

City of Waterloo Circulation Comments – Draft Plan
Draft Plan of Subdivision 30T-21401
Date: April 6, 2022

No	Comment	Commentary/Action/Response	Addressed with addendum submission	Comment noted for consideration at future approval stage
Standard Subdivision Conditions				
3	The City's standard conditions of subdivision approval are attached hereto as Appendix 'B' as an example of the conditions that can be expected for Draft Plan of Subdivision 30T21401, unless otherwise indicated. Please be advised these conditions may be subject to change to any degree and/or may be amended from time to time, at the sole discretion of the City. Additional site-specific Draft Approval Conditions shall also apply.	Details of condition of draft approval to be determined		
Staging of Construction & Registration				
4	Further information is requested regarding the intended approach to registration of the subdivision – one registration or phased registration?	Refer to revised Draft Plan of Subdivision (based on revised development concept) Draft Plan of Subdivision to contain Stage A and B (two stages)	✓	
5	A Municipal Park Block shall be dedicated to the City as part of the first registration. Road widenings and reserves shall also be shown on the draft plan and conveyed to the City as part of the first registration.	Development concept revised to include central public amenity space (Privately-owned, public park space) Refer to POPs on revised Draft Plan of Subdivision; Proposed POPs approximately 1.03 hectares in size	✓	
6	Prior to undertaking any works on the Lands, and prior to registration, the Owner shall submit a Staging Plan demonstrating how the subdivision will be registered and/or constructed in stages, including how required services and infrastructure will be provided for each block and each stage, to the satisfaction of the City's Director of Planning.	Revised Draft Plan of Subdivision identifies future stages of development	✓	
7	Given that a phased approach to registration may/could be taken, and in light of the proposed private road network in place of a standard municipal road network providing public access and street frontage to each development block, further information is requested regarding the intended approach to construction. In particular: a) Construction of the private roads, including the functional cross section and details related to infrastructure proposed underground; b) Installation of private water, sanitary and storm services; c) Installation of utilities & burial of hydro infrastructure;	A municipal right of way is proposed to provide for public access and to facilitate the servicing of each block in the subdivision. Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
8	The City is not supportive of a piecemeal or incremental approach to construction of the primary transportation network – being the private roads and central spines / promenades. This infrastructure should be constructed and open for use as a condition of registration of the subdivision, or prior to issuance of certain building permits based on the phasing sequence identified in the Staging Plan, at the discretion of the Director of Engineering Services. Consider whether cost-sharing arrangements/agreements should be used to compensate the party responsible for front-ending the associated construction costs.	Revised Draft Plan of Subdivision now includes future municipal right of way Revised Draft Plan of Subdivision identifies future stages of development, including conveyance and staging of public road	✓	
Road & Transportation Infrastructure				
9	Staff strongly recommended the subdivision include a separate block of land for the private street network, rather than create these streets by way of easements over multiple blocks. Although the City is not interested at this time in the creation of new municipal streets within the limits of the	Revised Draft Plan of Subdivision now includes future municipal right of way	✓	

	subdivision, the separate block of land for the private roads could be created with shared ownership, access, operation and maintenance responsibilities established through conditions or draft approval, easements and agreements, and/or potentially through registration of a condominium. This needs to be explored and discussed further			
10	Transportation and Planning Approvals Staff are of the opinion there are too many road accesses onto Conestogo Road West – 6 in total – which interfere with the multi-use pathway being constructed across the entire frontage of the site along Conestogo Road West in 2022. Consideration should be given to consolidation of accesses and strategic one-way directional traffic. For example: a) It is recommended that ‘Street B’ is an ‘exit only’ access. Staff recommend that all operational accesses (ie. for garbage collection, delivery, loading, move-in purposes) and structured parking accesses for Blocks 4 and 5 be concentrated along Street B as a “rear laneway” situated between the blocks. b) It is recommended that Street F be closed or limited to one way access into the site from Conestogo Road only.	Revised Draft Plan of Subdivision includes future municipal right of way; proposed development revised to include <u>only</u> two (2) access driveways to Conestogo Road	✓	
11	Staff question the need for vehicular access through the hydro corridor. People should be encouraged to walk the promenade that will extend through the site rather than drive. To this end, consider whether that section of Street D, extending south of Street C is necessary or that section can be pedestrians only.	Vehicular access removed from/through Hydro Corridor; portion of property south of Hydro Corridor removed from application package	✓	
12	The current width of Conestogo Road West is 20 metres. To install the left bound turn lane recommended by the Traffic Impact Study, the City has identified the need for a road widening, of approximately 3 metres. As the intersection of Northfield Drive West and Conestogo Road West are under Regional jurisdiction, the City requires the Applicant to submit a package to the Region that includes a detailed plan/set of plans for the ultimate cross-section with the turn lane improvements, and clarifies the limits of the specific widenings required and an associated cost estimate. The Region of Waterloo will be responsible for reviewing and approving the cross-section and cost estimate. The specific road widenings should be shown as a block on the plan of subdivision to be conveyed to the City of Waterloo, as part of the first stage of registration. Timing of construction of the improvements will be determined in consultation with the Region and may be secured through a draft plan condition and/or the subdivision agreement. The Owner will be responsible for all costs associated with the intersection improvements. Staff note that Block 10 of the Draft Plan is currently identified as a road widening. Waterloo North Hydro has confirmed they have an easement over this block and there is underground hydro infrastructure in this location. Depending on the ultimate cross-section design of Conestogo Road West with the new northbound left turn lane, there may be a conflict with this existing underground infrastructure. Further review and discussion is required.	Refer to Comment Response Letter as prepared by Paradigm Transportation Solutions Limited, dated March 28, 2023	✓	
13	The subject lands are within the Ministry of Transportation’s Permit Control Area (PCA), and as such, MTO permits are required prior to any demolition, grading, construction of site alteration commences	There will be no impact on the MTO lands.	✓	
14	Consider full sets of comments issued by the Ministry of Transportation dated December 1, 2021 and December 6, 2022. The City requests a copy of the response provided to the MTO	Refer to Comment Response Letter as prepared by Paradigm Transportation Solutions Limited, dated March 28, 2023	✓	
15	In comments dated December 1, 2021, the Ministry of Transportation, expressed a lack of support for the proposed pedestrian bridge extending from the subdivision lands to the opposite side of Highway 83 (Conestogo Expressway). The Expressway is within MTO’s control as a 1A Freeway. The MTO cited	Business Case, Kraus Northfield Pedestrian Overpass, prepared by GSP Group and provided to City and Region in January 2023.		

	the proximity of the existing road over the Expressway at the Northfield Drive Interchange which contains sidewalks and cycling lanes, as the primary reason for not supporting this new bridge. However, the City remains interested and supportive of the proposed pedestrian bridge, having identified an active transportation connection in this location conceptually on Schedule J2 Northfield Station Area of the City's Official Plan. Staff also note there is considerable room for improvement to the inhospitable pedestrian and cycling conditions offered by the current Northfield Drive overpass.	MTO approval of the pedestrian bridge is not required for this application, however the owner will continue to support the process of partnership with the City and Region to obtain MTO approval.		
16	It is the City's understanding that the MTO will be providing the technical requirements for location and construction of the bridge with the Region and the consultant. Questions and comments raised by City Staff include: a) What would the proposed timing of construction be? b) What would the cost sharing arrangement be? c) What is the process and/or tools/mechanisms for securing such funds? d) Who would own and maintain the bridge? All season maintenance would be required. e) Bridge lighting would be a requirement. f) What easements and agreements for the bridge would be required and between whom? g) What other easements and infrastructure through the subdivision is required to ensure direct public access to and from the bridge and (a) Conestogo Road West and (b) the ION Station on Northfield Drive West. Clear and direct wayfinding is important. h) What is the process for approving technical bridge plans? Who is/are the approval authority?	Not applicable to approval of the applications.		
17	If the approval authorities were to reach agreement on the installation of this pedestrian bridge, the City may apply draft plan conditions to ensure that the bridge is constructed as a condition of development on certain blocks. It is Staff's understanding that the MTO, Region and City would need to enter into an agreement regarding the ownership and maintenance of over the bridge, to which the Owner would not be a party	Not applicable to approval of the applications.		
18	City Staff note that within the Transportation Impact Study submitted, the intersection diagram is incorrect for Conestogo Road at Durward Place. There is one yield sign along Durward Place		✓	
Grading				
19	Overlay the subdivision on the servicing & grading plans. The limits of all blocks must be clearly visible	Completed. Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
20	The Servicing Report notes that the proposed lowering of the grades within the hydro corridor will require all underground hydro infrastructure to be installed at a lower depth, which would be very costly and involve complicated clearances from HONI. Have the implication of the proposed grading through the hydro corridor been fully considered?	Grades will not be lowered in the hydro corridor as shown in the redesign. Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
21	In comments issued Dec 1, 2021, it is stated the MTO does not support the proposed grading and earth works extending onto MTO lands across the north edge of Blocks 1 and 2, up to the limit of Northfield Drive West. All plans must be revised accordingly	Grades will not be altered in the MTO lands as shown in the redesign. Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
Parkland Dedication				
22	Pursuant to the City's Parkland By-law, as amended, Employment Lands are currently exempt from providing parkland dedication. If there is a parkland requirement at the time of draft plan registration, the City reserve the right to require the dedication of land at the applicable rate. Block 9 is encumbered by hydro infrastructure and (we assume) associated easements and is primarily proposed to be used as surface parking for the employment uses in Block 8. Block 9 is	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs); equates to approximately 1.03 hectares of net land area	✓	

	more appropriately designated and zoned for business employment uses (than open space), and the lands would be exempt from any parkland dedication.			
23	Given that the proposed Official Plan Policy Framework, proposed Zoning Framework and proposed development of the lands north of Block 9 is to include high density residential, it is not appropriate to calculate parkland at the rate of 5% of the net land area, which is the rate reserved for low density residential development having a density of less than 100 units/ha. Rather, the alternative rate of 0.15 ha/300 units for development exceeding 100 units/ha is the appropriate rate to apply. The exact number of units this subdivision will contain upon full build out is not known, only that the maximum density permitted would be 750 bedrooms/ha, subject to meeting other performance criteria, and the projected number of dwelling units will be approximately 2,534. Based on the projected dwelling unit yield, the parkland dedication would be 1.267 hectares.	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs); equates to approximately 1.03 hectares of net land area	✓	
24	Further to the explanation of the parkland calculation given in comment #23 above, it is the City's opinion that the overall parkland dedication amount will be based on 80% of the projected unit yield upon full build out of the subdivision, which is equal to 2,027 units and a parkland area of 1.013 hectares. The City requires that 100% of that parkland dedication be in the form of a single block of land, being at the scale of a Local Park. Local Parks are neighbourhood-oriented parks with facilities including informal active play fields, skating rinks, play facilities, seating, trails and landscaping.	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs)	✓	
25	As a condition of any building permit, which results in the overall density of the subdivision exceeding 2,027 units (based on # of units for which permits have been issued), the City reserves the right to require additional cash in lieu of parkland contributions.	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs)	✓	
26	In accordance with the Parkland Dedication Bylaw, land that is unsuitable for park development will not be accepted. This includes: • Environmental features • Hazardous or flood prone lands • Steep or unstable slopes • Lands having unsuitable or unstable soil conditions • Utility rights-of-way or easements, including, but not limited to hydro, gas, cable and telecommunications • Servicing rights-of-way or easements, including, but not limited to sanitary, water or stormwater infrastructure. • Lands that are contaminated or are suspect of being contaminated • Lands that are within or form part of a stormwater management facility	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs)	✓	
27	Given that the Master Plan presented includes extensive underground and structured parking, and limiting surface parking is an objective within the Stations Areas, Planning Approvals is open to discussing a Strata Park Block. A Condominium may be required for this arrangement of land ownership.	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs)	✓	
28	In addition to the Municipal Park Block requirement, the City may accept Privately Owned Publicly Accessible Spaces (POPS) within the limits of the Subdivision, as contribution to the overall subdivision parkland requirements, at a discounted value. The location of these POPS must be identified in the Master Plan & Design Guidelines document. A base level of securities shall be posted for the construction of these spaces, as a condition of subdivision registration, provided they are to the satisfaction of the Director of Planning.	Park and open space provisions will be provided as POPs.	✓	

	Through the site plan approval process, the specific design of these spaces and associated cost estimates will be determined, and easements over these spaces will be required in favour of the City to grant public access.			
29	The City requests the park block of 1.013 hectares meet the following general location and configuration criteria: a) A minimum of 40 metres of frontage along Conestogo Road West (frontage along Northfield Drive, being a high traffic Regional arterial road, is not accepted); b) Consideration should be given to situating the park adjacent to Block 9, being the Hydro Corridor, as it presents “park-like” and active transportation opportunities which can connect with the activities within the park c) Generally square in shape, without any significant shape irregularities; d) Connected to both the north-south and east-west primary promenades; e) Free of encumbrances and soil contaminants; f) At least eighty percent (80%) of the Park Block shall have grades of two percent (2%) or less.	Revised Draft Plan of Subdivision includes central park amenity space (identified as POPs). Proposed POPs include a total area of 1.03 ha, with frontage on Street A.	✓	
30	Once the City is in general support of the location and configuration of the park block, a Functional Design for the Park Block must be submitted, as a condition of registration and prior to the conveyance of the block, to the satisfaction of the Director of Parks Operations. The Functional Park Design Package must include: a) Landscape Plan b) Landscape Details c) Functional Grading Plan d) Functional Servicing Plan	Future details will be provided during the landscape design process.	✓	
31	The Functional Park Design Package shall be developed in consultation with the City of Waterloo and shall include and demonstrate the following to the satisfaction of the Director of Parks Services: a) Pathways & Walkways b) Accessibility c) Active uses (see comment #32 & #33 below) d) Passive uses e) Contribution to the Tree Target f) Connections to surrounding trails, sidewalks, and pathways, including connectivity to the Central Spine / Promenade Network, and the East West Central Pedestrian Promenade. g) Appropriate drainage patterns h) Appropriate services for park features i) Shade Structure and Seating	Future details will be provided during the landscape design process.	✓	
32	The expectation is that this park will include amenities that support active uses by the community, such as a playground, play field, play courts (basketball, tennis/pickleball), location for a skating rink, etc. The location of the park should be chosen accordingly, to minimize conflict between the residents and the park users, especially complaints related to noise and light levels.			✓
33	In addition to the above, the park space should provide a substantial flex-space of either soft or hardscape or both that could accommodate a range of potential programming opportunities and community functions including but not limited to farmer’s markets, street sales, festivals, concerts, etc.			✓
34	The park space shall not include an amenity for dogs, and therefore the Applicant shall provide amenities for dogs on the private property. The size and features of this private amenity shall be appropriate for the expected number of dogs at a development of this size.	Dog run is planned		✓
35	The park should be constructed prior to the issuance of the first building permit, unless otherwise directed by the City’s Director of Planning.			✓
Site Plan Approval				

36	It is anticipated that all Blocks within the limits of the subdivision will be subject to Section 41 of the Planning Act, and will therefore be subject to Site Plan Approval			
37	Prior to Site Plan Approval for any development within the limits of Draft Plan 30T-20401, registration of the subdivision, or the respective stages within the subdivision, is required.			
38	Prior to site plan approval within Blocks 3, 6, 8, and 9, approval from the GRCA is required.			
39	Prior to site plan approval within Blocks 1 and 2, approval from the Region of Waterloo is required.			
40	Prior to site plan approval within all Blocks, approval from the MTO is required.			
41	The City may impose a draft plan condition requiring that the Owner provide a noise impact study to the City and the Region prior to site plan approval for any building containing sensitive land uses. The noise impact study shall be prepared by a qualified and licensed acoustical engineer, and shall assess transportation noise impacts and stationary noise impact from the nearby hydro transformer station on surrounding sensitive uses. The noise impact study shall be prepared to the satisfaction of the Region. The Owner shall implement all recommendations of the accepted noise impact study, to the satisfaction of the City and the Region. As a condition of final site plan approval, if required by the City or Region, the Owner shall enter into a development agreement with the City or Region (as the case may be) to implement the requirements of the noise impact study, said agreement to be registered on title at the discretion of the City or Region (as the case may be).	Noise study has been submitted		✓
Easements				
45	As previously indicated, the City has significant reservations about the proposed approach to creating an internal private road network. A separate block of land for the roads is the preferred approach. Depending on the approach taken/approved, a reciprocal easement over the road network in favour of all blocks north of Block 9 may be required. The easement shall allow for the extension of services and utilities under and/or over the roads and the shared use and maintenance of the roads. Easements may need to be extended to Blocks 8 and 9 as well.	Revised Draft Plan of Subdivision now includes future municipal right of way	✓	
46	Easements are required for the installation of services through one block to serve a separate block. However, it is recommended that all services be contained within the private roadway, to the extent possible.	Revised Draft Plan of Subdivision now includes future municipal right of way		✓
47	Prior to Final Site Plan Approval of any block containing a Privately Owned Publically Accessible Open Space, the City shall require an easement in favour of the City to be registered over the space. The City may also require the Owner to enter into an agreement with the City, to be registered on title to the space occupied by the POPS. The agreement would ensure matters involving maintenance, repairs, usage, closure and other operating items be addressed.	Revised Draft Plan of Subdivision now includes future municipal right of way		✓
48	Easements in favour of the City are requested to be registered over all central spines and promenades, including private roads, generally illustrated below and detailed in the Master Plan. The easements must allow for public access and a complete active transportation network through the subdivision.	Revised Draft Plan of Subdivision now includes future municipal right of way		✓
49	The Owner shall agree to grant easements required for the proper and legal functioning of the master planned development on the lands in perpetuity either prior to registration, prior to final site plan approval or prior to the issuance of a building permit, depending on the purpose of the easement. Such easements may include: a) Servicing Easements (sanitary, water, stormwater) b) Utility Easements (hydro, natural gas) c) Telecommunication easements d) Private Access Easements (vehicular and pedestrian) e) Public Access Easements (over the central spines, promenades, POPS, and private roads).	Revised Draft Plan of Subdivision now includes future municipal right of way		✓
Agreement				

50	Prior to the initial registration, the Owner shall enter into a subdivision agreement for the Lands, being all of Draft Plan of Subdivision 30T-21401, which shall contain a condition requiring the Owner to enter into supplementary subdivision agreements for each stage of registration to satisfy all requirements, financial or otherwise, of the City in relation to such stage. The form and content of the agreements shall be to the satisfaction of the City's Director of Planning and the City's Director of Legal Services.			
51	Prior to the initial registration, the Owner may be required to enter into a Reciprocal Operating Agreement, to be registered on title to all lands. The Agreement shall outline the responsibilities for the maintenance, repair, replacement, and compliance of all shared facilities, services, infrastructure, roads, sidewalks, pathways, stairs, ramps, public spaces, access routes, open spaces, and demarcations (including fencing) within the subdivision for the life of the development in a lit, clear, safe and snow/ice free condition at all times.			
52	An agreement may be required where a pedestrian bridge is constructed from the limit of the subdivision, extending over Conestogo Expressway.			
53	All development within the limits of this subdivision will be subject to site plan control. The City may require a Master Site Plan Agreement to be registered on title to the entire subdivision, prior to the issuance of the first building permit, to the satisfaction of the City Solicitor. The agreement shall address the standard requirements for each site plan. Supplementary Site Plan agreements shall be registered on title as the subdivision is built out in phases.			
54	Prior to registration, agreements shall be signed by all parties. Signed agreements shall be registered on title to all applicable lands prior to, concurrent with, or immediately following registration of the subdivision as directed by and to the satisfaction of the City Solicitor.			
Hydro Infrastructure				
55	The City requires that all existing hydro infrastructure along Conestogo Road West and within Blocks 1 and 2 be buried at the Owners expense, in accordance with timing specified by the City's Director of Engineering Services. It is noted in the Servicing Report that the proposed raising of the grades across the top of the site will require the hydro infrastructure to be replaced anyway. The Servicing Report also notes that the proposed lowering of the grades within the hydro corridor will require all underground infrastructure to be installed at a lower depth.	Hydro infrastructure is not required to be buried along Northfield and Conestogo now that the MTO Lands and Hydro Corridor grades are not changing.	✓	
56	To offset the costs associated with this request, the City is prepared to support a setback of 5 metres along the northern limit of Blocks 1 and 2 and along Conestogo Road West subject to meeting other setback criteria related to noise, the MTO, etc.			
Servicing Infrastructure & Ontario Building Code				
57	Having no municipal roads through this subdivision presents challenges for servicing the "interior blocks". The Ontario Building Code states as follows regarding separate services for separate properties: 7.1.5.4. Separate Services (1) Except as provided in Sentences (2) and (3), piping in any <i>building</i> shall be connected to the public services separately from piping of any other <i>building</i> . (2) An ancillary <i>building</i> on the same property as the main <i>building</i> may be served by the same service. (3) <i>Water service pipes</i> or <i>building sewers</i> serving <i>buildings</i> located on the same property may connect into a <i>private water supply</i> or a <i>private sewer</i> conforming to Article 7.1.5.5. (4) No <i>plumbing</i> serving a <i>dwelling unit</i> shall be installed in or under another unit of the <i>building</i> unless the piping is located in a tunnel, pipe corridor, common <i>basement</i> or parking garage, so that the piping is <i>accessible</i> for servicing and maintenance throughout its	Revised Draft Plan of Subdivision now includes future municipal right of way	✓	

	length without encroachment on any private living space, but this Sentence does not prevent <i>plumbing</i> serving a unit located above another unit from being installed in or under the lower unit.									
58	Although it would appear each block is serviced separately from Conestogo Road West, through various easements, it will be a condition of draft approval that prior to registration, the Owner shall sufficiently demonstrate to the satisfaction of the Chief Building Official and Director of Engineering that each block can be serviced in a manner that complies with the Ontario Building Code and good Engineering practices, including the proper separation of all underground services and utilities and other above ground utilities and installations. It shall also be demonstrated that any easements and agreements related to servicing are in place at the time of registration.									
59	The City is not supportive of agreements for the sharing of water and/or sanitary services. The City is unlikely to enter into any agreements for the sharing of stormwater services, and such agreements are entirely at the discretion of the Director of Engineering Services.	Revised Draft Plan of Subdivision now includes future municipal right of way Water and sanitary provided as part of future municipal right of way; Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023).	✓							
60	Minimize the number of service connections to the municipal mains. Revise servicing to reduce municipal connections while meeting all Ontario Building Code and other applicable municipal specifications/guidelines. Minimize water meters to be read by City of Waterloo Utilities	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓							
61	Considering the size of the proposed development, the proposed stormwater outlet point and change in stormwater treatment, the City requests that the stormwater management system designed, be capable of exceeding both quantity and quality control specifications required by the City/Region and GRCA prior to outlet into GRCA floodplain and MTO property.	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓							
62	A report addressing Storm Water Management quantity and quality control for the 2, 5 and 100 year storms, post and pre-development attenuation is required. A Professional Engineer must confirm that stormwater quality will meet current standards prior to leaving property.	Completed. Addressed in Section 9.4 of the W/F report.	✓							
63	A water distribution report is required. This report should demonstrate the capability of the existing municipal watermain to supply the domestic and fire flow requirements for the development.	Completed. Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023).	✓							
64	City Staff have carried out a preliminary assessment of the sanitary capacity for 525-565 Conestogo Rd. The Functional Servicing Report (Report) for the application notes that the proposed development will have a peak sanitary discharge of 71.28 L/s. As per the provided Letter, the proposed sanitary flow rates are as summarized in Table 1 below. Table 1 – Sanitary Servicing anticipated maximum peak flow rates: <table><tr><th>Source</th><th>Peak Flow (L/s)</th><th>Peak Flow (m³/s)</th></tr><tr><td>Proposed Site</td><td>71.28</td><td>0.00713</td></tr></table> 2029 Modelling Scenario The future conditions PCSWMM sanitary sewer model includes loading rates that are projected to reflect 2029 conditions. Although the projected 2029 model should include the projected flows from the proposed development, evidence of this was not readily apparent in the 2029 model. To be conservative, the flows resulting from the proposed development were added to the sanitary sewer model flows to determine the effects of the proposed development on the sanitary sewer system. The analysis was carried out for the wet weather modelling scenario as it is more conservative. Forwell Creek Trunk System	Source	Peak Flow (L/s)	Peak Flow (m³/s)	Proposed Site	71.28	0.00713	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
Source	Peak Flow (L/s)	Peak Flow (m³/s)								
Proposed Site	71.28	0.00713								

	The proposed flow of 71.28 L/s was accounted for in the MH F26-2 flows, as per the Report. The 2029 projected 'post-development' modelling results indicate that the sanitary sewer on Conestogo Road downstream of the proposed development does not appear to have available capacity under wet weather modelling scenarios prior to the additional flows, reaching a full flow capacity, as shown on the figures below.			
65	The subdivision agreement will include a clause that the City may require the Owner to submit and have approved a detailed Geotechnical Investigation & Hydrogeological Assessment as part of any complete site plan application and/or detailed engineering submission, to the satisfaction of the City. The Geotechnical Investigation and/or Hydrogeological Assessment shall provide specific recommendations relative the design of foundations for these structures, to the satisfaction of the City's Chief Building Official and/or Director of Engineering.			
66	Section 9.4.1 of the Functional Servicing & Stormwater Management Report by WalterFedy, dated June 2021, states that stormwater infiltration is not proposed within the subdivision due to the soils being identified for potential contamination. Are the LIDs such as bio-retention and permeable surfaces referenced in the design guidelines even feasible? There appears to be conflicting information here.	Not applicable. Please refer to Section 6.3 of the Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
67	<u>Possible Draft Plan Condition</u> Prior to the initial registration and any site servicing or subdivision construction works (excluding stripping of topsoil and area grading): a) A northbound left turn lane shall be constructed on Conestogo Road West at Northfield Drive in accordance with Plans approved by the Region of Waterloo and City of Waterloo, to the satisfaction of the City's Director of Engineering Services. b) It shall be demonstrated that sanitary services are sufficient and as necessary have been upgraded to fully service the subdivision to the satisfaction of the City of Waterloo. c) It shall be demonstrated that water services are sufficient and as necessary have been upgraded to fully service the subdivision, to the satisfaction of the City of Waterloo. d) It shall be demonstrated that stormwater services are sufficient as necessary have been upgraded to fully service the subdivision to the satisfaction of the City of Waterloo.	Please refer to the Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
68	<u>Possible Draft Plan Condition</u> All services and related infrastructure including appurtenances thereto in the subdivision shall be privately owned and maintained, and connected to municipal services within the adjacent road right of ways, to the satisfaction of the City			
69	<u>Possible Draft Plan Condition</u> The design, construction, and operation of any private water service(s) for development on the Lands shall not create a non-municipal drinking water system(s) within the meaning of the Safe Drinking Water Act, 2002, S.O. 2002, c.32 (the "SDWA").			
70	<u>Possible Draft Plan Condition</u> The design, construction, and operation of private services (water, sanitary, and stormwater) for development on the Lands shall comply with applicable law, including but not restricted to the Building Code Act, 1992, S.O. 1992, c.23 and Section 7.1.5.4 of the Ontario Building Code, to the satisfaction of the City's Chief Building Official			
71	<u>Possible Draft Plan Condition</u> Where a lot or block is subject to Site Plan Control pursuant to Section 41 of the Planning Act, R.S.O. 1990, c.P.13, no site servicing or subdivision construction works shall be undertaken (excluding grading or topsoil removal, or works authorized by a Site Alteration Permit) until plans are approved, and agreements and easements are registered, unless written authorization has			

	been granted for said works by the City's Director of Engineering Services or the City's Chief Building Official.			
72	<u>Possible Draft Plan Condition</u> Design and construction plans for all retaining walls and the like in the subdivision shall be included with the required engineering drawings, including dimensions and materials, to the satisfaction of the City's Director of Engineering Services.			
73	<u>Possible Draft Plan Condition</u> The engineering plans shall identify the regulatory floodplain, to the satisfaction of the City and the Grand River Conservation Authority. Residential development within the subdivision shall not be located within the regulatory floodplain, measured at the finish ground level adjacent to the building, unless otherwise directed by the City and the Grand River Conservation Authority.	Please refer to the Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
Environmental				
74	Section 5.1 of the Planning Justification Report notes that "the Scoped EIS was not identified as part of the pre-consultation process...". For clarity, the need for a Scoped EIS was identified and was included in the City's Pre-Consultation Meeting Record that was issued on March 12, 2020.		✓	
75	Section 5.1 of the Planning Justification Report notes that the Scoped EIS evaluated the proposed pedestrian bridge crossing over the Parkway on both the east and west sides of the connection. To this end, the Scoped EIS does state the following: <i>"...the crossing location will avoid in-water work and the proposed crossing location will take advantage of an existing disturbed open area. Care has been taken to minimize the direct footprint of construction, and the design of the bridge will avoid bends in the watercourse. There will be no need for any physical realignment of Forwell Creek, and the crossing will not inhibit fish movement or act as a barrier. Additionally, the risk to flood damage to upstream or downstream properties will be negligible, given the bridge design and crossing location. As such, no negative impacts are anticipated to any watercourses."</i> And also states: <i>"A DFO self-assessment will be completed, following final engineering design of the pedestrian bridge, documenting consideration to the watercourse and fish habitat in relation to the proposed pedestrian bridge."</i> However, the sections of the Scoped EIS that describe the Aquatic Habitat Assessment and the various drainage features and watercourses do not appear to describe the perennial watercourse that the pedestrian bridge would be built alongside on the west side of the Parkway. Clarification is needed.	Response to comments related to EIS to be provided by NRSI under separate cover	✓	
76	Through Official Plan policies 8.2.5(6), (7), (8), (9), (10) and (11), appropriate buffers for perennial watercourses are to be established, with a guideline width of 30 metres to be evaluated through an EIS. Further, through policy 8.2.5(13), opportunities to naturalize piped, culverted, or channelized perennial watercourses to enhance or restore ecological functions are to be supported. It is unclear whether the pedestrian bridge would be built as part of this development application or through a separate process, and therefore the applicability of these policies is unclear.	Response to comments related to EIS to be provided by NRSI under separate cover	✓	
77	The Scoped EIS maps and describes the intermittent/ephemeral features on site. It needs to be confirmed whether these features meet the Official Plan's definition of "intermittent watercourse" and whether the corresponding policies in Section 8.2.5 apply.	Response to comments related to EIS to be provided by NRSI under separate cover	✓	
78	With respect to the trees on site, Official Plan policy 8.2.9(2) states: <i>"It is the City's intent to protect existing trees and plant new ones where feasible and appropriate. When considering development applications and site alteration permit</i>	Response to comments related to EIS to be provided by NRSI under separate cover	✓	

	<i>applications, the City will require that only the trees that directly impede the proposed work be removed and that the applicant replace them in reasonable amount, with trees of sufficient maturity. The amount and maturity of replacement trees will be determined based on the amount, maturity, species, and health of the trees to be removed. A Tree Preservation Plan may be required to provide an inventory of all trees on the site, an assessment of their health and condition, recommendations regarding which trees should be saved and which will be removed, tree protection measures, and replacement trees. As part of any Tree Preservation Plan, the City may require tree loss totals and corresponding compensation estimates. Tree Preservation Plans must be prepared by qualified professionals.”</i> Therefore, a Tree Preservation Plan that addresses the above noted policy should be submitted. The City will require this as a condition of draft of approval, and a clause in the global subdivision agreement.			
79	Given that the City’s Stormwater Management Master Plan identified Forwell Creek as having “the worst Subwatershed conditions in the City”, opportunities to improve conditions should be sought through the stormwater management undertaken as part of this development. Consider the Engineering comments above to this effect.	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
80	Through the Functional Servicing and Stormwater Management Report, the limits of the floodplain have been refined. As described in the report, the floodplain has been “mapped to be generally contained within the drainage channel with minor encroachment onto the subjects lands in and around the utility corridor”. The refined floodplain is shown on Figure 5. However, the refined floodplain does not appear to be used on the other drawings submitted. The floodplain is a designated Candidate Two Zone Policy Area. Per Official Plan 8.4.2(29), Candidate Two Zone Policy Areas are treated as One Zone Policy Areas unless additional technical analysis is completed to the satisfaction of the GRCA and the results of the analysis validate the application of the Two Zone approach. As confirmed by GRCA through their July 9, 2021 comments, the Functional Servicing and Stormwater Management Report is not appropriate for a two-zone policy analysis, and therefore the floodplain must be treated as a one-zone. Per Official Plan policy 8.4.2(19), development and site alteration will not be permitted in One Zone Policy Areas except in accordance with policy 8.4.2(4), which provides exceptions where the development is limited to land uses that, by their nature must locate within the floodway, including flood or erosion control works, structures necessary for conservation, water supply, wastewater management, or minor additions or passive non-structural uses which do not affect flood flows. Therefore, the refined floodplain will need to be shown on all the drawings and it will need to be demonstrated that all development and site alteration is outside of the floodplain, with the exception of anything that meets the criteria set out in 8.4.2(4).	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
81	With respect to the zoning by-law, the F prefix is currently applied to the entire site because it is one property. Since smaller properties will be created through the subdivision process, it will be appropriate to limit the applicability of the F prefix to just those blocks that will contain portions of the regulatory floodplain. Based on the refined floodplain mapping presented in the Functional Servicing and Stormwater Management Report (excerpt included below), it appears this may include Blocks 3, 6, 9 and 8	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023)	✓	
82	The City typically requires terrestrial, surface water and/or ground water monitoring for Plans of Subdivision in accordance with our Development Monitoring Protocol. However, given the findings of the Scoped EIS, pre-, during- and post-development monitoring will not be required.		✓	
83	The Sustainable Design Strategy imbedded within the Master Plan and Design Guidelines speaks to sustainability at three scales: District Scale, Block Scale and Building Scale. Under the District	Sustainable options continue to be explored to service the property in the most efficient manner.		

	Scale, it is noted that “district-level energy generation facilities have not been explored leading up to the Master Plan exercise; however, geothermal facilities for the broader site are a consideration moving forward in the development process”. Under the Block Scale, it is noted that “Blocks within the District have been consciously oriented considering southern exposure as it relates to solar orientation” and that “EV charging stations will be provide throughout the underground parking garage” and that “opportunities for building in future capacity through electrical infrastructure will also be explored through detailed design”. Under the Building Scale, it is noted that alternative roof designs will be explored, solar panels are contemplated for mid-rise forms, wall-to-window ratios will be generally balanced between the interests of energy efficiency and urban design objectives, and building design will broadly look to optimize building energy performance. Staff appreciate the level of consideration that sustainable design has been given to date, but think there are significant opportunities that warrant more detailed evaluation. The following items need to be considered/further considered: a) Identify and evaluate opportunities for the buildings to achieve at least a 15% improvement in energy efficiency above the Ontario Building Code, SB-10, Division 3 (2017). b) Identify and evaluate opportunities for designing the buildings and the site to be Solar Ready. c) Identify and evaluate opportunities for partial or full replacement of conventional natural gas heating with low carbon alternatives such as electric systems or geoexchange systems. d) Identify and evaluate opportunities for maximizing low-carbon transportation measures within the buildings and the site, including electric vehicle charging stations and/or readiness to enable future charging station installation. e) Identify and evaluate opportunities for backup power systems that will improve the resilience of the buildings to power outages. f) Identify and evaluate opportunities for district or shared energy. g) Provide a cost-benefit analysis of items a) through f) that covers the short, medium and long term. h) Describe the planning tools that will be used to implement items a) through f). As part of item c), a feasibility study for a geoexchange system will need to be undertaken. To help facilitate such a study, Staff request that the Applicant meet with Matthew Day - Community Energy Program Manager at WR Community Energy. Matthew will be able to assist with determining the potential scope of the feasibility study and provide general guidance for undertaking such a study. For a new master planned development of this scale and density, it is the City’s expectation that a substantial commitment is made to implementing the sustainability items outlined above in a) through f) at, a district, block and building level. This commitment may be secured through draft plan conditions imposed by the City.			
84	In correspondence from the GRCA dated July 9, 2021, it was requested that the Applicant provide a comment response matrix to address GRCA’s comments. A copy of the response matrix should be circulated to the City for awareness.	Please refer to Functional Servicing Report Addendum #1, prepared by Walter Fedy (dated March 28, 2023).		
Master Planning & Urban Design				
85	Staff have reviewed the Preliminary Master Plan & Design Guidelines document and appreciate the level of detail in the plans, renderings and text. As a condition of registration of the subdivision, the Owner will be required to submit a Final Master Plan & Design Guidelines document to the satisfaction of the City of Waterloo. This document is intended to clearly outline the expectations for the design of the blocks within the subdivision through the site plan	Please refer to Urban Design Report Addendum, prepared by GSP Group (dated March 2023).	✓	

	review process. Certain design requirements and specifications may be further secured through conditions of draft approval. Staff requests that the comments in Appendix 'A' be considered and addressed in the preparation of the Final Master Plan & Design Guidelines			
86	Staff do not recommend updating/refining the Master Plan & Design Guidelines document until the policy and zoning framework and the location and configuration of the municipal park block have been further advanced. This will more accurately inform the type and mix of uses, built form and setbacks, density, phasing, internal street alignment etc. Other primary factors, such as the additional turn lane and road widening on Conestoga Rd W, the confirmation on watercourse impacts and floodplain limits, removal of all site alterations within the floodplain and MTO lands (with the possible exception of the pedestrian bridge), a drainage design that improving SWM quality and quantity, should be further reviewed to determine their impact and resulting changes to the Master Plan. All of these complex details must of course be orchestrated together.	Please refer to Urban Design Report Addendum, prepared by GSP Group (dated March 2023).	✓	
87	<u>Possible Draft Plan Condition</u> Prior to the initial registration, the Owner shall, at its expense, prepare Urban Design Guidelines for the Lands (the "UDG"), to the satisfaction of City's Director of			
88	<u>Possible Draft Plan Condition</u> The subdivision and all buildings therein shall conform to and implement the accepted UDG, unless otherwise agreed to by the City's Director of Planning			
89	<u>Possible Draft Plan Condition</u> The UDG shall, in part: • foster design continuity within the subdivision; • create an architectural vision and design objectives for the subdivision and buildings therein; • assist future owners through the site plan process; • create a common design vocabulary and standard for the subdivision and buildings therein; • identify and protect/enhance significant focal points and views / vistas; • establish design guidelines for above-grade utilities; • foster high quality urban design and building architecture; • foster connectivity; and • foster well-designed and attractive streetscapes			
90	<u>Possible Draft Plan Condition</u> If required by the City of Waterloo, prior to area grading and topsoil stripping, and prior to registration, the Owner shall obtain acceptance of the following additional plans from the City and any other authority having jurisdiction, and shall comply with and implement the said accepted plans at its expense: a) "Master Site Plan" shall be provided identifying and including: i. The location of all Buildings and Structures, including retaining walls ii. Major overhead utilities (within the hydro corridor) iii. Building Entrances and Accesses to Underground Parking Levels iv. Vehicular accesses to parking areas v. Underground Parking Levels vi. Comprehensive Private Road and Promenade Network, connecting to the municipal streets vii. Privately Owned Open Spaces, Municipal Parkland, and other Landscaped Areas viii. Fire Routes ix. Floodplain Limits and other Environmental Boundaries			✓

	x. Data Chart including uses within each building, building heights, approximate floor areas for each use, approximate bedroom and unit counts, approximately vehicle and bicycle parking counts, approximately density. All Site Plans shall generally conform to the Master Site Plan. a) “Comprehensive Private Road and Promenade Network Plan (the “CPRPNP which shall include construction details for the promenades and private roads, as identified in the Approved Master Site Plan, to the satisfaction of the City’s Director of Engineering Services. The plan shall include, identify and/or demonstrate: i. The private roadway ii. multi-use pathways (MUP) and sidewalks; iii. connections to the municipal sidewalk network; iv. underground utilities and infrastructure; v. dimensions and setbacks to buildings; vi. construction techniques and cross-sections; vii. landscaping and details; viii. bollards, site furnishings, lighting and signage The Owner shall, at its expense, design, construct, and maintain the accepted Comprehensive Private Road & Promenade Network Plan, to the satisfaction of the City’s Director of Engineering Services. b) “Emergency Response Plan” shall be provided to the satisfaction of the City’s Chief of Fire Rescue Services demonstrating: i. the location, design and configuration of emergency accesses. ii. private roads have been designed to accommodate the City’s largest fire truck, including turning movements; iii. all services and appurtenances thereto required for fire response and fire protection; iv. how all residential areas in the proposed subdivision registration will maintain access for emergency responders during the maintenance, repair and replacement of services and private roads or any segment thereof; v. how all blocks in the proposed subdivision registration will maintain access for emergency responders if a section of the private road is obstructed; vi. how the stacking of emergency responder vehicles (including fire, paramedics, police, utilities, social services) who attend significant emergency events is accommodated, and evacuation accesses maintained for the duration of the emergency event.			
91	<u>Possible Draft Plan Condition</u> The Comprehensive Private Road and Promenade Network (the “CPRPN) shall be constructed and open for use based on timing/staging acceptable to the City’s Director of Engineering Services. The staging of construction of the CPRPN should be clarified in the Staging Plan	Revised Draft Plan of Subdivision now includes future municipal right of way.	✓	
92	<u>Possible Draft Plan Condition</u> Upon completion of the whole or portions of the CPRPN to the satisfaction of the City’s Director of Engineering Services, the Owner shall convey easements as necessary			
93	<u>Possible Draft Plan Condition</u> With the exception of any municipal buildings within the park block, there shall be no building permits issued within the limits of the subdivision until the related subdivision lands are registered, the CPRPN (or appropriate sections) are completed, the park block is completed, and other draft plan conditions as required are satisfied.			

Concluding Remarks			
94	Based on our review of the first submission, there are outstanding matters to be resolved and addressed. The City is not in a position to offer a recommendation in support of draft plan approval.		
95	In response to the comments contained herein, the City requests the submission of updated material in digital format, accompanied by a cover letter and response matrix	✓	
96	Please review these comments in conjunction with those issued by the City regarding the Official Plan Amendment No 32 and Zone Change Application Z-21-03 (Part 2 of 2), and the comments issued by the Region of Waterloo on February 10, 2022. The City reserves the right to modify or add to these comments based on additional material submitted to the City, or where there are inconsistencies noted between the City and Regional comments.	✓	
APPENDIX A – Master Plan & Design Guideline Requirements			
a	Coordination: Ensure all plans are coordinated for future submissions. For example: a) Show pedestrian bridge clearly on all plans. b) Show GRCA regulated Floodplain limit on all plans. c) Site plans Functional SWM Report show a different layout than the site plans for the office building area. d) The EIS plan for the office buildings indicates a sports field fronting the parkway yet the GSP plans do not show this.		
b	Central Spines / Promenades: a) A network of north-south and east-west promenades or spines provide the primary pedestrian and vehicular circulation network for the entire subdivision. These areas (purple and red below) should prioritize pedestrians and cyclists, with vehicles as the secondary priority. b) In terms of their location, Staff are in general agreement with the arrangement of the promenades as shown in the Master Plan document. The locations should be strengthened in a dedicated image in the Master Plan and each central spine / promenade should be given a name for ease of reference. c) Staff see there being two types of promenades: (a) Promenades without a private street; and (b) Promenades with a Private Street. Staff require further work to be undertaken on preparing detailed cross-sections for these two types of Promenades for inclusion in the Master Plan. - o Promenades without a Private Street should generally be designed in accordance with the following cross-section: • 4 m commercial activity zones that can accommodate patios, and commercial displays, with a 1.5 – 2 m space for the passage of pedestrians. • Planting zones wide enough and deep enough to support large canopy tree growth • A promenade zone/multi-use pathway zone that can accommodate pedestrians and cyclists • A 5 m planting zone that can accommodate tree growth, causal seating, flower beds, and other areas for public art, patios, exercising, or children’s play. - o Promenades with a Private Street should generally be designed in accordance with the following cross-section: • 4 m commercial activity zones that can accommodate patios, and commercial displays, with a 1.5 – 2 m space for the passage of pedestrians. • Planting zones wide enough and deep enough to support large canopy tree growth • A dedicated roadway of 6.1 to 7 m to for vehicles	Development concept revised to exclude large pedestrian promenade along Conestoga Parkway and previous central spine (“main street”-type connection to Conestogo Road) Revised development concept includes central park amenity space, to be designed with appropriate pedestrian system to provide for connectivity to future residential development, as well as proposed pedestrian overpass and future open space amenity area associated with Hydro Corridor	✓

	• A 2.5 flex-space for on-street parking, patios or plantings			
	Central Spines / Promenades: Other details that must be referenced in the Promenade cross-sections and/or accompanying sections of the Master Plan document include: ○ Consideration for bump-outs at crossing locations. ○ Consideration of material variation and/or tabletop intersections and crossing areas. ○ Minimum soil depths for Planting Zones and Green Zones being 1.5 metres. This may be achieved through the use of raised planters, however planter heights cannot exceed 0.6 metres. ○ Tree planting standards and spacing intervals for Planting Zones and Green Zones. Currently, there are no trees shown on the cross-sections. Note, the Planting Zones are expected to be heavily treed, with minimal hardscaping. This area is important to enable to subdivision to reach the Tree Target upon full build out. ○ Use of textured strips between Zones for universal accessibility purpose ○ Standards for street furnishings including Bike Racks, Seating, Garbage Receptacles, Lighting etc for consistency throughout these spaces. ○ Standards for landscaping for consistency through these spaces. ○ The location of underground utilities ○ The location of lighting standards			
	Central Spines / Promenades: The central spines / promenades must be activated at the ground level with commercial, employment and/or community uses. Despite what has been shown in the Master Plan, residential units may only be permitted on the ground level of buildings in special circumstances through the site-specific implementing zoning by-law, but not as the standard.	Development concept revised to exclude large pedestrian promenade along Conestoga Parkway and previous central spine (“main street”-type connection to Conestogo Road) Future right of way provided around central park/open space area to be designed to provide for integration of residential, commercial and park/open space uses	✓	
	Central Spines / Promenades: As there are no dedicated parcels of land for private or municipal streets within the limits of the subdivision, Staff have considered other methods of establishing building setbacks that will secure sufficient space for the construction of the promenades in accordance with the cross-sections. Assuming that the promenades will be centred along certain shared property lines, the approach recommended is a minimum setback from certain property lines to building facades. For example: ○ For Promenades with a Private Street, the minimum building setback should be approximately 9.5 metres from the applicable property line. ○ For Promenades without a Private Street, the minimum building setback should be approximately 12 metres from the applicable property line; ○ The zoning by-law would provide more specifics as to which property lines from each block these setbacks apply to.	Revised Draft Plan of Subdivision now includes future municipal right of way which will be designed in accordance with City standards (bike facilities, sidewalks, street trees, etc)	✓	
c	Open Spaces & Landscaping: a) The development must be planned and constructed with a convenient network of barrier free accessible / AODA compliant routes, including through the central spines / promenades, parks (municipal & POPS), private roads, connections to municipal streets, connections to the pedestrian bridge in accordance with the City’s Accessibility Standards: https://www.waterloo.ca/en/government/accessibility-standards.aspx b) In addition to the Municipal Park required by the City, consider the distribution of the other open spaces. Ensure these spaces are well connected to the promenade and the municipal park.			

	c) The Hydro Corridor is an opportunity for other open spaces. However, permission to install any features, such as a multi-use pathway, passive amenity spaces and naturalized spaces, and a dog park, should be vetted through Hydro One d) Regarding the Plaza Space Along Northfield Drive: ○ The current design demonstrates large urban squares and amenity areas along Northfield and the Parkway. However, the plaza space along Northfield Drive extends into lands owned by the Ministry of Transportation. The Master Plan needs to accurately reflect the limits of development and grading activities in this area, as the MTO is not supportive of any encroachments. The design of Blocks 1 and 2 and their buildings must find other ways to relate to and form an inviting interface with Northfield Drive without utilizing the MTO lands. ○ Given the level of dust and noise generated by heavy traffic along Northfield Drive and the Conestoga Expressway, it is recommended that the Master Plan locate the primary open spaces more internal to the development where they are less exposed. ○ This area has a significant amount of hardscaping. A more balanced approach to both hard and softscaping is encouraged, where plantings including large shade trees, shrubs and perennials, and grass are applied generously to enhance and soften the scale of the development. e) The primary gathering areas, community amenities, and commercial spines should be located internally to create a community heart within the neighbourhood and not on the periphery. f) The elements of the community heart should be logically linked to transit, the proposed bridge, visitor parking areas, the municipal park and other important assets. The community should be designed to radiate out from this central core. g) Smaller neighbourhood parkettes, squares and gathering areas can occur within the larger blocks, however, the primary design gesture should ideally revolve around a central heart/core and one or two central spines that link everything. h) Staff recommend commercial uses and primary amenities/community assets be distributed along Street D, which will ideally behave as the “main street” of the neighbourhood. i) The UDB describes a vision and provides imagery of a heavily planted and naturalized open space within the hydro corridor, however, the site plan demonstrates a manicured park and parking. The text and imagery need to be consistent. In addition, the proposed plan for the hydro corridor must not conflict with Hydro One requirements.			
d	Tree Target: a) The City requires the establishment of a Tree Target of 300 trees to be planted within the limits of the subdivision upon full-build out. b) To ensure the target is reached incrementally as the blocks are built out, the Master Plan must establish tree target ranges for each block within the subdivision, using reasonable standards and assumptions that must also be noted in the Master Plan document. c) The Master Plan needs to establish minimum soil volumes and/or depths over underground parking structures and on roof top terraces for proper tree growth. d) A minimum of fifty percent (50%) of the trees shall be large canopy species, unless otherwise agreed to by the City’s Director of Engineering Services; e) Trees on rooftops may contribute up to a maximum of 30% of the tree target. f) Contact HONI and/or WNH to confirm what trees may be permitted within the hydro corridor. There may not be a height limit given the height of the overhead infrastructure.			✓

	g) Contact the MTO and GRCA to understand what trees, if any, can be planted within the floodplain and 14 metre development setback. The graphics in the Master Plan must accurately reflect what is permitted by these approval authorities. h) A Master Landscape Plan should be included, which visualizes the full build out of the tree target. i) The Master Plan should reference tree planting guidelines including: i. <i>Minimum of 50% of proposed trees shall be large canopy species and a maximum of 25% shall be small canopy species</i> ii. <i>Minimum soil volumes available for each tree shall be 30 cubic metres for each large canopy tree, 17 cubic metres for each small canopy tree, up to 15 cubic metres can be shared between trees</i> iii. <i>Minimum 50mm caliper size wire basket or balled and burlapped condition to be provided</i> iv. <i>Tree spacing shall be 8-10m on centre for large species and 6-8m on centre for small species</i> ii. <i>No more than 25% of any one genus of species shall be represented</i>			
e	<u>Privately Owned Publicly Accessible Parks Space (POPS):</u> a) The Urban Design Guidelines must identify the location of any Privately Owned Publically Accessible Park Spaces (POPS) which are outside of, but well connected to, the central spine / promenades. b) Ensure that solar access and wind protection in these areas is maximized. c) Guidelines within the Master Plan for these POPS must be aligned with the City's Guidelines for POPS, available here: https://www.waterloo.ca/en/government/resources/Documents/Development-applications/Guidelines-for-Privately-Owned-Accessible-Spaces.pdf			
f	<u>Dog Park:</u> Considering the number of dogs that would reside in this development, a dedicated, fenced dog park should be accommodated.	Dog run is planned	✓	
g	<u>Outdoor Art:</u> a) For a development of this scale, it is appropriate to identify on a plan where outdoor art installations will be located. Consider high visibility locations that do not interfere with or impede pedestrian and cycling routes. Make these destinations and landmarks within POPS and along the central spines / promenades. b) Open spaces provide opportunities for the installation of Public Art. The Master Plan should incorporate general "at-grade" locations for public art, in areas which the public will have access. The details of the art installation will be further secured through site plan approval process.			✓
h	<u>Standards for Pedestrian Crossings:</u> Standards for pedestrian crossings over private roads and drive aisles must be provided, including widths, material and any stamping or texture details.			✓
i	<u>Bike Parking:</u> For a development of this scale, it is appropriate to show on a plan where external bike facilities will be generally located, that is those not located within a building. Bike parking details, including rack type and shelters, should be included.			✓
j	<u>Street Layout / Entrances:</u> Consider the comments #12 above.			
k	<u>Hydro Infrastructure:</u>			

	a) All buildings must have a vault room. No external hydro pad mounted transformers. No above ground hydro. b) Consider what needs to be installed at the outset to make this possible?			
l	Functional /Operational Elements: a) Consider guidelines for how to locate and screen the following from view of pedestrian realms, parks and open spaces, public streets and the central spines/promenades: i. Loading & Deliveries ii. Garbage Collection, Pick up and Storage Areas iii. Move in-Rooms			
m	Street level architectural guidelines: a) Ensure there are clear guidelines for street level architecture and building entrances, in particularly where adjacent to the central spines / promenades and other private roads. b) Provide guidelines for the ground level of buildings which will “back” onto the Conestogo Expressway.			
n	Roofline architectural guidelines Given that the proposed zoning is requesting height permissions up to and even exceeding 81 metres, clear guidelines for the top storeys of building must be provided. Articulation of all sides is required. A distinctive character is encouraged.			
o	Opportunities for Community Uses: a) To support residential uses on this site, and given the density proposed and lack of other amenities in the vicinity, the Master Plan should contemplate and identify where space could be accommodated, with direct access at grade, for such community facilities/uses as: i. Schools ii. Daycares iii. Libraries iv. Community Centres b) Guidelines for designing these space should be offered in the Master Plan.	Official Plan and Zoning By-law Amendment to include permissions for non-residential uses	✓	
p	Gateways Consider where the gateways to this District are located and what clearly demarcates them as gateways? What else is located at a gateway? Signage or other wayfinding installations?			
q	Low-Impact Development: Identify <i>where</i> there are special features proposed. Consider the recommendations of the Functional Servicing and Stormwater Report.			
r	Environmentally Conscious Demolition The demolition of the existing buildings will produce a huge amount of debris. Demonstrate how this process of demolition and debris removal may be done in a manner that reduces landfill waste and increases reclamation.			
s	Underground and Structured Parking: a) Consideration for these south of the hydro corridor is warranted. The plan only contemplates surface parking. b) Where underground parking is proposed, do not rely heavily on raised planters to achieve appropriate soil depths for tree growth. The average minimum distance between grade and the top of any underground structure should be 1.5 metres across the site. These standards should be embedded in the Master Plan.			
t	Wind and Noise Mitigation: a) Staff recognize that detailed wind and noise studies may be required as part of a complete site plan application for a more fine grain evaluation based on the specific geometry and location	RWDI addendum report includes placement of noise barrier for outdoor amenity areas.		✓

	of a building. However, given that a noise study and wind assessment have been conducted based on a master plan level of detail, the following should be reflected properly in the Master Plan: i. Noise barriers. These are required for outdoor amenity areas as outlined in the study. The design and location of these should be shown on the plans including details. May require sections to determine the pedestrian impact along the promenade and elsewhere. ii. Winter wind condition should be addressed and improved. Outdoor common amenity area, including rooftop terraces, must be evaluated. There should be outdoor spaces that will be comfortable to sit and stand in during the winter months. Wind control methods should be incorporated and prioritized. Although the report states that public sidewalks are expected to have appropriate wind conditions, we should aim for better throughout the site, and along the central spines / promenades, within parking areas, and around the municipal park. We should ensure the spaces are designed with winter-city design in mind.	RWDI addendum marked the location of noise barriers on plans and will include further detail design and location. Our mitigation plan will also include plantings to further reduce noise levels and wind impact. Outdoor amenity areas will be evaluated for winter wind conditions and prioritize wind control methods.		
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