Greenspace Alliance of Canada's Capital
Alliance pour les espaces verts dans la capitale du Canada

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3 March 2014

To: Don Schultz,
Director, Real Estate, Rockcliffe
Canada Lands Company
30 Metcalfe Street, Suite 601,
Ottawa, Ontario, K1P 5L4

By E-mail: dschultz@clc.ca

Dear Don,

Subject: Comments on Former CFB Rockcliffe Preferred Draft Community Design Plan (CDP)

The Greenspace Alliance of Canada's Capital wishes to congratulate the Canada Lands Company for conducting three pre-consultation events with the general public regarding the development of the former Rockcliffe air-base. Overall, we believe that this has resulted in a preferred Conceptual Design Plan (CDP) that achieves a fair balance between the economic imperatives of development and the desire for a more environmentally sustainable community. We also appreciate the opportunity afforded to Al Crosby, our representative, to participate in the Public Advisory Group.

Below are a few suggestions to further improve the CDP. They quote from the City's Official Plan, indicating that our comments are consistent with it and the Urban Design Guidelines for Greenfield Neighbourhoods which should find favour with both CLC and the City's planners.

Section 2.4 of the City of Ottawa's Official Plan relates to Maintaining Environmental Integrity and contains policies on greenspace that "encourage high quality urban design consistent with the objectives and principles of Section 2.5.1, where natural lands and open space and leisure areas are used as integral elements in the design". (S. 2.4.5. policy 1b) Our four (4) suggested changes and comments focus on the principles of these design policies and objectives in Section 2.5.1 – Urban Design and Compatibility. The Design and Planning Guidelines related to Section 2.5.1 are also used as supporting references.

Objective: To understand and respect natural processes and features in development design (s. 2.5.1.)

1. Improve and enhance the required buffers to protect valued natural and Environmentally Sensitive Areas.

Natural Areas. Based on the design principles and the planning guidelines for "greenfield neighbourhoods", the Montfort Woods and NRC Woods require protective buffers that will "protect, integrate and enhance the urban forest, vegetative cover, green spaces and greenway corridors, environmental features and landscapes" (S.2.5.1. (6)). CLC must attempt to retain as much existing natural vegetation achievable especially along the boundary

of the Montfort Woods and in areas that link other green spaces. The ecological boundaries do not necessarily follow the property boundaries at 90° angles and buildings and parking lots do not make good buffers.

We believe that “vegetative” swales are inadequate buffers and “treed” buffers will be much more effective in meeting the policies and design objectives for sensitive natural areas. Our rationale is that many significant trees will inevitably be lost due to construction and therefore more native trees must be planted in these buffer areas so that there is a substantial gain of significant trees rather than a net loss. “Treed” buffers can also serve a dual purpose of walkability by allowing for a linear trail around the perimeter of the Montfort Woods and the NRC Woods. These linear buffer areas can also have a third use, which is to serve as shallow ditches for ground water run-off and drainage where appropriate. We also believe that keeping surface water run-off rather than channeling it into storm drains will preserve the vegetation in these natural areas, especially in dry summer months. Remediating the historical drainage patterns that meander toward the existing natural areas are key to a successful design and the preservation of significant trees.

The ability to control public access to trails in sensitive natural areas such as the Montfort and NRC forests could be improved. It should be possible to close access (with signage on a gate), e.g. due to extreme fire hazards during long summer dry spells. It is common in many countries to close access to forest areas due to any risks such as fire, vandalism or inappropriate use.

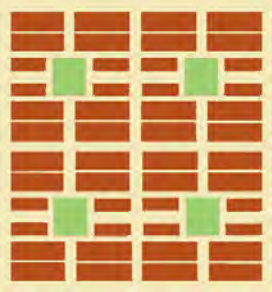
We are particularly concerned about the developments proposed near the Montfort Woods and especially in the north east corner near the NRC Woods. (Blocks 31 and 47). We feel that maintaining residential development in this Special Study location is a very risky endeavour that will fail and result in the inadvertent loss of trees in a very significant natural area of Ottawa. We suggest instead that the opportunity be grasped to re-naturalize this sensitive natural area. The "loss" of units planned could easily be made up by increasing the heights of buildings in blocks 3, 59 and 63. To us, letting these woods become naturalized would be the best option for parcels 31 and 47 in the north east.

If re-naturalization is not acceptable, then for the buildings adjacent to the NRC Woods we would suggest that the environmental footprint be equal to the previous road and building footprint consisting of two or three storey buildings. Furthermore, we suggest that the existing road area be included as part of the building footprint. In effect, due to the environmental sensitivity of this area we would advocate that it become a no-car zone with walkable throughways that also serve as fire lanes plus overhead walkways that connect all buildings. An appropriate building height around sensitive natural areas would be equal to the nearby tree canopy. The north-east area can be devoted to a large retirement home requiring only limited commercial traffic and visitor access off the main street. A compatible suggestion for this area has been to design a totally sustainable LEED platinum building that reduces resource consumption, energy use, and the carbon footprint. It is hoped that such options will be studied and reviewed in conjunction with the National Research Council during the subdivision and site planning stages for Phase 3.

2. Introduce a system of mini-parks to encourage walkability as well as to increase greenspace.

Parks. In addition to enhancing the natural areas, we are pleased that CLC is committed to providing one hectare of usable park space for every 300 units in the development. However, the judicious use of pocket parks or mini-parks seem to be lacking in the higher density central community core areas of Blocks 34, 35, 36, 38, 39, & 40. The proposed Town Square does not answer this need. We recommend CLC consider adding a network of

small parks/leisure areas in these blocks as means of connectivity to encourage pedestrians to walk throughout their neighbourhood as illustrated below.



When used properly, this model is internationally recognized for enhancing the beauty and walkability of a central neighbourhood. It is the most notable example of an urban planning concept that is still being emulated by modern architects and urban planners. In winter, and depending upon the design of the mini-park, these areas can also be used for snow storage. This will reduce energy requirements and the potential carbon pollution from having to truck away excess snow.

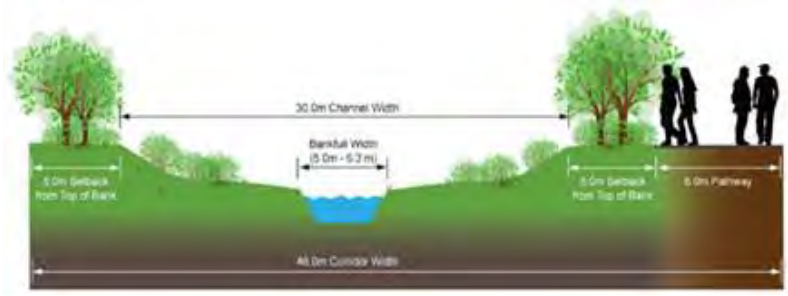
One finds support for this model in the urban design principles where it says "locating the majority of a community's population within walking distance of a functionally-integrated neighbourhood with community facilities, parks, schools, neighborhood retail centers, and employment centres. Walking connectivity is also enhanced by using through greenways between the parks and mid-block pedestrian connections" (S. 2.5.1. (1.2)). The urban design guidelines also state: "Connect major greenspace elements, like community parks, storm water management ponds, and natural features with 'green streets' to create enhanced walking and cycling environments, and to improve ground water recharge." (S. 2.5.1. (6.2)). The stated CDP design objective for Rockcliffe also indicated: "The plan will provide for active recreation areas, passive greenspace, protected natural areas, and a vibrant network of green fingers penetrating development areas coordinated with the natural drainage strategy." A network of walkable mini-parks will achieve this objective.

3. Include more natural linkages across the entire site.

Natural Linkages. At the neighbourhood scale, the location of some off-road pathways in isolated or constrained areas is of concern. Pathways are preferred through well-used areas that also provide connections to public roads or parks. The choice of walking routes and circulation patterns must be studied more closely for this CDP. Two obvious natural linkages are suggested for inclusion in the CDP.

The first one relates to the north side of the Montfort Woods where block 9 is a medium high-rise designation. We suggest switching the designation of block 9 with that of block 12 so that the residents of the stacked townhouses will be further away from the noise of traffic on Hemlock Road while at the same time benefiting from closer proximity to the natural areas. Mid-rise buildings in this block would be able to accommodate a north-south linkage using a ground level pathway that provides a contiguous connection between blocks 10 and 13. Below are examples of open, exterior pathways through buildings from a New York urban area and at 101 Colonel By Drive in Ottawa.

The second natural linkage suggestion relates to block 26. We suggest that instead of a narrow "vegetative swale" for stormwater management and drainage, a more substantial linear pathway plus a swale be located in that block to provide connectivity between blocks 23 and 29. Over time with future growth, we see this connection becoming more utilized as shown in the photo from Shanghai on the right. Sufficient area is needed in the Conceptual Design Plan.



Objective: To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment. (s. 2.5.1.)

4. Early on, define clear targets for subsequent site plans and building plans for an environmentally sustainable development.

Part C of a Community Design Plan must establish the vision, objectives and targets in accordance with Official Plan requirements. In order to maximize an environmentally sustainable development it will be necessary to envisage potential uses at the site plan and building plan level in order to identify any shortcomings in the higher level Community Design Plan (CDP).

In this regard, we suggest considering reviewing the design guidelines for potential uses of the site for seniors residences, retail stores, office building, and even "LEED" self-sustaining buildings whereby issues and problems that might arise can be identified now, and appropriate changes made to the draft CDP. By using all the Design and Planning Guidelines as a checklist, problems in the CDP can be revealed and corrected.

Concerns have been expressed that valued ideas from the community are being "lost", or are in danger of being lost as this project goes forward due to the lack of consideration of more detailed guidelines. The following issues highlight the need for more changes to the CDP and/or clear objectives and targets for subsequent plans.

a. Geo thermal. There appears to be an opportunity here to develop a pilot program for geothermal heating/cooling for this site which has not been thoroughly addressed in the conceptual planning. There should be consideration of vertical or horizontal geothermal projects that can make this community self-sufficient for heating and cooling needs, with significant long-term savings which can be a model for the rest of the world. It is our understanding that the CDP did not consider the potential of using parks (not natural areas) for Community Scale Geothermal and District Geothermal Energy projects. Using greenspace areas to provide energy is a progressive idea that needs full consideration.

b. Solar. The street and site scale guidelines for Urban Design must be considered as they have a direct impact on the road orientation for this CDP. Under the design objective 2.5.1 (7) – "To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment" - a principle states:

"Orienting the street network and/or building patterns to maximize the opportunity to incorporate passive solar heating"

Furthermore there are urban design guidelines which support this principle: Guideline 14. "Maximize opportunities for passive energy conservation and south facing exposure through street orientation, block pattern, building location and heights. Use vegetation and architectural detailing for shading and wind protection" and Guideline 15 "Create a transition in height from taller buildings to adjacent lower buildings, particularly when connecting to an adjacent development or neighbourhood."

This means that some streets at the west of the site should be re-aligned east- west and north-south in order for buildings to more efficiently and effectively install solar panels in the future. Rectangular buildings should also be oriented east-west in order to take advantage of the southern exposure. Depending upon the topology, southern buildings should be lower than buildings further north if active or passive solar power is a future consideration. During this pre-consultation process we did not see any shade studies. They should be undertaken to support the proposed height strategy.

c. Water usage. Advanced water storage and conservation methods can allow for passive cooling of building interiors during the summer. The eventual excess water run-off from all buildings will need to be channelled to parks and fountains for use by the vegetation before proceeding to further run-off areas. For any fountain or water feature, the overflow must be connected to the surface run-off network rather than storm water sewer. This will affect the targets/objectives for on-site storm water retention and the route for surface run-off as noted in Guideline 51. "Reduce and delay storm water run-off from a property by using techniques such as storm water retention gardens, green roofs, permeable paving and surfaces, and storm water re-use".

d. Green buildings. We suggest that targets/objectives for builders are required in Part C of the CDP to incorporate green roofs, green walls and passive solar heating and cooling methods in order to take advantage of the environmental integrity design objectives of the final Community Design Plan. This issue is supported by design principles at the building level such as: "Constructing buildings that will serve as environmental showpieces

that will prompt others to consider green building practices locally and throughout the city." Also note that energy conservation through design is a policy referenced in Section 4.9 of the Official Plan.

We look forward to further collaboration during the evolution of this development.

Respectfully,

Erwin Dreessen
Co-chair
Greenspace Alliance

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