector" in the 2012 Lakestone Master Plan. For context all of Okanagan Centre Road West and Tyndall Road are also classified as "Connector" roads in the 2012 Lakestone Master Plan and Major Collector's in the Mobility Master Plan with the remaining roads within the subdivision being classified as "Local" roads.

The Subdivision and Development Servicing Bylaw hillside development standards specify a 50 km/h design speed for hillside collector roads where development fronts both sides and 40 km/h for hillside local roads. The applicant is seeking a variance to the design speed for Beacon Hill Drive from 50 km/h to 30km/h to vary the design standards the hairpin turn (reduced design speed over a section of approximately 240 metres of the proposed road). Design speed of a road is used for establishing appropriate geometric design elements such as grade, superelevation and sight distance. The proposed design speed will result in a series of tighter radius corners though this section of road.

The applicant advises that the reduction in design speed being proposed for a localized segment of Beacon Hill drive allows for the optimization of the road alignment, while also minimize rock cut slopes. The area of the speed reduction variance is shown in Schedule B of the DVP.

The proposed grades over the hairpin section of the road range from 1 to 10%. Overall, the proposed design includes maximum grades of 12%. The hillside development standards of the Subdivision and Development Servicing Bylaw permit maximum grades on collector roads to be increased to 12% where necessary due to topographic constraints. The bylaw requires that the final grades be surveyed for verification prior to final subdivision approval.

Cul-de-sac Length

Section G.6 of the Subdivision and Development Servicing Bylaw, 1121, 2020 limits cul-de-sacs to a maximum length of 300 metres with provision for an emergency exit within 50 metres of the end of the cul-de-sac. Cul-de-sacs are generally measured from the last point where there are two or more alternative routes to exit to the remainder of the road network. In this case, this point is taken to be the intersection of Beacon Hill Drive and Long Road or alternately the intersection of Beacon Hill Drive and Tyndall Road (Figure 2).

Staff have identified this cul-de-sac as an item that needs to be considered by Council as a variance to the Subdivision and Development Servicing Bylaw, 1121, 2020. The Applicant advises that they have been operating on the principle that the long cul-de-sacs are an inherent part of the development and it isn't a cul-de-sac. It is just a road that will be extended with the subsequent phases.

The Applicant has not submitted a request for a variance; therefore, it is being brought forward by staff to ensure that Council has an understanding of the implications of this phase and ensure the process complies with the bylaw.

It is acknowledged by District Engineering staff that the difficult terrain and the inherent nature of the development's phasing result in a proposed cul-de-sac length that exceeds the bylaw maximum.

This variance is considered to be interim in nature as future phases will eliminate the need for a variance. However, the timing of the extension of Beacon Hill Drive (the spine road) connecting through in a southerly direction depends on market conditions and a phasing plan that will eventually eliminate the non-compliant cul-de-sac. Careful future road planning and future phase planning will be required to ensure an emergency/alternate access is provided as soon as possible.

The applicant's representative has suggested that development of this phase and perhaps the entire project would be impractical without this variance.

Highway and Driveway Access Bylaw: Access Permits will be issued on a lot-by-lot basis on application prior to Building Permit issuance.

Integrated Community Sustainability Plan: The anticipated 2021 update of the Lakestone Master Plan has been an ongoing process. It is fully anticipated that the 2021 version will realign the target for the number of multi-unit residential units to future phases to ensure that the diversity of housing stock available continues to reflect community needs. Subdivision design will continue to respond to site conditions as more detailed information becomes available on a phase-by-phase basis.

Heritage Conservation Act: There is a significant potential for the existence of archaeological sites in the area. As such, landowners are advised to inform themselves of their responsibilities under the Provincial Heritage Conservation Act. An Archeological Impact Assessment may be required to satisfy local FLNRO and/or First Nations that no archeological site is being impacted by the proposed development.

Technical Considerations:

Impact on Infrastructure and Other Municipal Services

The Lakestone Servicing and Water Master Plan Integration was completed in 2016. The District continues to address water and sewer items on an ongoing basis to improve the level of service provided; updates to the 2012 Master Plan to be considered by Council in Spring 2021 are expected to continue this process.

Concerns related to storm water management, mobility, emergency egress and feasibility of construction will be resolved prior to subdivision approval.

Given that the entire road connection has not been proven through design, there is a risk that new constraints will arise once the development moves beyond the Summit Phase that won't allow some or all of the network connections currently envisioned. The design solutions being presented appear to lean heavily on the proposed conceptual alignments shown in the Lakestone Master Plan without the detailed work required to prove their viability. These design issues appear to stem from not planning and designing beyond the current phase boundaries at how the network will integrate holistically.

While the Summit Phase will be limited to the creation of 57 fee simple lots suitable for single detached homes, extension of Beacon Hill Drive southward in accordance with the Master Plan provides primary access to the "Highlands" area of the Lakestone community opening additional lands for development. Extensive areas of subsequent phases have been identified as appropriate for low density multi-unit residential development. These future phases will contribute to realizing the original density targets contained in the Lakestone Master Plan, most particularly in the Highlands south and eastern areas.

Impact on Staff Capacity and Financial Resources (Cost/Benefit Analysis)

Regular staff time and resources have been used to process the application. A significant amount of staff time has been spent on the application to assist the applicant. This has caused delays in the processing of other files. Should this file be deferred back to staff, additional delays on other files are expected. The development will create some benefits for the community including additional property taxation base and is part of a larger plan that will see additional options for road network continuity. However, there will be increased operating costs for the municipality once infrastructure is turned over to District ownership. Therefore, the operational maintenance of the infrastructure is considered during the design phase. The addition of population in the community impacts other incremental services such as policing, transit and demand for services. Portions of the property taxation added will need to be allocated to ensure services can be maintained through the population growth.

Comments from Other Government Agencies, Council Committees and Relevant Stakeholders:

- BC Hydro – The section for development will belong to Fortis Electric except for the airport beacon which is on a private line connected to BC Hydro's infrastructure and they will need to send a detailed plan to show

where it needs to be relocated, to BC Hydro for discussion and approval with the private line's owner and the entity that owns the beacon. The applicant is working with BC Hydro, the airport and Fortis with respect to removing existing overhead lines and establishing a permanent power source power for the beacon that is located within 50m of the Summit water reservoir site. This will be addressed as part of the subdivision process.

Consultation, Public Feedback, and Communication to and from the Public and the Applicant:

Notification requirements as per the Development Applications Procedures Bylaw have been undertaken including signage and surrounding property owner letters to all properties located within 50 m of the subject property.

ANALYSIS OF OPTIONS FOR CONSIDERATION:

OPTION A: Approval of both DP2020-028-C and DVP2020-019 would allow the applicant to proceed with the subdivision of the Summit Phase of the Lakestone development in accordance with the Preliminary Layout Review issued by the Approving Officer.

OPTION B: Denial of both DP2020-028-C and DVP2020-019 would result in the applicant having to revisit their explanation of how the applicable Development Permit Area guidelines have been met and to redesign the proposed subdivision layout to eliminate any variances to the zoning bylaw regulations.

OPTION C: Deferral of the applications pending receipt of additional information as identified by Council would return the applications to staff to continue working with the applicant to address identified concerns. Any such deferral should be specific as to the information requested. Council is reminded that as long as the proposed development satisfies the majority of the Development Permit Area Guidelines they are obliged to grant the permit. The DP and DVP have been separated into two distinct documents to allow Council to consider the non-discretionary (DP) and discretionary (DVP) decisions separately.

OPTION D: Refers the applications back to staff to work with the applicant to revise the site plan and proposed variances as identified by Council.

OPTION E: Any combination of Options A and B be approved.

Respectfully Submitted,

Corine (Cory) Gain, MCIP RPP
MANAGER OF PLANNING
PLANNING & DEVELOPMENT

This report has been prepared with the collaboration of the following individuals:

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This report has been prepared in consultation with the following departments:

CONCURRENCES	
DEPARTMENT	NAME
Chief Administrative Officer	Tanya Garost
Director of Planning & Development	Jamie McEwan
Director of Engineering & Environmental Services	Matthew Salmon
Director of Parks, Recreation & Culture	Matt Vader
Director of Utilities	Greg Bucholz

ATTACHMENTS:

Attachment A	Applicant's Rationale/Proposal Description (DP)
Attachment B	Proposal Description (DVP)
Attachment C1	Development Permit Area Guidelines Checklist(s)
Attachment C2	Response to Council's questions regarding Development Permit Area Guidelines Checklist responses
Attachment D	Site Plan with Hazard DPAs and Pre- and Post-Development Site Contours
Attachment E	Development Permit DP2020-028-C
Attachment F	Development Variance Permit DVP2020-019
Attachment G	Erosion & Sediment Control Plan
Attachment H	Technical Memorandum from Ecoscape Environmental Consultants Ltd.
Attachment I	CTS Traffic Engineering Specialists Peer Review Report
Attachment J	Preliminary Engineering Comments
Attachment K	Letter to Mayor and Council from Macdonald Communities Limited dated May 12, 2021