



FORM TITLE

Header text

In accordance with sections 43 through 45 of [Procedure Bylaw 35M2017](#), the information provided **may be included** in the written record for Council and Council Committee meetings which are publicly available through www.calgary.ca/ph. Comments that are disrespectful or do not contain required information may not be included.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

Personal information provided in submissions relating to matters before Council or Council Committees is collected under the authority of Bylaw 35M2017 and Section 33(c) of the Freedom of Information and Protection of Privacy (FOIP) Act of Alberta, and/or the Municipal Government Act (MGA) Section 230 and 636, for the purpose of receiving public participation in municipal decision-making. Your name and comments will be made publicly available in the Council agenda. If you have questions regarding the collection and use of your personal information, please contact City Clerk's Legislative Coordinator at 403-268-5861, or City Clerk's Office, 700 Macleod Trail S.E., P.O. Box 2100, Postal Station 'M' 8007, Calgary, Alberta, T2P 2M5.

- I have read and understand that my name and comments will be made publicly available in the Council agenda. My email address will not be included in the public record.

| | |
|--|---|
| First name (required) | Philip |
| Last name (required) | Langill |
| What do you want to do? (required) | Submit a comment |
| Public hearing item (required - max 75 characters) | LOC2020-0163 (Land Use Amendment and Outline Plan in Alpine Park (Ward 13), |
| Date of meeting | Sep 13, 2021 |

Mayor Nenshi and Members of City Council:

The University of Calgary wishes to thank the City of Calgary for our continued conversations on new development within the Providence area. We have reviewed the most recent report package (CPC2021-1013) and would like to take this opportunity to re-submit our original December 21, 2020 letter. This letter demonstrates the importance of Dark Sky policies and best practice lighting standards for development within the Providence Area Structure Plan, in relation to the Rothney Astrophysical Observatory and the significant research that occurs at the RAO.

Comments - please refrain from providing personal information in this field (maximum 2500 characters)

We recognize that there will be another opportunity to work with the City of Calgary and Applicants at the Tentative Plan stage, as subdivision and development occurs in the Providence area. We look forward to further stakeholder engagement as development progresses.

Sincerely,
Dr. Phil Langill
Director, Rothney Astrophysical Observatory
University of Calgary

DISCLAIMER

1/1

This document is strictly private, confidential and personal to its recipients and should not be copied, distributed or reproduced in whole or in part, nor passed to any third party.

Sep 7, 2021

10:45:11 AM



UNIVERSITY OF
CALGARY

Brendyn Seymour
File Manager, Planning Services
City of Calgary

December 21, 2020

Re: LOC2020-0163

The University of Calgary values the opportunity to provide feedback on this proposed Land Use Amendment and Outline Plan for Alpine Park Stage 2. Alpine Park is located in close proximity to UCalgary's Rothney Astrophysical Observatory (RAO) – an astronomical observatory in Foothills County operated by the university's Department of Physics and Astronomy. The observatory's telescopes play an important role in astrophysics teaching and research, as well as school programming and public events to inform and engage our community in the night sky. The university believes that this unique context presents an exciting opportunity for the The City of Calgary, the applicant, and the community of Alpine Park, including future residents, to be innovative and demonstrate leadership in protecting dark skies.

Dark skies are critical for the RAO's operation and potential light pollution from developments like this is a serious concern for the RAO. Increased artificial light in Alpine Park will impact the ability of RAO telescopes to study astronomical phenomena, conduct research, and provide teaching opportunities. Since light behaves like little ping-pong balls bouncing around off air particles, the light from outdoor fixtures – whether it be close or distant – makes its way into RAO telescopes, and mingles with the light from the faint astronomical objects being studied. This additional man-made light reduces what the human eye can see in the sky at night, and it reduces what the sensitive RAO telescopes can see at night too.

The good news is that the applicant can make simple adjustments to minimize the negative impact on the RAO by making smart decisions about outdoor lighting design and fixtures for this project. While we recognize that outdoor lighting serves a variety of needs, including safety, we request that to minimize the harmful effects of light pollution, lighting should:

- Only be used when needed;
- Only light the area that needs it;
- Be no brighter than necessary;
- Use controls, timers or motion detectors to ensure that light is available only when needed;
- Minimize blue light emissions by using the lowest possible colour temperature (i.e. warm colour lights, below 2,700K); and
- Be fully shielded (pointing downward) to minimize glare and light trespass.

In particular, we request that the applicant work with The City to adopt dark-sky compliant lighting for streetlights on all types of streets and pathways illustrated in the proposed outline plan. Further, we would like to reinforce

that the Providence ASP (see section 8.4, p. 31) specifies that post-top lighting, should not be used due to light pollution concerns, as the illustrations in the circulation appear to depict this type of lighting for some green ways and residential streets.

Lighting technology, including ease of application, considerations of when and where to use light, and availability of low colour temperature luminaires, is evolving and improving all the time. We encourage the applicant to become informed and make progressive lighting decisions based on the best available information. The following organizations provide information and examples that will help the applicant to make lighting decisions and select appropriate fixtures:

- The Mont-Megantic International Dark Sky Reserve: ricemm.org
- The International Dark Sky Association: darksky.org
- The Lamp Spectral Data Base for Domestic and Public Use:
<http://galileo.graphyics.cegepshebrooke.qc.ca/app/en/lamps>

Thank you for your consideration in this matter. Please do not hesitate to contact me if you have any questions about the RAO, light pollution, or dark sky-friendly lighting.

Sincerely,

Dr. Phil Langill
Director, Rothney Astrophysical Observatory
University of Calgary
pplangil@ucalgary.ca
403.220.5402

Cc:
Diane Colley-Urquhart, Ward 13 Councillor