Rocky View County Subdivision and Development Appeal Board

Appeals against the decisions of the Development Authority of Rocky View County to approve:

(a) Development Permit PRDP20221305 for a Special Function Business at 3084 Springbank Heights Way; and

(b) Development Permit PRDP20221306 for a Special Function Business at 3126 Springbank Heights Way

Hearing June 30, 2022

HEARING SUBMISSIONS From

(a) J.C. (Jack) Anderson (Appellant)

(b) William & May Greig (Appellant)

(c) David Pierce (Appellant)

Date: June 27, 2022

Submitted by Rick Grol, agent for the Appellants

H. J. (Rick) Grol, LLB, LLM 315A – 39 Avenue SE Calgary, AB T2G 1X5 T: 403-922-8269 E-mail: rgrol@shaw.ca

I. Introduction

- J.C. (Jack) Anderson, David Pierce, and William & May Greig each filed Notices of Appeal against the decision of Municipal Planning Commission, acting as the Development Authority (DA), to approve a development permit for a Special Function Business at 3084 Springbank Heights Way; and for a Special Function Business at 3126 Springbank Heights Way.
- Jack Anderson is the property owner and resident of 2270 Springbank Heights Way (east of the proposed development). David Pierce is the property owner and resident of 3328 Springbank Heights Way (west of the proposed developments). William & May Greig are the property owners and residents of 3150 Springbank Heights Way (immediately west of the proposed developments. [See Appendix A – Map]
- 3. The Appellants are materially affected by the approval of the proposed developments. The proposed development negatively affects the use and enjoyment of their properties.
- 4. These are the Appellants' submissions for the hearing on June 30, 2022.

II. Grounds for the Appeals

- 5. The Appellants submit that in approving the proposed developments the DA failed to properly, among other things:
 - (a) Evaluate the development permit applications;

(b) Take into account the County's Municipal Development Plan and applicable Area Structure Plan;

(c) Review the compatibility and impact of the proposed development on the adjacent developments and the appropriateness of the development on the parcel;

(d) Review the merits, or lack thereof, of the development permit application;

- (e) Consider the transportation impacts of the proposed development; and
- (f) Apply sound planning principles.
- 6. The Appellants submit that the DA failed to comprehensively review the impact of the proposed development on the surrounding properties in conjunction with the proposed development of a Special Function Business (outdoor wedding venue) at 3084 Springbank Heights Way (Development Permit PRDP20221305; File 05714020) and 3126 Springbank Heights Way (Development Permit PRDP20221306; File 05722007).

- 7. The proposed development is inconsistent with the Central Springbank Area Structure Plan. The proposed development will negatively impact the use and enjoyment of the Appellants' properties and the surrounding properties. The Appellants are concerned about, among other things, traffic, noise and nuisances generated by the proposed developments, the impacts on the natural wildlife habitat in the valley and wildlife corridors, and potential for grass fires.
- 8. The requirements of prior to release conditions number 2 and 3 should have been satisfied prior to the approval of the permit. The referenced transportation assessment memo and stormwater memo should have been provided prior to the approval of the permit and should have been evaluated by Municipal Planning Commission. The conditions amount to improper delegation and fettering of discretion.

III. Arguments and Evidence

- 9. Mr. Anderson is in particular concerned about the potential of grass fires resulting from the proposed developments. In 2008, Mr. Anderson experienced a significant grass fire that endangered the adjacent properties and the whole valley. The grass fire accidently started at his property. The grass fire created significant property damage to adjacent properties in the area. He was fined in Provincial Court for the offence. Mr. Anderson is in his nineties and is one of Alberta pioneers who operated a ranch in the foothills. He and family donated their ranch to the University of Calgary's Faculty of Veterinary Medicine. He's a modest, private person who enjoys living in the valley in his own home at his old age but his health does not allow him to attend the hearing to express his concerns about the proposed development. Nonetheless he is tremendously worried about the possibility of calamities like grass fires being generated by the wedding venues. The microclimate in the valley is exceptionally dry and it can be very windy. He feels a business like a wedding venue that attracts large numbers of patrons should not be allowed in a country residential community.
- 10. The Greigs are concerned because of the close proximity of the proposed development at 3126 Springbank Heights Way to their home. They are also concerned about the cumulative impact of both outdoor wedding venues. In their opinion, the proposed developments will negatively impact the use and enjoyment of their property. At the hearing the Greigs will make a presentation elaborating on their concerns.
- 11. Mr. Pierce is concerned about the noise generated by the proposed developments. Mr. Pierce is a world renowned music director and composer. He chose to purchase and live on his Springbank Heights Way property because of the quiet and tranquil location along the Bow River. He is afraid the noise from the proposed developments will be an intrusion on the use and enjoyment of his property. He needs peace and quiet to service the music industry with his music arrangements and compositions. The pristine environment of his property surrounded by wildlife contribute to fully inspire his creativity to create exceptional music. The noise caused by the proposed wedding venues will negatively

impact his ability to produce music compositions. [See Appendix B for his Bio and accomplishments]

Applicable Statutory Plans

12. In determining the appeals, the Subdivision and Development Appeal Board must comply with the applicable statutory plans (pursuant to section 687(3) of the *Municipal Government Act*, RSA 2000, c M-26, as amended).

The County Plan

- 13. The County Plan, Rocky View County's Municipal development Plan, is a statutory plan that applies to the proposed development. Even though the MDP is a high level policy document and does not have the same status as a land use bylaw, which is a regulatory document, the MDP provide guidance for new development and thus is relevant.
- 14. In the Plan (Map 1) the subject lands are identified as "Country Residential". Section 5.8 of the County Plans states with respect to country residential areas: "Support the development of existing country residential communities (identified on Map 1) in accordance with their area structure plan." Section 6.8 states: "Direct the majority of new commercial and industrial businesses to locate in the business areas identified on Map 1."
- 15. The County Plan, section 7.0, Environment, Goals states: "Manage private development and County operations in a way that maintains and improves the quality of the natural environment". The Appellants submit that the proposed developments run counter to the goals of the County Plan.

Area Structure Plan

- 16. The applicable Area Structure Plan is the Central Springbank Area Structure Plan, which is a statutory plan.
- 17. The ASP contains policies that guide the DA in the review of development permit applications. The subject lands are designated in Map 3 of ASP as a Special Planning Area. In Map 6 the land is identified as a Wild Life Movement Corridor with strong connections. [Appendix C]
- 18. The ASP section 2.0.3 (c) directs that the appearance and visual impact on the landscape and existing development will be important for development in the future. Sub (k) directs that local business development should accommodate only services in the Plan Area that cannot be provided elsewhere. Section 2.3.2.3 places restriction on what can be done on the land that is located in the Bow River Special Planning Area.

- 19. The valley is a biologically diverse and ecologically significant piece of the country residential neighbourhood. The east facing hillside is a major wildlife corridor. So is the escarpment along the Bow River. The proposed developments are an intrusion in an environmentally sensitive area as identified in the ASP. Parking lots associated with these development do not belong in this area.
- 20. The Appellants submit that the proposed developments are of a scale and intensity that is incompatible with the existing country residential developments is the area.

Safety and Security

21. The Appellants are concerned about the large number of patrons that will attend the proposed developments. There are no limitations in the permit regarding the number of patrons that could attend the venues. The permit contains no hours of operations of the venues. The proposed wedding venues could operate simultaneously. There is no operational plan and emergency plan submitted by the Applicant and property owners. Fire, EMS and Police response times are high already.

Land Use Bylaw

- 22. The applicable rules of the Land Use Bylaw (LUB), sections 154 156 are very lacks. The LUB for home occupation businesses are far more stringent than for Special Function Business. Having regard to sound planning principles this does not make sense.
- 23. While the proposed developments are a discretionary use, the DA failed to properly assess the impacts of the developments on the adjacent properties and residences
- 24. It is important to note that the owners of the subject properties do not reside on the properties. This indicates that the Applicant and owners are likely utilizing the property for commercial activities. The proposed developments are not an ancillary use to the residential use of the property.

Noise Bylaw and Special Events Bylaw

- 25. Section 15(6) of the Noise Bylaw states that the provisions of the Bylaw do not apply to any activity identified and approved by way of a development permit. Section 17 of the Noise Bylaw allows an exemption allowing noise that otherwise would violate the Bylaw.
- 26. The Appellants believes that Noise Bylaw will provide no protecting to them from noise generated by the proposed outdoor wedding venues as the operator of the venues likely will apply for a special event permit and obtain an exemption for loud music being played at the venues.

Lack of Engagement

27. The Applicant and the owners of the subject properties were reluctant to engage with the adjacent neighbours. This is contrary to best practices in land use planning, and ignored the Appellants' concerns. The Applicant and owners did not directly engage the appellants about the subject DP application. The majority of the neighbours only became aware of the permit approvals after MPC's decision.

Transportation Assessment

- 28. Furthermore, it is the Appellants' position that the DA prematurely approved the subject DP application as no proper transportation assessment was undertaken. However, the DA imposed a condition in the permits to that effect. The Appellants submit that this evaluation should have been required prior to the approval of the permits.
- 29. The Appellants retained JCB Engineering Ltd. (Justin Barrett, a professional Transportation Engineer) to conduct a transportation assessment of Springbank Heights Way. He provided a report to the Appellants with his findings. [Appendix D] Mr. Barrett observed that there are geometric deficiencies along the subject section of Springbank Heights Way when compared to the appropriate roadway classifications in the Rocky View County Servicing Standards. Because Springbank Heights Way is the only route to access the proposed event venues, there is no alternate route for emergency access. With increased traffic volumes created by events and an existing below minimum pavement width on the subject section of roadway, there is an increased potential for the roadway to become blocked during an emergency.
- 30. In his professional opinion, a full transportation impact assessment should be conducted for each venue which would include a detailed geometric assessment of the subject section of Springbank Heights Way to confirm any geometric deficiencies that could lead to safety issues with the additional traffic generated during events. Either improvements to Springbank Heights Way or capacity limits be applied to the event venues could be recommended if the assessment identifies issues that require mitigation.

Support Letters

31. It is significant to note that numerous neighbours who live in the immediate vicinity have submitted letters in support of the appeals. The Community Association also has expressed concerns about the proposed developments.

IV. Summary

32. For the all reasons articulated above, the proposed developments are inconsistent with the County Plan and the ASP.

33. The proposed developments are incompatible with the adjacent country residential developments and are an intrusion in a quiet country residential neighbourhood. From a planning perspective the proposed developments are not appropriate for the subject parcels of land. The proposed development materially interfere with use, enjoyment and value of the neighbouring parcels of land and the Appellants' properties.

V. Conclusion

34. The Appellants respectfully request that: (a) the Board allow the appeals; (b) overturn the DA's decisions; and (c) revoke the development permits.

Respectfully submitted on behalf of the Appellants,

Rick Grol, Agent for the Appellants

Encl.:

- Appendix A Context Map
- Appendix B Bio David Pierce
- Appendix C Map ASP
- Appendix D Report Letter JCB Engineering Ltd.

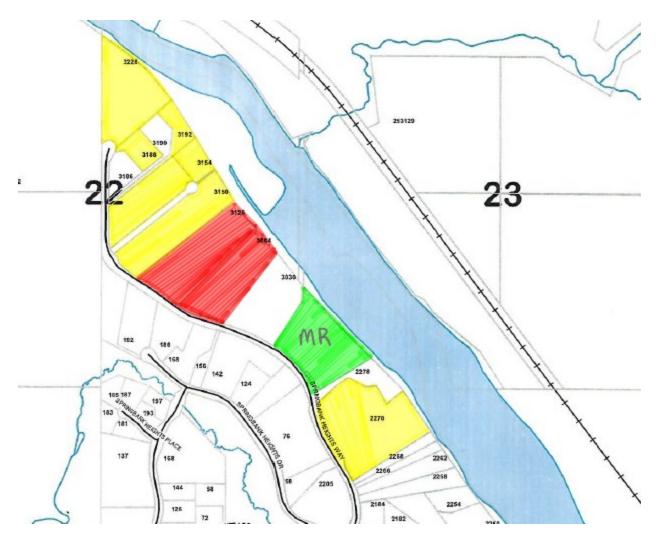
B-3 05722007; PRPD20221306 SDAB 2022 June 30 Appellant Exhibit - Anderson, Pierce and Grieg Page 8 of 26

APPENDIX A

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Appellants' Residences

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Red – Subject properties Yellow – Appellants' properties

Green – Park (Municipal Reserve)

APPENDIX B Bio David Pierce

Biography of David Pierce

Alberta born and internationally renowned, David Pierce has been creating music his entire life. One of his classmates from Strathcona Tweedsmuir, recalls what may have been his first composition. When students at their school sang the national anthem, Pierce was regularly entrusted to accompany on piano. On one occasion he was moved to perform a rendition his fellow student described as grand, unique, brilliant and entertaining.

David Pierce is a composer, producer and orchestrator, graduate of the Berkley College of Music, he is sought after in major music cities of the world but chooses to live in Springbank. His creative range is extraordinary, but so are the scale and scope of his work. He's collaborated with artists such as Michael Bublé, K.D. Lang, Celine Dion, Brian Adams, Sarah McLachlan, and Paul Brandt, arranged musicals for Andrew Lloyd Webber and created performances at Radio City Music Hall for major award shows and for the Macy's Day Parade.

He won the Emmy award for his work on the opening, closing and victory ceremonies of the Vancouver Winter Olympics when he brought his music to audiences of over 60,000 in the stands and tens of millions on television.

His work has toured the world, shared the air with the acrobats of Cirque du Soleil and been commissioned by Queen Elizabeth II. In a list of accomplishments far too long for someone still so young, one that stands out is his creative direction of the Stampede Evening Grandstand show.

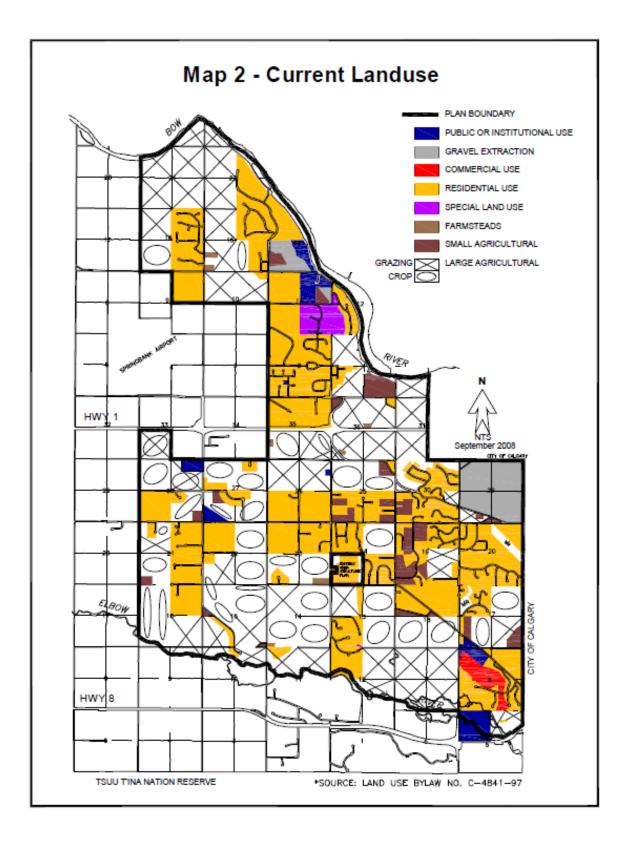
David Pierce is an artist of international stature who was able to produce powerful work on a scale few can imagine. He not only calls Springbank home, he fills its sky with wonder.

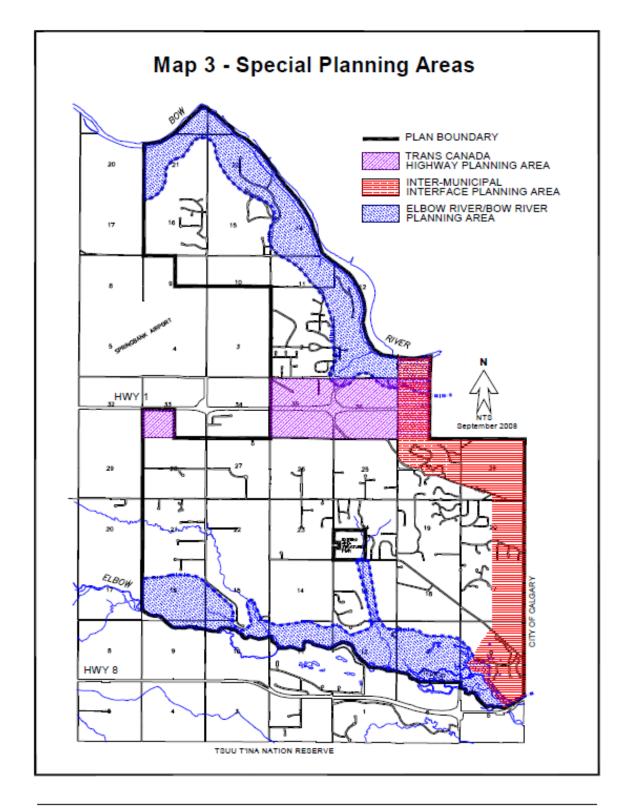
David Pierce's achievements in composition, production and arrangement are known around the globe. He inspires audiences, his fellow musicians and shares his talents with the community, the tourists who visit Alberta and the young musicians hoping to follow in his footsteps. Pierce finds his inspiration, his connection to the land and his love of music at his creative retreat and studio in the foothills of the Canadian Rockies.

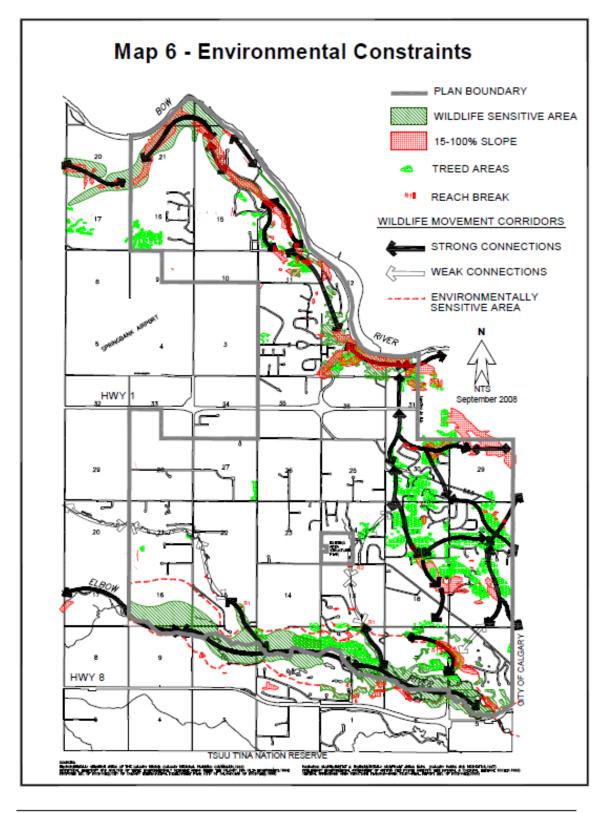
APPENDIX C

Maps

Central Springbank Area Structure Plan







APPENDIX D

Report letter JCB Engineering Ltd.



June 27, 2022

Sent via E-Mail

- Attn: Melanie Spafford et al; J.C. (Jack) Anderson; William & May Greig; and Dave Pierce (Appellants)
- Re: Transportation Assessment Springbank Heights Way, Rocky View County, Alberta Development Permits PRD20221305 & PRD20221306 (Special Function Business -Outdoor Wedding Venue) at 3084 & 3126 Springbank Heights Way

JCB Engineering Ltd. (JCB) is pleased to present our transportation assessment for Springbank Heights Way in Rocky View County, Alberta. This assessment was requested by local residents along the roadway due to two proposed event venues along this Springbank Heights Way that they are concerned will impact the safety and operations of the roadway.

1. Subject Roadway Observations

The subject section of Springbank Heights Way is from the intersection with Township Road 251A and Range Road 32 (south limit) to the end of the roadway near the Bow River (north limit), a distance of approximately 4 kilometres. A site visit was conducted by Justin Barrett of JCB on June 13, 2022 (Monday) from 11:30 AM to 1:00 PM; this included recorded drive throughs in both directions, measurements and pictures at various locations along the roadway, and a discussion with several local residents about the history of the roadway and their concerns.

Following is a summary of the notes recorded by Justin Barrett of JCB and attached to this report are pictures illustrating key aspects of the subject section of roadway.

- Springbank Heights Way narrows significantly north of the intersection with Township Road 251A (i.e., at the turn off to Springbank Links Golf Club); the driving lanes remain a similar width north and south of the intersection, but the shoulders narrow to the north. Based on a review of historical pictures on Google the intersection of Springbank Heights Way and Township Road 251A was upgraded in 2012, which included improving Range Road 32 to the south of the intersection by adding the wider shoulders.
- The average width of the subject section of Springbank Heights Way is 7.3 metres; the travel lanes are 3.4 to 3.5 metres in width and the shoulders are 0.15 to 0.25 metres in width. The full width of this roadway has an asphalt paved surface that is in adequate condition.
- The first 1.4 kilometres of Springbank Heights Way north of the intersection with Township Road 251A has no significant horizontal curvature or grades, but does have some vertical curves that create limited sight distance. The final 2.6 kilometres of the subject roadway has a combination of tight horizontal curves, steep grades and the narrow cross section noted previously. This north



section of the roadway has significant sight distance issues created by the combination of geometric elements that are not to the appropriate standards.

- The posted speed limit is 80 km/h, there is an advisory warning to reduce speed to 60 km/h for the north 2.6 kilometres of the subject section; this is the section of Springbank Heights Way that has geometric issues that were discussed previously.
- The surrounding land use is primarily residential with some recreational use near the Bow River.
- Because Springbank Heights Way is a dead end, there is no other route into the area north of Township Road 251A; Springbank Heights Way is the only roadway in and out of this area.
- Information provided by local residents is that there are significant volumes of pedestrians and bicyclists along this roadway. Local residents offered to collect data on these roadway users and Justin Barrett of JCB provided guidance on what information to collect and how to accurately collect it.
- Local residents stated that are a significant number of wildlife that cross Springbank Heights Way, especially in the mornings and evenings, as they travel to and from the Bow River. Wildlife warning signs were observed along the subject section of roadway, and in the area structure plan¹ there are wildlife corridors identified along the Bow River, adjacent to Springbank Heights Way and a strong wildlife movement corridor that crosses Springbank Heights Way near the river.

2. Geometric Deficiencies

A survey was not conducted for the subject section of Springbank Heights Way, only visual observations and basic measurements taken during the site visit. As noted in the observations above, while the entire length of the subject roadway is narrow, it is the north 2.6 kilometres that is of concern with regards to the geometric deficiencies. This is because there is a combination of tight horizontal curves, steep grades and the narrow cross section that result in the roadway having deficient geometry; while one of these items may not be a problem on its own, these items combined create a deficiency for the roadway design.

After a review of the Rocky View County Servicing Standards², this section of Springbank Heights Way is most similar to a 'Country Collector' classification as it is a residential collector roadway that provides access to more than 10 lots. According to the Rocky View County standards a 'Country Collector' has a posted speed limit of 50 km/h. It is important to note there is a significant difference from the 'Country Collector' classification because Springbank Heights Way has a posted speed limit of 80 km/h. Therefore, the design speed for the geometric elements of Springbank Heights Way should be based on the 'Regional Transitional Paved' classification. These two roadway classifications in the Servicing Standards are very similar with the exception of the design based on the posted speeds. Following is a comparison of the geometric standards between these classifications and the subject section of Springbank Heights Way. These are not all of the geometric elements listed in the Servicing Standards for the various roadway

¹ <u>Central Springbank Area Structure Plan</u>, Map 6; Rocky View County; 2001

² <u>County Servicing Standards</u>, Table 400-F; Rocky View County; 2013



classifications, but the ones most relevant to the comparison to demonstrate the issues with the geometry on this roadway.

Classification / Roadway	Posted Speed	Design Speed	Minimum Pavement Width	Minimum Radius	Minimum Crest Curve *	Maximum Grade
Springbank Heights Way	80 km/h	N/A	7.3 m	N/A	N/A	N/A
RVC Country Collector	50 km/h	60 km/h	8.0 m	120 m	k 20	7%
RVC Regional Transitional Paved	80 km/h	90 km/h	8.0 m	300 m	k 55	8%

Table 2-1: Geometric Element Comparison

* k-value definition: this value represents the horizontal distance along which a 1% change in grade occurs on the vertical curve; it expresses the abruptness of the grade change

The design details for Springbank Heights Way were not surveyed for this assessment, and design drawings were not available as the roadway was constructed over 40 years ago. Although measurements are not available for many of the geometric elements of Springbank Heights Way to compare to the County roadway classification standards, the comparison of elements between design speeds is important to note. The subject section of Springbank Heights Way is posted at 80 km/h but the majority of it is under a 60 km/h advisory speed, and the above table demonstrates the significant difference in the geometry standards between a 60 and 90 km/h design speed. Combined with the below minimum pavement width on Springbank Heights Way and this shows that the subject section of this roadway is not constructed to the appropriate design speed and therefore has deficient geometry. The advisory speed limit underscores the deficient geometry. During the site visit by Justin Barrett of JCB it was observed that the 60 km/h warning speed on Springbank Heights Way is warranted, due to the geometry of the roadway it was not comfortable to drive at the posted speed limit of 80 km/h.

Attached to this report are pictures taken from the drive through conducted by Justin Barrett of JCB that highlight some of the geometric issues noted along the subject section of Springbank Heights Way.

3. Emergency Access Issues

North of the intersection of Springbank Heights Way and Township Road 251A there is only one route in and out of the area, Springbank Heights Way. Should there be an emergency north of this intersection, responding emergency vehicles will only have Springbank Heights Way to use and with its below minimum pavement width there is the potential for the roadway to become blocked.

As will be discussed in the next section of this report, it is expected that the proposed event venues will significantly increase the volume of traffic on Springbank Heights Way. This greater volume of traffic will increase the probability for the roadway to be blocked during an emergency, especially if both venues



have events in progress and all of the visitors attempt to evacuate along Springbank Heights Way at the same time.

There is also the issue of emergency access into each of the venues from Springbank Heights Way, both of the existing accesses are single lane due to being used for residential properties. These should be considered to be widen to allow vehicles in both directions to pass each other, which is not only convenient but also critical during an emergency situation. Pictures of the existing accesses from the drive through are attached to this report.

4. Traffic Volume Increase

Due to the locations of both venues on Springbank Heights Way it is expected that attendees and staff for events will drive personal vehicles; due to the semi-rural location visitors are not likely to walk, bicycle or take transit, unless a private service is provided, to the event. As a result, the majority of the traffic volumes expected to be generated by the event venues are personal vehicles, and due to Springbank Heights Way being the only route to the venues, all of this additional traffic will impact that roadway.

From the development permit conditions provided by Rocky View County for each of the event venues³ there are two prior to release conditions that will primarily impact the traffic volumes expected to be generated by events.

- (1)(i) That the event area shall not exceed 400.00 m²
- (7) That there be a minimum of 50 parking stalls available on site

An event venue of 400.00 m^2 could accommodate approximately 450 people for a banquet style event based on information provided online from several event planning services; this is an estimate as there is no information on maximum capacity at one of these venues in the development permit conditions. As a result, it is possible that the maximum area allowed for the venue could be used to accommodate a large banquet. It is also important to note that if another style of event was held at one of these venues, such as a reception or auditorium style event, then the number of attendees could be even greater than assumed for a banquet. The estimate of 450 attendees at an event is considered to be conservative.

Should 450 people attend an event at one of the venues, 50 parking stalls will not be adequate; most attendees are likely to be travelling in groups of 2 (couple) to 4 (family) per vehicle, and then event staff will also be travelling in various vehicles to deliver equipment and food to the venues. It is likely that the necessary parking on site will need to be for 125 to 250 vehicles; 250% to 500% of the required minimum parking stalls on site.

125 to 250 vehicles per event would result in 250 to 500 trips generated as each vehicle would need to make at least one entry and one exit trip; all of these trips would have to travel along Springbank Heights Way due to there being no alternate route, as discussed previously. If there are two events occurring on the same day, which is possible as there is no restriction on each venue having events on the same day,

³ <u>Special Function Business Development Permit Application</u>, PRDP20021305 and PRDP20021306; Rocky View County Municipal Planning Commission Development Authority; May 11, 2022



that would increase the trips on Springbank Heights Way by 500 to 1,000 on the days when the events are occurring.

The Rocky View County Servicing Standards states that for a 'Country Collector' classification the daily traffic volumes should be 200 to 2,000 vehicles, and for a 'Regional Transitional Paved' the daily traffic volumes should be 200 to 1,000 vehicles. As discussed previously, these are the roadway classifications that best fit the subject section of Springbank Heights Way. Although a traffic count was not conducted by JCB for this study, it is unlikely that there will be more than 500 vehicles a day on the subject section of roadway due to the low density of residential properties and one recreational property accessed from Springbank Heights Way. Adding 500 to 1,000 more vehicles on this roadway would result in a daily traffic volume increase of 100% to 200% when events are in progress.

5. Summary of Findings

The subject section of Springbank Heights Way, north of the intersection with Township Road 251A, will be significantly impacted by the addition of two proposed event venues near the north end of this roadway along the Bow River.

- From a site visit conducted for this assessment it was observed that there are geometric deficiencies along the subject section of Springbank Heights Way when compared to the appropriate roadway classifications in the Rocky View County Servicing Standards.
- Because Springbank Heights Way is the only route to access the proposed event venues, there is no alternate route for emergency access. With increased traffic volumes created by events and an existing below minimum pavement width on the subject section of roadway, there is an increased potential for the roadway to become blocked during an emergency.
- Traffic volumes on Springbank Heights Way could increase by 500 to 1,000 vehicles per day if there are events occurring on the same day at both venues, and if the maximum event areas are used by attendees.

6. Conclusion

In my professional opinion, a full transportation impact assessment should be conducted for each venue which would include a detailed geometric assessment of the subject section of Springbank Heights Way to confirm any geometric deficiencies that could lead to safety issues with the additional traffic generated during events. Either improvements to Springbank Heights Way or capacity limits be applied to the event venues could be recommended if the assessment identifies issues that require mitigation.



* * * * *

If you wish to discuss any items within this report, please feel free to contact the undersigned at jcbarrett@jcbengineering.ca or at (403) 714-5798.

Sincerely,

PERMIT TO PRACTICE JCB ENGINEERING LTD.
RM APEGA ID #: 77644
DATE:
PERMIT NUMBER: P012310 The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Justin Barrett, P. Eng., PTOE President and Transportation Engineer JCB Engineering Ltd.

Attachments

• Pictures from June 13, 2022 Drive Through of Springbank Heights Way by Justin Barrett



Pictures from June 13, 2022 Drive Through of Springbank Heights Way by Justin Barrett



Figure A-1: Access to 3084 Springbank Heights Way (Site A)

Looking north from Springbank Heights Way towards 3084 Springbank Heights Way



Figure A-2: Access to 3126 Springbank Heights Way (Site B)

Looking north from Springbank Heights Way towards 3126 Springbank Heights Way

JCB Engineering Ltd.; 704, 8000 Wentworth Drive SW, Calgary, AB, T3H 5K8





Figure A-3: Springbank Heights Way East of 3084 Springbank Heights Way

Looking east along Springbank Heights Way Access to 3084 Springbank Heights Way is on the left side of the picture (indicated by red arrow)



Figure A-4: Northbound Drive Approaching 3084 Springbank Heights Way

Driving northbound on Springbank Heights Way Approaching first venue access from the east (indicated by red arrow)



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Figure A-5: Northbound Drive Through Vertical Curve Sight Distance



Driving northbound on Springbank Heights Way Vertical curve before descent into Bow River valley creates sight distance limitation

Figure A-6: Northbound Drive Through Horizontal Curve Sight Distance



Driving northbound on Springbank Heights Way Horizontal curve during descent into Bow River valley creates sight distance limitation



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Figure A-7: Southbound Drive Through Ascent from River Valley



Driving southbound on Springbank Heights Way

Horizontal curve, steep grade and narrow cross-section during ascent out of Bow River valley create sight distance limitation

Figure A-8: Southbound Drive Through Vertical Curve Sight Distance



Driving southbound on Springbank Heights Way Vertical curve during ascent out of Bow River valley creates sight distance limitation