OPA #80 Public Meeting – Environmental Resiliency Discussion by way of a Deer Crossing Corridor/Linkage Issue on the Gordon Street Intensification Corridor

After the Needs of the Provincial Government (P2G), the Development Sector, and Planners have been met(building height/density provision), what is left for the Guelph general community to understand?

 A reflection on who are the 'stakeholders at the table' making decisions of the future – is there the appropriate balance in trying to manage a resilient future for Natural and Human Communities?

- A Story of Conflict of Differing Values Where Two Corridors Collide on Gordon, i.e., a Human Community Intensification Corridor and a Natural Community Deer Crossing Linkage)



The City's 'Best' Graphic of the Future (note no greenery)

Dr. Paul Kraehling MCIP RPP (Ret.) Resident on Vaughan St., Guelph March 30, 2022

## Intersectionality of Human and Natural Community Systems in Conflict

- Premise: The fixation on increasing density within the Gordon Street 'Strategic Growth Area Intensification Corridor' in the Places2Grow planning exercise will have permanent impacts on the natural and human communities that exist in the area; the quest to 'accommodate' additional people and jobs in this one intensification corridor will result in unsustainable, long term degraded outcomes
- The area of Gordon between Edinburgh and Arkell has many existing planning constraints – it is a heavily travelled area with North-South and East-West travel movements on the arterial road network. It also has a significant ecological corridor/linkage between the adjacent Torrance Swamp and Hanlon Swamp PSW areas.
- The current proposed OPA #80 plan for this portion of Gordon Street has not adequately accounted for environmental features in the area. . .
- It appears that every square meter of potential developable land (including 'underutilized land', like the Salvation Army building) has been placed in a potential persons + jobs/ha equation model . . . While this density calculation may appear as being semi-scientific that only planners can understand, it doesn't account for the natural and social dimensions of the existing communities in the area
- The next few pages attempt to explain the dilemma and offer an alternative solution to reconciling the differing natural/human community interests
   Existing Land Use Designations

Overview – Area of Concern – existing OP Land Use Schedule



Natural Corridor Location in proximity to historic 'Hamilton Corner' intersection

Provincially Significant Wetlands (PSWs) serve as a development foundation for south Guelph – protection of these features is essential for quality of life for both natural/human communities – Natural Heritage System (NHS) corridor/linkage feature & function occurs between them -Significant human transport & development activity already impacting in Edinburgh/Arkell intersections segment area





Ecological Corridor/Linkage

#### Human Community Corridor

- south Guelph on the Gordon St. 'Strategic Growth Area Intensification Corridor' (area between Edinburgh and Arkell segment) is a heavily congested travel area as well as it comprises an existing remnant Natural Heritage Feature Corridor Linkage)



### A Surprise from Proposed OPA #80...



- This natural corridor is intended to recognize the existing 'deer crossing' natural corridor that exists in this area
- This OP proposed designation for the linkage/corridor is too small, and a poor reflection of Guelph's so-called environmental focus

## City OPA Attempt at Providing a Meager Deer Corridor on Gordon

Proposed Land Use Designations



### OPA #80 Proposed Remnant NHS Ecological Corridor/Linkage



Numerous intensification development sites exist now and potentially in the future, and together these will obliterate the linkage function of the small remnant corridor proposed in OPA #80



Unbuilt development sites in proximity to natural linkage/corridor (including potential Solstice 3) if OPA 80 is approved creating a new Medium Density Residential Block to the north of the existing Solstice building

### If City OPA #80 is accepted, a new Medium Density Residential building (Solstice 3?) could happen in the area...

This would occur of course after backfilling of dirt on the adjacent lands to the Hanlon Swamp PSW and re-arranging the natural heritage lines for the area...



A Problem via City OPA #80 Proposal – a Remnant Natural Corridor that is too small with indirect pathways – this is too small to provide an overall effective NHS corridor/linkage function



Recommended Solution to Address Competing Human/Natural Interests in the Corridor – Remove Medium Density Residential designation and replace with NHS designation . . .

 The severely sloped land west of Gordon, south of Edinburgh should be redesignated as NHS, i.e. a new natural corridor/linkage area enhancement with no yellow Medium Density Residential designation here





Recommended Solution will Implement Existing Official Plan – it accommodates natures 'Deer Crossing' needs rather than pushing for more human population on this existing congested corridor

- Existing OP Schedule 4

   Natural Heritage
   System is shown
  - Proposal will implement existing Guelph OP with enhancements to the deer crossing natural areas at the southwest corner of Gordon and Edinburgh
  - Deer crossings shown on schedule within red circle



### Recommended Solution Continued - Planning Policy Basis to Enhance Existing Natural Heritage System Linkage/Corridor Features on the Gordon Corridor (southwest quadrant of Gordon/Edinburgh)

The adjacent area to the Hanlon Swamp PSW should be redesignated as NHS lands as being consistent with the Provincial Policy Statement, and in in conformity, and not in confliction with the Places to Grow Plan, and encouraged by policy in the existing Guelph Official Plan), i.e., there is more than adequate justification for this.



Recommended New Enhanced NHS Area in southwest corner of Gordon/Edinburgh Existing Guelph OP Support for Recommendation Solution – the NHS corridor/linkage area at the southwest corner of Gordon/Edinburgh should be enhanced/not diminished by OPA #80

- Objective of Section 4.1 of the Official Plan, Natural Heritage System is the following: protection of natural features and areas for the long term and maintaining, restoring and where possible improving the biodiversity and connectivity of natural heritage features and areas, and ecological functions of the NHS, while recognizing and maintaining linkages between and among natural heritage, surface water features and groundwater features.
- NHS Linkage/Corridor feature enhancement in the southwest quadrant of Gordon and Edinburgh will support multiple deer crossings identified currently on existing OP Schedule 4, Natural Heritage System

# Proposed NHS Corridor/Linkage Feature Enhancement is supported by Provincial Natural Heritage Reference Manual



https://docs.ontario.ca/documents/3270/natural-heritage-reference-manual-for-natural.pdf Pgs 28-29

LINKAGE/CORRIDOR ATTRIBUTES		
a. General	<ul> <li>The nature of a linkage will depend on the ecological function that the linkage is intended to perform.</li> <li>Factors that may affect the ecological function of a linkage include its length and width (generally, a wider linkage is better, and the width of a linkage should increase relative to its length), composition, orientation and configuration.</li> <li>The significance and relative importance of these factors vary with the needs of different species.</li> <li>Some linkages may serve to connect habitat for particular species to complete their life cycles (e.g., linkages between wetlands and upland areas to allow for reptiles and amphibians to move between breeding and summer/winter habitat).</li> <li>The ecological appropriateness of a corridor should be considered when identifying linkages.</li> <li>Corridors should be assessed as to whether there is a natural relationship between the core areas or features being connected, especially when identifying linkages that should be restored or established in fragmented landscapes.</li> </ul>	

### NHS Reference Manual Text Continuation

LINKAGE/CORRIDOR ATTRIBUTES		
a. General	<ul> <li>Alternative or multiple linkages in a natural heritage system can assist in maintaining its ecological functions, as well as its overall ecological integrity.</li> <li>Smaller patches of natural cover that are closely spaced can serve as stepping stones for species movement, and thus be identified as a linkage.</li> </ul>	
b. Habitat	• The habitat needs of the species type that will move through a corridor should be taken into account when establishing it.	
c. Shape	<ul> <li>An important consideration for the shape of corridors is the dispersal patterns (e.g., directional vs. random) of the species that will be using them.</li> <li>To increase the probability that animals will locate corridors, they should be designed to have a funnel shape at either end, to maximize the contact surface between the core and the corridor.</li> </ul>	
d. Length	• If an individual cannot travel through a corridor within one activity period, the corridor should provide appropriate habitat for the foraging requirements of the species, and in some cases for breeding or hibernating requirements as well.	
e. Width	<ul> <li>Recommendations for corridor width depend on the landscape matrix and species context.</li> <li>Approaches for determining appropriate corridor widths can include the following: <ul> <li>Noss (1992) suggests that long corridors (more than 16 kilometres [km]) should be at least 1.6 km wide and that shorter corridors be at least three times the measurable "edge effects." Using Noss's criterion, this translates into 300 metre (m) wide corridors.</li> <li>Environment Canada et al. (1998) suggest corridor widths from 50 m for generalist species (i.e., white-tailed deer, raccoon) up to 500 m in rural areas for species that require interior forest habitat.</li> </ul> </li> </ul>	

- Note e. Width in the above. Corridor widths of 50 m for "generalist species, i.e., whitetailed deer should be provided.
- The City's proposed natural linkage/corridor on OPA#80 is totally inadequate due to its meager width +/-20m; consider the accumulative deer crossing areas on Edinburgh and Gordon as depicted on existed OP Schedule 4, Natural Heritage System



Figure 1: A Greenway Concept in a Crowded Landscape

Source: Nature Ontario, 2014. Best Practices Guide to Natural Heritage Systems Planning

Illustration of a desired 'greenway corridor' in a crowded landscape, i.e., potential intensification corridor. The remnants of a once vibrant natural corridor are in the area of Hamilton Corner but these will be obliterated now by the 'new and improved' Intensification Corridor development push

### Conclusion

- A removal of the Medium Density Residential block at the southwest corner of Gordon and Edinburgh and its replacement with a NHS enhanced Corridor/Linkage designation will go a long way in giving support to 'deer crossing' capability on busy Gordon Street
- Open area will give greater visibility both for the deer as well as motorists to avoid collisions in the proposed new solution, i.e., an illustration of human/natural communities co-existing
- Proposal will give greater substance to a natural heritage corridor function linking both the Torrance and Hanlon Swamp PSWs
- A balanced effort to accommodate competing (but potentially) complementary ideals for human and natural communities can be demonstrated via a larger NHS area
- The removal of a Medium Density Residential block in the already congested/high traffic activity area of the Edinburgh – Arkell intersection stretch along Gordon will be assisted by rebalancing life for natural and human communities. The Strategic Growth Area Intensification Corridor total people +jobs number can be reduced somewhat from the current OPA#80 target of 120.
- The recommendation solution from this correspondence will assist in redirecting the notion that planning efforts now have been directed to placing too much density in the Gordon/Arkell corridor, i.e., a rebalancing of natural and human community quality of life values will again have greater value than simply packing in more people+jobs in a relatively confined area
- Suggested enhanced NHS linkage/corridor at the southwest corner of Gordon and Edinburgh is a win-win for both human and natural communities

### Other General Observations

- The allocation of growth targets to individual nodes/corridors is a surprising enterprise in OPA#80. The allotment of growth on this basis is known only to planners, and to anyone else in the community its meaning and development impact on the land is a mystery. This 'new' Provincially-derived density definition places an over-emphasis on numbers (quantification of growth) over quality of life attributes. Pushing for targets on an individual area by area basis overly focuses the planning effort to achievement of development targets. An over-reliance on numbers that only planners 'seem' to understand will come as a potential loss to the subtlety of planning on the ground, and even may cause misunderstanding/mistrust.
- My belief on all this concentration of growth and targets will push development to the maximum allowances by the Guelph planning system, without the variances, for example, that come with public input, consideration of natural enhancement possibilities on a site by site basis. As a result, the new 'numbers game' embedded in the planning system will further impact the overall 'former small town' quality of life for Guelphites, i.e., we are now simply an outer-ring municipality that 'exists' within the Greater Toronto area conurbation, and a product of the P2G provincial mantra 'density number' game.

#### Re: Climate Change Policies in OPA #80 to be Guelph 'Future Ready'

Dear Mayor Guthrie and Councillors of the City,

The suggested policy wording in Item numbers 51 and 52 of the proposed amendment do not give adequate attention to requiring new private sector development to be 'energy smart' and 'carbon neutral'. Your/our Official Plan needs to integrate actionable items on the ground by the development sector as essential partners in the journey to meet the City's recently enacted net zero carbon ambitions and give 'teeth' to implementation of the Community Energy Initiative.

It is not adequate at this stage of the climate change emergency to simply go forward with general encouragement statements here and there as currently contained in OPA #80. The plan amendment is locking in development activity for the City for the next 30 years, and this development needs to be part of the climate change emergency solution, not adding to our current problems.

# Therefore, before OPA #80 goes forward item numbers 51 and 52 should be reworded to give greater guidance to all on how new construction in the City will have a low carbon/low energy footprint. This will require additional research by staff, and direction by Council to have this implemented.

For inspiration on this matter, I would focus attention to other Ontario municipalities that are 'in the news' respecting their good climate change mitigation/adaptation policies, procedures and by-laws. The following are some examples:

-Green Building Standards as used in the City of Toronto for the past decade, i.e., refer to the City of Toronto 'Green Standard Review and Update' report to the Planning and Housing Committee, June 11, 2021

https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/

-City of Markham Green Building Requirements

https://www.markham.ca/wps/portal/home/business/building-permits/green-building/07-green-building

-Town of East Gwillinbury green building new construction requirements

https://www.eastgwillimbury.ca/en/government/resources/Documents/TGDS-Subdivision.pdf

General guidance on 'climate change ready' policies, procedures and mechanisms to guide the private sector are available from Natural Resources Canada. The City should be moving forward now with policy requirements for new private sector construction to meet standards set out in a set of 'Guelph Green Building Standards' or reference should be made in your/our OP to other standards that are available, e.g., Canada Green Building Council. The following information source may be of use for this purpose:

https://www.nrcan.gc.ca/homes/about-integrated-community-energy-solutions/integrated-communityenergy-solutions-roadmap-for-action/learning-from-successful-communities/6551 In reviewing actions and requirements used in other places, it is important to remember that the opportunities/constraints for implementing actions here need to be in line with the enabling legislation that is currently in place in Ontario. However, the current provincial government's inaction on the climate change file (e.g., updates to the Planning Act, Ontario Building Code) should not stifle innovation and creative use of available tools to push forth on the City's strategic climate-change-impact assistance mission.

The City, through its planning approval process mechanisms, have many opportunities to require developers/builders to institute green building technologies to assist in addressing the climate change emergency. These tools include development agreements/conditions at the Land Division stage (severance, subdivision, condominium plan), through the OP and Zoning By-law amendment process, and/or provisions made on site plans and development requirements in the Site Plan Control process.

Thank you for the opportunity to comment on this important aspect of planning for the future of an environmentally/economically/socially sustainable community here and beyond our borders. All the best in the completion of your work,

Paul Kraehling MCIP RPP (Ret.)