Report to Planning and Environment Committee

To: Chair and Members

Planning & Environment Committee

From: George Kotsifas, P. Eng.

Managing Director, Development & Compliance Services and

Chief Building Official

Subject: Application By: 2219008 Ontario Ltd (York Developments)

Silverleaf Subdivision – 3493 Colonel Talbot Road Request for Extension of Draft Plan Approval

Meeting on: September 9, 2019

Recommendation

That, on the recommendation of the Director, Development Services, with respect to the application of 2219008 Ontario Ltd (York Developments) relating to lands located at on the west side of Colonel Talbot Road and south of Park Road; legally described as Part of Lot 75, West of the North Branch of the Talbot Road (Geographic Township of Westminster), City of London, County of Middlesex, situated on the south side of Pack Road, west of Colonel Talbot Road, municipally known as 3493 Colonel Talbot Road the Approval Authority **BE REQUESTED** to approve a three (3) year extension to Draft Plan Approval for the residential plan of subdivision File No. 39T-14504, **SUBJECT TO** the revised conditions contained in the attached Schedule "A" 39T-14504.

Executive Summary

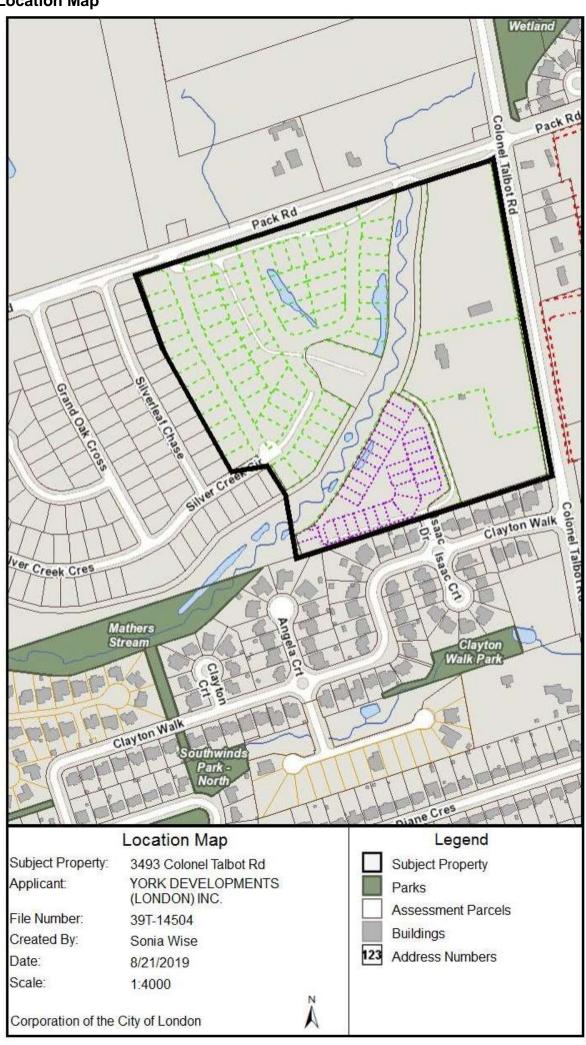
Purpose and the Effect of Recommended Action

The purpose and effect of the recommended action is to consider a three (3) year extension to Draft Approval for the remaining phases within the Silverleaf draft plan of subdivision (39T-14504).

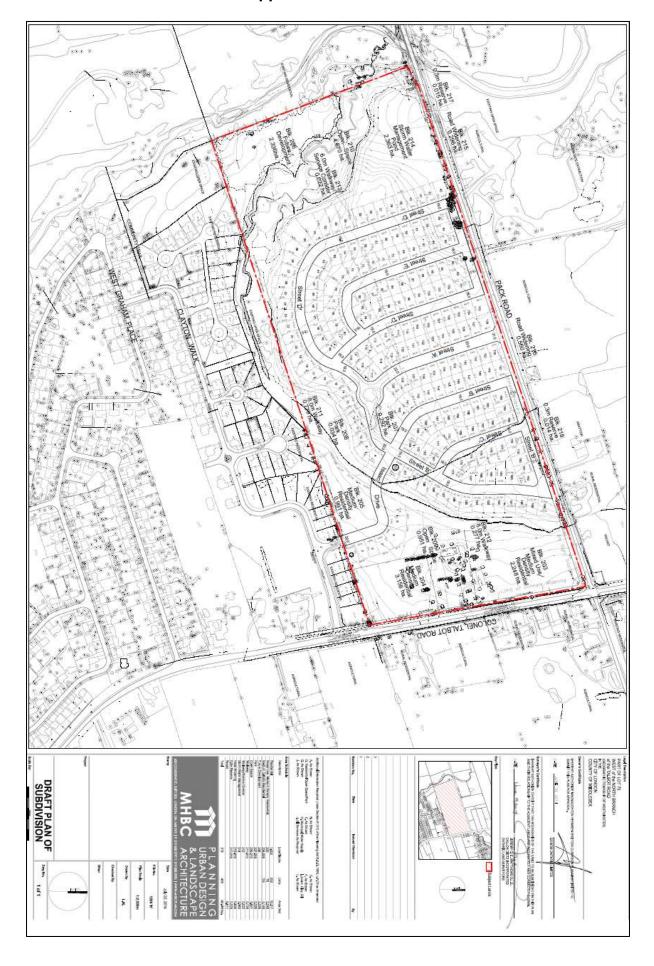
Rationale of Recommended Action

- 1. The requested three (3) year extension of Draft Plan Approval is reasonable, and should allow the applicant sufficient time to satisfy revised conditions of draft approval towards the registration of this plan.
- The land use pattern and road alignments in this subdivision comprise an integral part of the overall subdivision, and supports connectivity with adjacent future development lands. Therefore, an extension should be supported provided the conditions of Draft Approval are updated to reflect current City Standards and regulatory requirements.

Location Map



Silverleaf Subdivision - Draft Approved Plan of Subdivision



Silverleaf Subdivision – Red-line Revised Draft Plan



1.0 Background

1.1 Planning History

The application for Draft Plan of Subdivision was received on September 15, 2014, and was granted draft approval on March 24, 2016. The draft approval included: 172 single detached dwellings lots, three (3) medium density residential blocks, one (1) mixed use block, five (5) walkway blocks, one (1) future development block, two (2) park blocks, two (2) open space blocks, and a stormwater management block; serviced by Pack Road, and six (6) local public streets (including the extension of Isaac Drive to the north).

Phase 1 of the subdivision has been registered as plan 33M-742 on April 16, 2018, consisting of 108 single family detached lots, the Stormwater Management Facility Dingman Tributary B4, six (6) park blocks, one (1) medium density block and several road widening's and 0.3 m (one foot) reserve blocks. Future phase(s) will include the balance of the lands which are draft approved but have not yet received final approval.

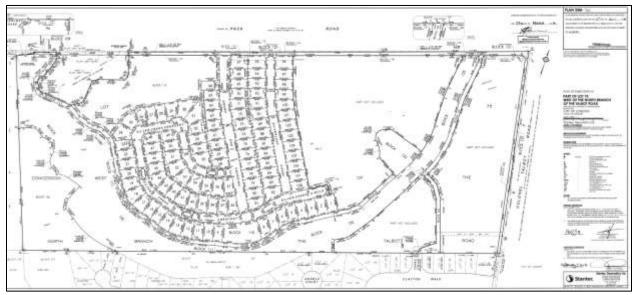


Figure 1: Registered Plan of Subdivision 33M-742

On March 22, 2019 an administrative (emergency) extension was granted for an additional 6 months (180 days) as the applicant was not able to satisfy the conditions of draft plan approval and register the remaining lands in advance of the expiry date of March 24, 2019. The current draft plan approval lapse date is September 24, 2019. An application for extension was received on June 6, 2019 requesting an additional three (3) years extension.

1.2 Request

The applicant has applied for a three (3) year extension in order to have more time to receive Final Approval and register the remaining phase(s) of the draft plan. The applicant has proposed minor changes to the lotting configuration and zoning for a portion of the lands, though has not proposed any changes to the road pattern that applies to the remaining lands. An extension period of three (3) years is being recommended in accordance with standard City practice. If Final Approval has not been provided within the three (3) year period and the applicant requests a further extension, there will be another opportunity to formally review the conditions and ensure that they are relevant to current planning policies and municipal servicing requirements.

1.3 Community Engagement

In accordance with Section 51(45) of the *Planning Act* notice was provided to the applicant, as well as any persons or public bodies prescribed under the Act, and anyone

who previously requested notification. Notice was not circulated to the community regarding the request for extension of draft approval given that there are no significant changes proposed to the zoning, lotting pattern or roadway alignments in the Draft Approved Plan (39T-14504).

1.4 Policy Context

Provincial Policy Statement, 2014

The Provincial Policy Statement (PPS) 2014, provides policy direction on matters of provincial interest related to land use planning and development. These lands are located within the City's Urban Growth Boundary where adequate servicing capacity exists. A comprehensive land use plan to guide future development in this area was previously prepared and adopted by Municipal Council, as the "Southwest Area Secondary Plan". The draft-approved plan of subdivision is in keeping with the Secondary Plan and meets the objectives of Section 1.1.1 of the PPS by creating healthy, liveable, safe, and sustainable communities by promoting efficient and resilient development patterns; accommodating an appropriate range and mix of housing; is in close proximity to recreational and public open space uses; and, makes efficient use of land and municipal services, including water, sanitary sewers, and stormwater management facilities (Section 1.1.3.6).

Environmental Impact Studies were prepared as part of the initial planning and approval process for this subdivision. Recommendations for protecting natural heritage features have been implemented including specific measures to enhance significant natural heritage resources through re-naturalization and restoration/compensation programs. There were also no concerns raised with respect to public health and safety, and there are no known human-made hazards. The draft plan of subdivision and requested extension is consistent with the Provincial Policy Statement.

The London Plan

The London Plan is the new Official Plan for the City of London (Council adopted, approved by the Ministry with modifications, and the majority of which is in force and effect). The London Plan policies under appeal to the *Local Planning Appeals Tribunal* (Appeal PL170100) and not in force and effect are indicated with an asterisk (*) throughout this report. The London Plan policies under appeal are included in this report for informative purposes indicating the intent of City Council, but are not determinative for the purposes of this planning application.

These lands are located within the Neighbourhoods and Green Space Place Types in The London Plan. Neighbourhoods allow for a range of low to mid-rise residential uses such uses as single detached, semi-detached, duplex, townhouses, secondary suites, home occupations, group homes, townhouses, stacked townhouses and apartment buildings (table 10*). The Green Space Place Type permits such uses as district, citywide, and regional parks; private green spaces such as cemeteries and golf courses; agriculture; woodlot management; conservation; essential public utilities and municipal services; stormwater management; recreational and community facilities.

The draft approved plan conforms to The London Plan's Place Type vision and key directions, including building strong neighbourhoods, providing a diversity of housing choices, and locating more intensive residential uses along higher order roads.

(1989) Official Plan

The subject site is located within the Low Density Residential (LDR), Multi-Family Medium Density Residential (MFMDR) and Open Space (OS) designations in the 1989 Official Plan, which primarily permits a range of low to mid-rise residential uses and passive recreational and conservation uses. The draft plan conforms with the policies

of the 1989 Official Plan.

Southwest Area Secondary Plan

Both The London Plan and the (1989) Official Plan recognize the need and role of a Secondary Plan to provide more detailed policy guidance for a specific area that goes beyond the general policies. The Southwest Area Secondary Plan (SWAP) forms part of The London Plan and the (1989) Official Plan, and its policies prevail over the more general Official Plan policies if there is a conflict (1556 & 1558*). The subject site is within the North Lambeth Residential Neighbourhood, and within the Low Density Residential (LDR), Medium Density Residential (MDR) and Open Space and Environmental Review designations. A range of low and medium density residential uses are proposed, as well as a limited range of secondary permitted uses and passive open space uses. The draft plan of subdivision extension conforms to the Secondary Plan.

1.5 Conditions of Draft Approval

The Draft Approval conditions have been re-circulated and reviewed with municipal departments and agencies to determine their relevance within the context of current regulatory requirements. As a result, there are minor wording modifications and revisions, as well as a number of new clauses added reflecting current municipal standards and requirements. One phase of the subdivision has been registered which has resulted in a number of deleted conditions have been completed as part of the final approval of the first phase. The amendments to the conditions of draft approval are shown as highlights for revisions, strikeouts for deletions and underlines for additions on the attached Schedule "A". The three year extension recommended would result in a new draft approval lapse date on or before September 24, 2022.

2.0 Conclusion

Staff are recommending a three (3) year extension to the Draft Approval for this plan of subdivision, subject to the revised conditions as attached. The proposed plan and recommended conditions of Draft Approval will ensure that development proceeds in accordance with Provincial Policy Statement, The London Plan, the Southwest Area Secondary Plan and 1989 Official Plan. A three (3) year extension is recommended to allow sufficient time for registration of the remaining lands within this Draft Plan. The recommended conditions of draft approval are attached to this report as Schedule "A" 39T-14504.

Prepared by:	
	Sonia Wise, MCIP, RPP Senior Planner, Development Services
Recommended by:	
	Paul Yeoman, RPP, PLE
	Director, Development Services
Submitted by:	
	George Kotsifas, P.ENG
	Managing Director, Development and Compliance Services and Chief building Official
Note: The opinions contained herein are offered by a person or persons	

qualified to provide expert opinion. Further detail with respect to qualifications

CC: Matt Feldberg, Manager, Development Services (Subdivisions) Lou Pompilii, Manager, Development Services - Planning Ismail Abushehada, Manager, Development Services - Engineering

can be obtained from Development Services.

August 30, 2019 /sw

Y:\Shared\ADMIN\1- PEC Reports\2019 PEC Reports\13- September 9\Draft 3493 Colonel Talbot Rd 39T-14504 SW 1 of 1.docx

Appendix A

THE CORPORATION OF THE CITY OF LONDON'S CONDITIONS AND AMENDMENTS TO FINAL APPROVAL FOR THE REGISTRATION OF THIS SUBDIVISION, FILE NUMBER 39T-14504 ARE AS FOLLOWS:

* Denotes Deleted, Revised, or New Condition

NO. CONDITIONS

- 1. This approval applies to the draft plan, submitted by MHBC Planning prepared by Callon Dietz, File No. 39T-14504, drawing dated June 19, 2014, as revised October 28, 2015, as red-line amended, which shows 64 residential units in the form of single detached dwellings, one mixed use/medium density residential block (Block 173), three (3) medium density residential blocks (Blocks 174, 175 and 190), all serviced by Pack Road, Colonel Talbot Road, and 6 local public streets.
- 2. This draft approval and these conditions replaces the conditions of draft approval granted on March 15, 2019 for plan 39T-14504 as it applies to lands located at 3493 Colonel Talbot Road on the west side of Colonel Talbot Road and south of Park Road; legally described as Part of Lot 75, West of the North Branch of the Talbot Road (Geographic Township of Westminster), City of London, County of Middlesex, situated on the south side of Pack Road, west of Colonel Talbot Road.
- 3. This approval of the draft plan applies for a period of three (3) years, and if final approval is not given within that time, the draft approval shall lapse, except in the case where an extension has been granted by the Approval Authority.
- 4. The road allowances included in this draft plan shall be shown and dedicated as public highways.
- 5. The Owner shall within 90 days of draft approval submit proposed street names for this subdivision to the City.
- 6. The Owner shall request that addresses be assigned to the satisfaction of the City in conjunction with the request for the preparation of the subdivision agreement.
- 7. The Owner, prior to final approval, shall submit to the Approval Authority a digital file of the plan to be registered in a format compiled to the satisfaction of the City of London and referenced to NAD83UTM horizon control network for the City of London mapping program.
- 8. Prior to final approval, appropriate zoning shall be in effect for this proposed subdivision.
- 9. The Owner shall enter into a subdivision agreement and shall satisfy all the requirements, financial and otherwise, of the City of London in order to implement the conditions of this draft approval.
- The subdivision agreement between the Owner and the City of London shall be registered against the lands to which it applies once the plan of subdivision has been registered.
- 11. In conjunction with registration of the Plan, the Owner shall provide to the appropriate authorities such easements and/or land dedications as may be required for all municipal works and services associated with the development of the subject lands, such as road, utility, drainage or stormwater management (SWM) purposes, to the satisfaction of the City, at no cost to the City.

12. No construction or installations of *any* kind (eg. clearing or servicing of land) involved with this plan shall be undertaken by the Owner prior to obtaining all necessary permits, approvals and/or certificates that need to be issued in conjunction with the development of the subdivision, unless otherwise approved by the Manager of Development Planning in writing (eg. MOE certificates; City/Ministry/Agency permits: Approved Works, water connection, water-taking, navigable waterways; approvals: UTRCA, MNR, MOE, City; etc; etc.). No construction involving installation of services requiring an EA is to be undertaken prior to fulfilling the obligations and requirements of the Province of Ontario's Environmental Assessment Act and the City of London.

Development Services - Planning

- 13. The Owner shall carry out an archaeological survey and rescue excavation of any significant archaeological remains found on the site to the satisfaction of the Southwestern Regional Archaeologist of the Ministry of Culture; and no final approval shall be given, and no grading or other soil disturbance shall take place on the subject property prior to the letter of release from the Ministry of Culture.
- 14. In conjunction with the first submission of engineering drawings, the Owner shall submit a Noise Impact Study which recommends noise mitigation measures in accordance with the Ministry of the Environment Guidelines and the City of London policies and guidelines that excludes the requirement for a continuous berm/barrier along the Pack Road and/or Colonel Talbot Road frontage, all to the satisfaction of the City.
- 15. The Owner shall dedicate Blocks 178-183 to the City at no cost to satisfy a portion of the parkland requirements for this subdivision. The remaining under dedication of parkland shall be taken through all or a portion of the dedication of Block 177 and/or cash in lieu as per By-law CP-9 to the satisfaction of the City.
- 16. The Owner shall construct a 1.5m high chain link fencing without gates in accordance with current City park standards (SPO 4.8) or approved alternate, along the property limit interface of all existing and proposed private lots adjacent to existing and/or future Park and Open Space Blocks. No fencing is to be provided between Multiple Residential Blocks 173, 174, 175 & 190 and adjacent Park Blocks. Fencing shall be completed to the satisfaction of the City, within one (1) year of the registration of the plan.
- 17. As part of the first submission of engineering drawings, the Owner will be required to provide a conceptual plan for the urban parks plans (Blocks 178 and 179), to the satisfaction of the City.
- 18. As part of the first submission of engineering drawings, the Owner will be required to provide a conceptual plan for the channel (Block 180), from the edge of the Environmental Significant Area to Pack Road, to the satisfaction of the City.
- 19. As part of the first submission of engineering drawings, the Owner will be required to provide a conceptual plan for the layout of the pathway network within Blocks 178, 179, 181, 182, 183 and the two connections over Mathers Creek (connecting to Clayton Walk through the existing pathway corridor and Isaac Drive, to the satisfaction of the City.
- 20. The Owner shall prepare and deliver to all homeowners an education package which explains the stewardship of natural area, the value of existing tree cover and the protection and utilization of the grading and drainage pattern on these lots. The educational package shall be prepared to the satisfaction of City and UTRCA.
- 21. The Owner shall not grade into any open space areas. Where lots or blocks abut

an open space area, all grading of the developing lots or blocks at the interface with the open space areas are to match grades to maintain exiting slopes, topography and vegetation. In instances where this is not practical or desirable, any grading into the open space shall be to the satisfaction of the City.

- 22. Prior to construction, site alteration or installation of services, robust silt fencing/erosion control measures must be installed and certified with site inspection reports submitted to the Environmental and Parks Planning Division monthly during development activity along the edge of the ESA.
- 23. The Owner shall, as part of the first submission of engineering drawings prepare a tree preservation report and plan for lands within the proposed draft plan of subdivision. The tree preservation report and plan shall be focused on the preservation of quality specimen trees within lots and blocks. The tree preservation report and plan shall be completed in accordance with current approved City of London guidelines for the preparation of tree preservation reports and tree preservation plans, to the satisfaction of the City as part of the design studies submission. Tree preservation shall be established first and grading/servicing design shall be developed to accommodate maximum tree preservation.
- 24. All parkland blocks lands shall be sufficiently protected from sediment throughout the construction period. A sediment barrier shall be established along the park block limits to the satisfaction of Development Services and the City.
- 25. The Owner shall implement all recommendations from the October 27, 2015 approved Environmental Impact Study and addendum prepared by Stantec Consulting Inc. As part of the design studies, the owner shall indicate how each of the recommendations will be implemented (ie, design studies, engineering review, special provisions)
- 26. Within one (1) year of registration of the plan, the owner shall grade, service and seed all parkland to the satisfaction of the City.
- 27. The Owner agrees to register on title and include in all Purchase and Sale Agreements the requirement that the homes to be designed and constructed on all corner lots in this plan (including lots with side frontages to parks and/or open spaces), are to have design features, such as but not limited to porches, windows or other architectural elements that provide for a street oriented design and limited chain link or decorative fencing along no more than 50% of the exterior sideyard abutting the exterior sideyard road/park/open space frontage. Further, the owner shall obtain approval of their proposed design to the satisfaction of the Managing Director of Planning, City Planner or his/her designate prior to any submission of an application for a building permit for corner lots with an exterior sideyard or an interior sideyard fronting a street, park or open space block in this Plan.
- 28. As part of the first submission of engineering drawings, the Owner will be required to provide a detailed urban design guidelines (for Architectural Control) for this subdivision, including all proposed building forms and implementation processes, to the satisfaction of the City.
- 29. As part of the first submission of engineering drawings, the Owner shall design the window street for Block 175 and be required to provide an updated block plans for Blocks 173, 174, 175 & 190 detailing locations of buildings, building orientation, pedestrian circulation, parking areas, and building orientation towards the public streets and open spaces, to the satisfaction of the City. Ensure block plans and the urban design guidelines are in conformance with the policies of the Southwest Area Secondary Plan and the City's Placemaking Guidelines.

- 30. Block 173 shall be divided into two separate and distinct blocks as per the red-line plan which includes Block 173 as the southern portion and a new Block as the northern portion with a total area of 0.650ha.
- 31. No opaque fencing or noise walls are to be provided along the property limit between the new block to the north of Block 173 and adjacent Park Blocks.

SEWERS & WATERMAINS

Sanitary:

- 32. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall have his consulting engineer prepare and submit and/or provide an update to the following sanitary servicing design information:
 - i) Provide a sanitary drainage area plan, including the preliminary sanitary sewer routing and the external areas to be serviced, to the satisfaction of the City;
 - ii) Provide a sanitary drainage report including the sewer routing invert and profile information relating to any crossing(s) of storm drainage channels and any external areas to be included in the design area, to the satisfaction of the City Engineer;
 - iii) Provide a report outlining the upgrades which will be required for the addition of sanitary flows to the Southwinds Pumping Station and a related work plan;
 - iv) Provide confirmation of the proposed ultimate service area by gravity to connect to the future planned Colonel Talbot sanitary trunk sewer and confirm a gravity connection can be made to the future planned Colonel Talbot sewer, all in accordance with the Southwest Area Sanitary Servicing Master Plan and to the satisfaction of the City Engineer;
 - v) Provide an analysis to establish the water table level of lands within the subdivision with respect to the depth of the sanitary sewers and recommend additional measures, if any, which need to be undertaken, to meet allowable inflow and infiltration levels as identified by OPSS 410 and OPSS 407.
- 33. In accordance with City standards or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of sanitary services for this draft plan of subdivision:
 - i) Construct sanitary sewers to serve this Plan and connect them to the existing municipal sewer system, namely, the 250 mm (10") diameter sanitary sewer located on Isaac Drive and the future sanitary trunk sewer on Colonel Talbot Road to the proposed Colonel Talbot Pumping Station, in accordance with the Growth Management Implementation Strategy (GMIS) which is tendered and is being constructed; both scheduled for construction in 2017 as per the current Growth Management Implementation Strategy (GMIS);
 - ii) Undertake necessary upgrades to the Southwinds Pumping Station and forcemain, all in accordance with the approved work plan
 - iii) Make appropriate arrangements for the City to install the private drain connections for Blocks 173, 174, 175, 190 and new Block 173 and 174 with the proposed Colonel Talbot Servicing trunk sewer at the Owner's expense;
 - iv) Construct a maintenance access road and provide a standard municipal easement for any section of the sewer not located within the road allowance, to the satisfaction of the City;
 - v) Make provisions for oversizing of the internal sanitary sewers in this draft plan to accommodate flows from the upstream lands external to this plan, all to the satisfaction of the City. This sewer must be extended to the limits of this plan and/or property line to service the upstream external lands; and
 - vi) Where trunk sewers are greater than 8 metres in depth and are located within the municipal roadway, the Owner shall construct a local sanitary

sewer to provide servicing outlets for private drain connections, to the satisfaction of the City. The local sanitary sewer will be at the sole cost of the Owner. Any exception will require the approval of the City Engineer.

- 34. In order to prevent any inflow and infiltration from being introduced to the sanitary sewer system, the Owner shall, throughout the duration of construction within this plan, undertake measures within this draft plan to control and prevent any inflow and infiltration and silt from being introduced to the sanitary sewer system during and after construction, satisfactory to the City, at no cost to the City, including but not limited to the following:
 - Not allowing any weeping tile connections into the sanitary sewers within this Plan;
 - ii) Permitting the City to undertake smoke testing or other testing of connections to the sanitary sewer to ensure that there are no connections which would permit inflow and infiltration into the sanitary sewer;
 - iii) Having his consulting engineer confirm that the sanitary sewers meet allowable inflow and infiltration levels as per OPSS 410 and OPSS 407;
 - iv) Installing Parson Manhole Inserts (or approved alternative satisfactory to the City Engineer) in all sanitary sewer maintenance holes at the time the maintenance hole(s) are installed within the proposed draft plan of subdivision. The Owner shall not remove the inserts until sodding of the boulevard and the top lift of asphalt is complete, all to the satisfaction of the City Engineer; and
 - v) Implementing any additional measures recommended through the Design Studies stage.
- 35. Prior to registration of this Plan, the Owner shall obtain consent from the City Engineer to reserve capacity at the Oxford Pollution Control Plant for this subdivision. This treatment capacity shall be reserved by the City Engineer subject to capacity being available, on the condition that registration of the subdivision agreement and the plan of subdivision occur within one (1) year of the date specified in the subdivision agreement.

Failure to register the Plan within the specified time may result in the Owner forfeiting the allotted treatment capacity and, also, the loss of his right to connect into the outlet sanitary sewer, as determined by the City Engineer. In the event of the capacity being forfeited, the Owner must reapply to the City to have reserved sewage treatment capacity reassigned to the subdivision.

Storm and Stormwater Management (SWM)

- 36. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall have his consulting engineer prepare and submit a Storm/Drainage and SWM Servicing Functional Report or a SWM Servicing Letter/Report of Confirmation or provide an update to the existing Functional Report to address the following:
 - i) Identifying the storm/drainage and SWM servicing works for the subject and external lands and how the interim drainage from external lands will be handled, all to the satisfaction of the City;
 - ii) Identifying major and minor storm flow routes for the subject and external lands, to the satisfaction of the City;
 - iii) Identifying how the existing drainage from external lands will be accommodated (eg. external flows conveyed into this plan via the existing culverts under Pack Road and Colonel Talbot Road)
 - iv) Providing a preliminary plan demonstrating how the proposed grading and road design will match the grading of the proposed Stormwater Management Facility to be built by the City on Block 184;
 - v) Providing details of a pipe design to convey flow from the intermittent tributary upstream of Pack Road West, from the existing culvert to an approved outlet along Mathers Stream;

- vi) identifying how/where the existing tributary (generally near east entrance road) is to be diverted to the main tributary watercourse (may need additional land or right-of-way to accommodate additional pipe), to the satisfaction of the City Engineer.
- vii) Providing a fluvial geomorphological assessment prepared by a qualified engineer to support the proposed watercourse alterations, to the satisfaction of the City Engineer and at no cost to the City;
- viii) Providing details of channel enhancements design to the Upper Reach of the Mathers Stream corridor, all in accordance with the Dingman Creek No. B-4 SWM Facility and Tributary Channel Improvement/Modification EA (April 2015), at the Owner's expense and all to the satisfaction of the UTRCA and the City.
- ix) Having its consulting geotechnical engineer provide an update to the existing geotechnical report to address all geotechnical issues relating to slope stability associated with the open watercourses in this Plan, construction, grading and drainage of this subdivision and any necessary setbacks related to erosion, maintenance and structural setbacks related to slope stability. The report shall address the following, to the specifications and satisfaction of the City Engineer and the Upper Thames River Conservation Authority:
 - Accurately delineate the Riverine Erosion Hazard limit
 - Identify existing erosion and/or slope hazards
 - Assess the impact of the proposed development on existing hazards
 - Assess the potential for the proposed development to create new hazards
 - Identify measures to safely avoid the potential hazards, including appropriate development setback from the River Erosion Hazard Limit
 - Identifying and providing details where there may be two type of fill materials that meet granular fill. This must be benched into the other fill.
 - Identifying the extent of fill needed to service the site which addresses benching as per the report and slope stability to establish property limits and building setbacks
 - Identifying filling of the tributary and considerations with regards to impact on roads, buildings and services.

In addressing the above, the report shall take into consideration the required/proposed fill within the plan as well as the proposed channel improvements.

The Owner shall provide written acceptance from the Upper Thames River Conservation Authority for the final setback;

Developing a sediment and erosion control plan(s) that will identify all required sediment and erosion control measures for the subject lands in accordance with City of London and Ministry of the Environment, Conservation and Parks standards and requirements, all to the satisfaction of the City. The sediment and erosion control plan(s) shall identify all interim and long term measures that would be required for both registration and construction phasing/staging of the development and any major revisions to these plans after the initial acceptance shall be reviewed/accepted by the City of London for conformance to our standards and Ministry of the Environment, Conservation and Parks requirements shall be: and

Developing an erosion/sediment control plan that will identify all erosion and sediment control measures for the subject lands in accordance with City of London and Ministry of the Environment standards and requirements, all to the satisfaction of the City. This plan is to include measures to be used during all phases on construction; and

- xi) Implementing SWM soft measure Best Management Practices (BMP's) within the Plan, where possible, to the satisfaction of the City. The acceptance of these measures by the City will be subject to the presence of adequate geotechnical conditions within this Plan and the approval of the City Engineer.
- xii) Should the proposed Storm/Drainage and SWM servicing works vary from the approved Functional SWM Plan for North Lambeth (Cumming Cockburn 2005), an updated Functional SWM Plan may be required to address the above, in lieu of a SWM Servicing Letter/Report of Confirmation.
- 37. The above-noted Storm/Drainage and SWM Servicing Functional Report or a SWM Servicing Letter/Report of Confirmation, prepared by the Owner's consulting professional engineer, shall be in accordance with the recommendations and requirements of the following:
 - i) The SWM criteria and environmental targets for the Dingman Creek Subwatershed Study and any addendums/amendments;
 - ii) The approved Storm/Drainage and SWM Servicing Function Report for the subject lands;
 - iii) The approved Functional Stormwater Management Plan/Report for Dingman Tributary Regional SWM Facility B-4 or any updated Functional Stormwater Management Plan;
 - iv) The accepted Municipal Class Environmental Assessment (EA) Study for Storm/Drainage and Stormwater Management (SWM) Servicing and Tributary ImprovementModification Works for the Dingman Creek No. B-4 SWM Facility and any addendums/amendments;
 - v) The Stormwater Letter/Report of Confirmation for the subject development prepared and accepted in accordance with the File Manager Process;
 - vi) The approved Functional Stormwater Management Plan for North Lambeth Subdivision, prepared by Cumming Cockburn Limited (2005) or any updated Functional SWM Plan;
 - vii) The approved Courtney Environmental Impact Study (EIS) for this site, prepared by Stantec Consulting Ltd. (July 2014) and any addendums/amendments;
 - viii) The City of London Environmental and Engineering Services Department Design Specifications and Requirements, as revised;
 - ix) The City's Waste Discharge and Drainage By-laws, lot grading standards, Policies, requirements and practices;
 - x) The Ministry of the Environment SWM Practices Planning and Design Manual, as revised; and
 - xi) Applicable Acts, Policies, Guidelines, Standards and Requirements of all required approval agencies.
 - xii) The City Design Requirements for Permanent Private Stormwater Systems were approved by City Council and is effective as of January 01, 2012. The stormwater requirements for PPS for all medium/high density residential, institutional, commercial and industrial development sites are contained in this document, which may include but not be limited to quantity/quality control, erosion, stream morphology, etc.
- 38. In accordance with City standards or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of stormwater management (SWM) and stormwater services for this draft plan of subdivision:
 - i) Construct storm sewers to serve the portion of this plan west of the watercourse, located within the Dingman Creek Subwatershed, and connect them to the existing Dingman Tributary SWMF B4 Facility;
 - ii) Construct storm sewers to serve the portion of this plan east of the watercourse and connection them to the existing municipal storm sewer system, namely, the 1200 mm (48") diameter storm sewer located on Isaac Drive in Plan 33M-524;
 - iii) Make provisions to oversize and deepen the internal storm sewers in this plan to accommodate flows from upstream lands external to this plan;

- iv) Grade and drain the west boundary of Block 176 to blend in with the abutting SWM Facility on Block 184 in this plan, at no cost to the City;
- v) Construct and implement erosion and sediment control measures as accepted in the Storm/Drainage and SWM Servicing Functional Report or a SWM Servicing Letter/Report of Confirmation for these lands and the Owner shall correct any deficiencies of the erosion and sediment control measures forthwith; and
- vi) Address forthwith any deficiencies of the stormwater works and/or monitoring program.
- 39. Prior to the issuance of any Certificates of Conditional Approval for any lot in this plan, the Owner shall complete the following:
 - i) For lots and blocks in this plan or as otherwise approved by the City Engineer, all storm/drainage and SWM related works to serve this plan must be constructed and operational in accordance with the approved design criteria and accepted drawings, all to the satisfaction of the City;
 - ii) The proposed Regional Dingman Tributary SWM Facility B-4, to be built by the City, to serve this plan must be constructed and operational;
 - iii) Construct and have operational the major and minor storm flow routes for the subject lands, to the satisfaction of the City;
 - iv) Construct a pipe to convey flow from the intermittent tributary upstream of Pack Road West, from the existing culvert to an approved outlet along Mathers Stream. Provide additional land or right-of-way if necessary;
 - v) Construct channel enhancements to the Upper Reach of the Mathers Stream corridor, all in accordance with the Dingman Creek No. B-4 SWM Facility and Tributary Channel Improvement/Modification EA (April 2015) and in accordance with section 9.7 of the EA, all to the satisfaction of the UTRCA and City.
 - vi) Implement all geotechnical/slope stability recommendations made by the geotechnical report, slope stability report and recommendations by the hydrogeological report on the engineering drawings, including but not limited to slope stability and engineered fill recommendations, accepted by the City;
- 40. Prior to the acceptance of engineering drawings, the Owner's professional engineer shall certify the subdivision has been designed such that increased and accelerated stormwater runoff from this subdivision will not cause damage to downstream lands, properties or structures beyond the limits of this subdivision. Notwithstanding any requirements of, or any approval given by the City, the Owner shall indemnify the City against any damage or claim for damages arising out of or alleged to have arisen out of such increased or accelerated stormwater runoff from this subdivision.
- 41. In conjunction with the first submission of engineering drawings, the Owner shall have a report prepared by a qualified consultant, and if necessary, a detailed hydro geological investigation carried out by a qualified consultant, or provide an update to the existing hydro geological report, to determine, including but not limited to, the following:
 - i) Identify any abandoned wells in this plan.
 - ii) Assess the impact on water balance in the plan, as applicable.
 - iii) Assess any fill required in the plan.
 - iv) Provide recommendations for foundation design should high groundwater be encountered.
 - v) To meet allowable inflow and infiltration levels as identified by OPSS 410 and OPSS 407, include an analysis to establish the water table level of lands within the subdivision with respect to the depth of the sanitary sewers and recommend additional measures, if any, which need to be undertaken
 - vi) Determine the effects of the construction associated with this subdivision on the existing groundwater elevations and domestic or farm wells in the

area and identify any abandoned wells in this plan, assess the impact on water balance and any fill required in the plan, as well provide recommendations for foundation design should high groundwater be encountered, to the satisfaction of the City. The hydrogeological investigation should identify all required mitigation measures including Low Impact Development (LIDs) solutions and associated details, as necessary, to the satisfaction of the City Engineer. Details related to proposed LID solutions, if applicable, should include information related to the long term operations of the LID systems as it relates to seasonal fluctuations of the groundwater table. If necessary, the report is to also address any contamination impacts that may be anticipated or experienced as a result of the said construction as well as provide recommendations regarding soil conditions and fill needs in the location of any existing watercourses or bodies of water on the site. The hydrogeological investigation should also include the development of appropriate short-term and long-term monitoring plans (if applicable), and appropriate contingency plans (if applicable), in the event of groundwater interference related to construction.

- vii) Determine water taking requirements to facilitate construction (i.e., PTTW or EASR be required to facilitate construction), including sediment and erosion control measures and dewatering discharge locations.
- viii) address any contamination impacts that may be anticipated or experienced as a result of the said construction
- ix) provide recommendations regarding soil conditions and fill needs in the location of any existing watercourses or bodies of water on the site.

all to the satisfaction of the City.

Prior to the issuance of any Certificate of Conditional Approval, the Owner's professional engineer shall certify that any remedial or other works as recommended in the accepted hydro geological report are implemented by the Owner, to the satisfaction of the City, at no cost to the City.

In conjunction with the Design Studies submission, the Owner shall have a report prepared by a qualified consultant, and if necessary, a detailed hydro geological investigation carried out by a qualified consultant, to determine the effects of the construction associated with this subdivision on the existing ground water elevations and domestic or farm wells in the area and identify any abandoned wells in this plan, assess the impact on water balance and any fill required in the plan, to the satisfaction of the City. If necessary, the report is to also address any contamination impacts that may be anticipated or experienced as a result of the said construction as well as provide recommendations regarding soil conditions and fill needs in the location of any existing watercourses or bodies of water on the site.

Prior to the issuance of any Certificate of Conditional Approval, the Owner's professional engineer shall certify that any remedial or other works as recommended in the above accepted hydro geological report are implemented by the Owner, to the satisfaction of the City, at no cost to the City.

- 42. Prior to final approval, the Owner shall dedicate sufficient lands to the City to enable to completion of the proposed SWM facility and all related servicing. The land for the SWM block shall be sized in accordance with the final accepted EA for Storm/Drainage and SWM Servicing and Tributary Improvement/Modification Works for the Dingman Creek SWM Facility B-4 and the final Functional SWM Report.
- 43. The Owner shall ensure the post-development discharge flow from the subject site must not exceed the capacity of the stormwater conveyance system. In an event, where the above condition cannot be met, the Owner shall provide SWM on-site

- controls that comply to the accepted Design Requirement for Permanent Private Stormwater systems.
- 44. The Owner shall develop the proposed plan of subdivision in accordance with the Design and Construction of SWM Facilities policies and processes identified in Appendix 'B-1' and 'B-2' SWM Facility "Just In Time" Design and Construction Process.
- 45. The Owner's professional engineer shall ensure that all existing upstream external flows traversing this plan of subdivision are accommodated within the overall minor and major storm conveyance servicing system(s) design, all to the specifications and satisfaction of the City Engineer.

Watermains

- In conjunction with the first submission of engineering drawings, the Owner shall have their consulting engineer prepare and submit a water servicing report or provide an update to the existing water servicing report, including the following design information, all to the satisfaction of the City Engineer:
 - a) Water distribution system analysis & modeling and hydraulic calculations for the Plan of Subdivision confirming system design requirements are being met;
 - b) Identify domestic and fire flows for the potential ICI/medium/high density Blocks from the low-level (high-level) water distribution system;
 - c) Address water quality and identify measures to maintain water quality from zero build-out through full build-out of the subdivision;
 - d) Identify fire flows available from each proposed hydrant to be constructed and determine the appropriate colour hydrant markers (identifying hydrant rated capacity);
 - e) Include a phasing report as applicable which addresses the requirement to maintain interim water quality;
 - f) Develop a looping strategy when development is proposed to proceed beyond 80 units;
 - g) Identify any water servicing requirements necessary to provide water servicing to external lands, incorporating existing area plans as applicable;
 - h) Identify any need for the construction of or improvement to external works necessary to provide water servicing to this Plan of Subdivision;
 - i) Identify any required watermain oversizing, if necessary, and any cost sharing agreements;
 - j) Identify the effect of development on existing water infrastructure identify potential conflicts;
 - k) Include full-sized water distribution and area plan(s);
 - Identify on the water distribution plan the location of valves, hydrants, and the type and location of water quality measures to be implemented (including automatic flushing devices);

In conjunction with the Design Studies submission, the Owner shall have his consulting engineer prepare and submit the following water servicing design information, all to the satisfaction of the City Engineer:

- i) A water servicing report which addresses the following:
 - a) Identify external water servicing requirements;
 - b) Confirm capacity requirements are met;
 - c) Identify need to the construction of external works:

- d) Identify the effect of development on existing water infrastructure identify potential conflicts;
- e) Water system area plan(s)
- f) Water network analysis/hydraulic calculations for subdivision report;
- g) Phasing report and identify how water quality will be maintained until full build-out:
- h) Oversizing of watermain, if necessary and any cost sharing agreements.
- i) Water quality
- j) Identify location of valves and hydrants
- k) Looping strategy
- 47. Prior to the issuance of any Certificates of Conditional Approval the Owner shall install and commission the accepted water quality measures required to maintain water quality within the water distribution system during build-out, all to the satisfaction of the City Engineer, at no cost to the City. The measures which are necessary to meet water quality requirements, including their respective flow settings, etc shall be shown clearly on the engineering drawings.

The Owner shall install temporary automatic flushing devices at all dead-ends to ensure that water quality is maintained during build out of the subdivision. They are to remain in place until there is sufficient occupancy use to maintain water quality without their use. The location of the temporary automatic flushing devices as well as their flow settings are to be shown on the engineering drawings. The automatic flushing devices and meters are to be installed and commissioners prior to the issuance of any Certificate of Conditional Approval. The Owner is responsible to meter and pay billed cost of the discharged water from the time of their installation until their removal. Any incidental and/or ongoing maintenance of the automatic flushing device is/are the responsibility of the Owner.

- 48. In accordance with City standards or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of water services for this draft plan of subdivision:
 - i) Construct watermains to serve new Block, Blocks 173, 174, 175 and 190 in this Plan and connect them to the existing municipal system, namely, the existing 600 mm (24") diameter watermain on Colonel Talbot Road and Block 190 175 to the existing 200 mm diameter watermain on Isaac Drive. It is noted the 200 mm diameter watermain on Isaac Drive will have to be connected and put into service by the Owner since it is currently not in service;
 - ii) Construct an appropriately sized watermain on Pack Road from the existing 600 mm diameter watermain on Colonel Talbot to the west limits of this plan to serve the 172 single family lots;
 - iii) Deliver confirmation that the watermain system has been looped to the satisfaction of the City Engineer when development is proposed to proceed beyond 80 units. It is noted all municipal watermains being proposed shall be located within the City right of way in standard location. Municipal watermains are not to be located in easements or walkways;
 - iv) Block 176 may be serviced from the proposed watermain on Pack Road or from the proposed watermain on Street 'A';
 - v) Available fire flows and appropriate hydrant rated capacity colour code markers are to be shown on the engineering drawings; the coloured fire hydrant markers will be installed by the City of London at the time of Conditional Approval;
- 49. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall implement the accepted recommendations of the water servicing report to address the water quality requirements for the watermain system, to the satisfaction of the City Engineer, at no cost to the City.

- 50. Prior to the installation of any water services for the Block in this Plan, the Owner shall obtain all necessary approval from the City Engineer for individual servicing of the said blocks.
- 51. With respect to the proposed medium density condominium blocks, Blocks 173, 174, 175 and 190, the Owner shall include in all agreements of purchase and sale, and or lease of Blocks 173, 174, 175 and 190 in this plan a warning clause advising the purchaser/transferee that should these develop as a Vacant Land Condominium or in a form that may create a regulated drinking water system under O.Reg. 170/03, the Owner shall be responsible for meeting the requirements of the legislation.

If deemed a regulated system, there is potential the City of London could be ordered to operate this system in the future. As such, the system would be required to be constructed to City standards and requirements.

- 52. The Owner shall ensure implemented water quality measures shall remain in place until there is sufficient occupancy demand to maintain water quality within the Plan of Subdivision without their use. The Owner is responsible for the following:
 - to meter and pay the billed costs associated with any automatic flushing devices including water discharged from any device at the time of their installation until removal;
 - ii) <u>any incidental and/or ongoing maintenance of the automatic flushing devices;</u>
 - iii) payment for maintenance costs for these devices incurred by the City on an ongoing basis until removal;
 - iv) <u>all works and the costs of removing the devices when no longer required;</u> and
 - v) <u>ensure the automatic flushing devices are connected to an approved outlet.</u>
- 53. The Owner shall ensure the limits of any request for Conditional Approval shall conform to the staging and phasing plan as set out in the accepted water servicing report and shall include the implementation of the interim water quality measures. In the event the requested Conditional Approval limits differ from the staging and phasing as set out in the accepted water servicing report, the Owner would be required to submit revised plans and hydraulic modeling as necessary to address water quality.

STREETS, TRANSPORATION & SURVEYS

Roadworks

- 54. All through intersections and connections with existing streets and internal to this subdivision shall align with the opposing streets based on the centrelines of the street aligning through their intersections thereby having these streets centred with each other, unless otherwise approved by the City Engineer.
- 55. In conjunction with the first submission of engineering drawings, the Owner shall have its consulting engineer provide the following, all to the specifications and satisfaction of the City Engineer:
 - i) provide a proposed layout plan of the internal road network including taper details for streets in this plan that change right-of-way widths with minimum 30 metre tapers for review and acceptance with respect to road geometries, including but not limited to, right-of-way widths, tapers, tangents, bends, intersection layout, daylighting triangles, etc., and include any associated adjustments to the abutting lots. The roads shall be equally tapered and aligned based on the road centrelines and it should be noted tapers are not to be within intersections.

- confirm that all streets in the subdivision have centreline radii which conforms to the City of London Standard "Minimum Centreline Radii of Curvature of Roads in Subdivisions:"
- prepare a conceptual design for the window street for Street F to consider such issues as grading the common boulevard between Pack Road and the window street, overland flow routes, sidewalk connections, servicing, to the satisfaction of the City Engineer.

In conjunction with the Design Studies submission, the Owner shall have his consulting engineer provide a proposed layout of the tapers for streets in this plan that change right-of-way widths with minimum 30 metre tapers (eg. from 20.0 metre to 18.0 metre road width), all to the satisfaction of the City Engineer. The roads shall be tapered equally aligned based on the alignment of the road centrelines.

- 56. In conjunction with the Design Studies submission, the Owner shall provide a conceptual layout of the roads and rights-of-way of the plan to the City Engineer for review and acceptance with respect to road geometries, including but not limited to, right-of-way widths, tapers, bends, intersection layout, daylighting triangles, etc., and include any associated adjustments to the abutting lots.
- 57. The Owner shall red-line the plan, as necessary, to provide 6.0 metre straight tangents between the reverse curves on Street 'F' (Silver Creek Circle extension) as required in the Design Specifications and Requirements Manual, to the satisfaction of the City Engineer.
- 58. The Owner shall provide a minimum of 5.5 metres (18') along the curb line between the projected property lines of irregular shaped lots around the bends on Street 'E'.

If not possible, the Owner shall limit the bulge in the curb line on Street 'E' to only a maximum offset from the standard radius required to achieve the minimum curb distance for driveways, as approved by the City Engineer. Further, the bulge in the street line is only to be to the extent required to achieve the minimum frontage for the abutting lots.

- 59. In conjunction with the Design Studies submission, the Owner shall have its professional consulting engineer confirm that all streets in the subdivision have centreline radii which conforms to the City of London Standard "Minimum Centreline Radii of Curvature of Roads in Subdivisions:"
- 60. The Owner shall have its professional engineer design and construct the roadwork's in accordance with the following road widths:
 - i) Street 'A' and Street 'D' have a minimum road pavement width (exluding gutters) of 8.0 metres (26.2') with a minimum road allowance of 20 metres (66').
 - ii) Street 'B', Street 'C', Street 'E' and Street 'F' (with the exception of the window street portion) have a minimum road pavement width (excluding gutters) of 6.0 metres (19.7') with a minimum road allowance of 18 metres (60').
 - iii) Street 'F' (window street portion) have a minimum road pavement width (excluding gutters) of 7.0 metres (23') with a minimum road allowance of 14.5 metres as per Window Street Guidelines.
 - iv) Street 'A' from Pack Road to 45 metres (150') south has a minimum road pavement width (excluding gutters) of 11.0 metres (36.1') with a minimum road allowance of 22.5 metres (75'). The widened road on Street 'A' shall be equally aligned from the centreline of the road and tapered back to the 8.0 metres of road pavement width (excluding gutters) and 20.0 metres of road allowance width for this street with 30 metre (100') long tapers on both street lines.

- v) Street 'C' from Pack Road to 30 metres (100') south has a minimum road pavement width (excluding gutters) of 10.0 metres (32.8') with a minimum road allowance of 21.5 metres (70'). The widened road on Street 'C' shall be equally aligned from the centreline of the road and tapered back to the 6.0 metres of road pavement width (excluding gutters) and 18.0 metres of road allowance width for this street with 30 metre (100') long tapers on both street lines.
- 61. In conjunction with the Design Studies submission, the Owner shall provide details of the right in/right out restricted access at Pack Road and Street 'B', to the satisfaction of the City Engineer.
- 62. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct a right in/right out restricted access at Pack Road and Street 'B', to the satisfaction of the City Engineer.
- 63. The Owner shall provide a temporary working easement along the Colonel Talbot Road frontage of Blocks 173, 174, 175, 190 and the new Block north of 173 and 174 in order to allow for the reconstruction of Colonel Talbot Road, which shall be released by the City when it is no longer needed, at no cost to the City.
- 64. The Owner shall revise Lot 1 and Lot 2 property lines to connect perpendicular to Pack Road street line as per City standards.
- 65. At 'tee' intersection, the projected road centreline of the intersecting street shall intersect the through street at 90 degrees with a minimum 6 metre tangent being required along the street lines of the intersecting road, to the satisfaction of the City.

Sidewalks/Bikeways

- 66. In accordance with the approved Southwest Area Plan (SWAP), the Owner shall construct a 1.5 metre sidewalk on both sides of the following streets:
 - i) Street 'A'
 - ii) Street 'B'
 - iii) Street 'C'
 - iv) Street 'D'
 - v) Street 'E'
 - vi) Street 'F'
- 67. The Owner shall provide sidewalk links from Street 'F' to the future sidewalk on Pack Road in accordance with the City of London Window Street Standard Guidelines UCC-2M to the satisfaction of the City, at no cost to the City. Breaks in the 0.3 metre reserve are to be identified on the survey plan when submitted to the City.
- 68. Should the Owner direct any servicing within the walkway or the walkway is to be used as a maintenance access, the Owner shall provide a 4.6 metre wide walkway designed to the maintenance access standard, to the specifications of the City.

Street Lights

69. Within one year of registration of the plan, the Owner shall install street lighting on all streets and walkways in this plan to the satisfaction of the City, at no cost to the City. Where an Owner is required to install street lights in accordance with this draft plan of subdivision and where a street from an abutting developed or developing area is being extended, the Owner shall install street light poles and luminaires, along the street being extended, which match the style of street light already existing or approved along the developed portion of the street, to the satisfaction of the London Hydro for the City of London.

Boundary Road Works

- 70. The Owner shall be required to make minor boulevard improvements on Pack Road and Colonel Talbot Road adjacent to this Plan, to the specifications of the City and at no cost to the City, consisting of clean-up, grading and sodding as necessary.
- 71. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall verify the adequacy of the decision sight distance on Pack Road at Street 'A', Street 'B' and Street 'C'. If the sight lines are not adequate, this street is to be relocated and/or road work undertaken to establish adequate decision sight distance at this intersection, to the specifications of the City Engineer, at no cost to the City.
 - Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct these works to the satisfaction of the City Engineer, at no cost to the City.
- 72. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall install temporary street lighting at the intersection of Pack Road and Street 'A', Street 'B' and Street 'C', to the specifications of the City, at no cost to the City.
- 73. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall have its professional consulting engineer submit design criteria for the left turn and right turn lanes/tapers on Pack Road at Street 'A', Street 'B' and Street 'C' for review and acceptance by the City.
- 74. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct a left turn lane on Pack Road at Street 'A' and Street 'C', to the satisfaction of the City Engineer.
- 75. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct a right turn taper on Pack Road at Street 'A', Street 'B' and Street 'C', to the satisfaction of the City Engineer.

Road Widening

- 76. The Owner shall be required to dedicate sufficient land to widen Pack Road and Colonel Talbot Road to 18.0 metres (59.06') from the centreline of the original road allowance.
- 77. The Owner shall provide a road widening dedication on Colonel Talbot Road measured 24.0 metres from the centreline of Pack Road to a point 150.0 metres south of Pack Road to the satisfaction of the City Engineer.
- 78. The Owner shall provide a road widening dedication on Colonel Talbot Road measured 18.0 metres from the centreline from a point 150.0 metres south of Pack Road to the southerly limit of this plan, to the satisfaction of the City Engineer.
- 79. The Owner shall be required to dedicate 6.0 m x 6.0 m "daylighting triangles" at the following intersections, in accordance with the Z-1 Zoning By-law, Section 4.24:
 - i) Colonel Talbot Road and Pack Road
 - ii) Street 'A' and Pack Road
 - iii) Street 'B' and Pack Road
 - iv) Street 'C' and Pack Road

Vehicular Access

80. The Owner shall notify the future owners of Blocks 173, 174 and 190 that only one access will be permitted for all the blocks to Colonel Talbot Road. A joint access agreement must be established for the shared access and the access must comply with the requirements from the Transportation Impact Assessment for this site at the time of site plan approval. It is noted a left turn lane and right turn taper will be required at this joint access.

81. The Owner shall include in all agreements of purchase and sale and register on the title of Blocks 173, 174 and 190 in this Plan a warning clause advising the purchaser/transferee that these Blocks will only have one access permitted for all Blocks to Colonel Talbot Road in a location satisfactory to the City Engineer and a joint access agreement must be established for the shared access, to the satisfaction of the City.

Traffic Calming

- 82. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall have its professional engineer provide a conceptual design of the proposed raised intersections along Street 'D' at Street 'A' and at Street 'C', to the satisfaction of the City.
- 83. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct a raised intersection at the intersections of Street 'A' and Street 'D' and Street 'C' and Street 'D', to the specifications of the City Engineer.

Construction Access/Temporary/Second Access Roads

- 84. The Owner shall direct all construction traffic associated with this draft plan of subdivision to utilize Pack Road via Colonel Talbot Road or other routes as designated by the City. Furthermore, there is a reduced load limit on Pack Road from Homewood Lane 1000 metre east and from Colonel Talbot Road to Bostwick Road in effect, so construction access shall be prohibited in the area.
- 85. In the event any work is undertaken on an existing street, the Owner shall establish and maintain a Traffic Management Plan (TMP) in conformance with City guidelines and to the satisfaction of the City for any construction activity that will occur on existing public roadways. The Owner shall have it's contractor(s) undertake the work within the prescribed operational constraints of the TMP. The TMP will be submitted in conjunction with the subdivision servicing drawings for this plan of subdivision.
- 86. In conjunction with 1st submission drawings', in addition, Pavement Markings Plans will be required for the lane markings at the intersections with the arterial road (Pack Road).

GENERAL CONDITIONS

- 87. The Owner shall comply with all City of London standards, guidelines and requirements in the design of this draft plan and all required engineering drawings, to the satisfaction of the City. Any deviations from the City's standards, guidelines or requirements shall be satisfactory to the City.
- 88. Prior to the issuance of a Certificate of Conditional Approval for each construction stage of this subdivision, all servicing works for the stage and downstream works must be completed and operational, in accordance with the approved design criteria and accepted drawings, all to the specification and satisfaction of the City.
- 89. Prior to final approval, the Owner shall make arrangements with the affected property owner(s) for the construction of any portions of services or grading situated on private lands outside this plan, and shall provide satisfactory easements over these works, as necessary, all to the specifications and satisfaction of the City, at no cost to the City.
- 90. In conjunction with the first submission of engineering drawings, the Owner shall provide, to the City for review and acceptance, a geotechnical report or update the existing geotechnical report recommendations to address all geotechnical issues with respect to the development of this plan, including, but not limited to, the following:

- i) servicing, grading and drainage of this subdivision
- ii) road pavement structure
- iii) dewatering
- iv) foundation design
- v) removal of existing fill (including but not limited to organic and deleterious materials)
- vi) the placement of new engineering fill
- vii) any necessary setbacks related to slope stability for lands within this plan
- viii) identifying all required mitigation measures including Low Impact Development (LIDs) solutions,
- Addressing all issues with respect to construction and any necessary setbacks related to erosion, maintenance and structural setbacks related to slope stability for lands within this plan, if necessary, to the satisfaction and specifications of the City. The Owner shall provide written acceptance from the Upper Thames River Conservation Authority for the final setback.

and any other requirements as needed by the City, all to the satisfaction of the City.

The Owner shall implement all geotechnical recommendations to the satisfaction of the City.

In conjunction with the Design Studies submission, the Owner shall provide, to the City for review and acceptance, a geotechnical report or update the existing geotechnical report recommendations to address all geotechnical issues with respect to the development of this plan, including, but not limited to, servicing, grading and drainage of this subdivision, road pavement structure, dewatering, any necessary setbacks related to slope stability for lands within this plan and any other requirements as needed by the City.

91. Once construction of any private services, ie: water storm or sanitary, to service the lots and blocks in this plan is completed and any proposed relotting of the plan is undertaken, the Owner shall reconstruct all previously installed services in standard location, in accordance with the approved final lotting and approved revised servicing drawings all to the specification of the City Engineer and at no cost to the City.

In the event that relotting of the Plan is undertaken, the Owner shall relocate and construct services to standard location, all to the specifications and satisfaction of the City.

- 92. The Owner shall connect to all existing services and extend all services to the limits of the draft plan of subdivision, at no cost to the City, all to the specifications and satisfaction of the City Engineer.
- 93. In the event the draft plan develops in phases, upon registration of any phase of this subdivision, the Owner shall provide land and/or easements along the routing of services which are necessary to service upstream lands outside of this draft plan to the limit of the Plan.
- 94. The Owner shall have the common property line of Pack Road and Colonel Talbot Road graded in accordance with the City of London Standard "Subdivision Grading Along Arterial Roads", at no cost to the City.

Further, the grades to be taken as the centreline line grades on Pack Road and Colonel Talbot Road are the future ultimate centreline of road grades as determined by the Owner's professional engineer in conjunction with the Design Studies, satisfactory to the City. From these, the Owner's professional engineer is

to determine the ultimate elevations along the common property line which will blend with the ultimate reconstructed road, all to the satisfaction of the City.

95. The Owner shall advise the City in writing at least two weeks prior to connecting, either directly or indirectly, into any unassumed services constructed by a third party, and to save the City harmless from any damages that may be caused as a result of the connection of the services from this subdivision into any unassumed services.

Prior to connection being made to an unassumed service, the following will apply:

- i) In the event discharge is to unassumed services, the unassumed services must be completed and conditionally accepted by the City;
- ii) The Owner must provide a video inspection on all affected unassumed sewers;

Any damages caused by the connection to unassumed services shall be the responsibility of the Owner.

- 96. The Owner shall pay a proportional share of the operational, maintenance and/or monitoring costs of any affected unassumed sewers or SWM facilities (if applicable) to third parties that have constructed the services and/or facilities to which the Owner is connecting. The above-noted proportional share of the cost shall be based on design flows, to the satisfaction of the City, for sewers or on storage volume in the case of a SWM facility. The Owner's payments to third parties shall:
 - i) commence upon completion of the Owner's service work, connections to the existing unassumed services; and
 - ii) continue until the time of assumption of the affected services by the City.
- 97. With respect to any services and/or facilities constructed in conjunction with this Plan, the Owner shall permit the connection into and use of the subject services and/or facilities by outside owners whose lands are served by the said services and/or facilities, prior to the said services and/or facilities being assumed by the City.

The connection into and use of the subject services by an outside Owner will be conditional upon the outside Owner satisfying any requirements set out by the City, and agreement by the outside Owner to pay a proportional share of the operational maintenance and/or monitoring costs of any affected unassumed services and/or facilities.

98. Should any contamination or anything suspected as such, be encountered during construction, the Owner shall report the matter to the City Engineer and the Owner shall hire a geotechnical engineer to provide, in accordance with the Ministry of the Environment "Guidelines for Use at Contaminated Sites in Ontario", "Schedule A – Record of Site Condition", as amended, including "Affidavit of Consultant" which summarizes the site assessment and restoration activities carried out at a contaminated site, in accordance with the requirements of latest Ministry of Environment and Climate Change "Guidelines for Use at Contaminated Sites in Ontario" and file appropriate documents to the Ministry in this regard with copies provided to the City. The City may require a copy of the report should there be City property adjacent to the contamination.

Should any contaminants be encountered within this Plan, the Owner shall implement the recommendations of the geotechnical engineer to remediate, removal and/or disposals of any contaminates within the proposed Streets, Lot and Blocks in this Plan forthwith under the supervision of the geotechnical engineer to the satisfaction of the City at no cost to the City.

In the event no evidence of contamination is encountered on the site, the geotechnical engineer shall provide certification to this effect to the City.

The Owner hereby agrees that, should any contamination or anything suspected as such, be encountered during construction, the Owner shall report the matter to the City Engineer and the Owner shall hire a geotechnical engineer to provide, in accordance with the Ministry of the Environment "Guidelines for Use at Contaminated Sites in Ontario", "Schedule A — Record of Site Condition", as amended, including "Affidavit of Consultant" which summarizes the site assessment and restoration activities carried out at a contaminated site. The City may require a copy of the report should there be City property adjacent to the contamination. Should the site be free of contamination, the geotechnical engineer shall provide certification to this effect to the City.

- 99. The Owner's professional engineer shall provide inspection services during construction for all work to be assumed by the City, and shall supply the City with a Certification of Completion of Works upon completion, in accordance with the plans accepted by the City Engineer.
- 100. In conjunction with the Design Studies submission, the Owner shall have its professional engineer provide an opinion for the need for an Environmental Assessment under the Class EA requirements for the provision of any services related to this Plan. All class EA's must be completed prior to the submission of engineering drawings.
- 101. The Owner shall have it's professional engineer notify existing property owners in writing, regarding the sewer and/or road works proposed to be constructed on existing City streets in conjunction with this subdivision, all in accordance with Council policy for "Guidelines for Notification to Public for Major Construction Projects".
- 102. Prior to any work on the site, the Owner shall decommission and permanently cap any abandoned wells located in this Plan, in accordance with current provincial legislation, regulations and standards. In the event that an existing well in this Plan is to be kept in service, the Owner shall protect the well and the underlying aquifer from any development activity.
- 103. In conjunction with the first submission of engineering drawings Design Studies submission, in the event the Owner wishes to phase this plan of subdivision, the Owner shall submit a phasing plan identifying all required temporary measures, and identify land and/or easements required for the routing of services which are necessary to service upstream lands outside this draft plan to the limit of the plan to be provided at the time of registration of each phase, all to the specifications and satisfaction of the City.
- 104. If any temporary measures are required to support the interim conditions in conjunction with the phasing, the Owner shall construct temporary measures and provide all necessary land and/or easements, to the specifications and satisfaction of the City Engineer, at no cost to the City.
- 105. The Owner shall remove any temporary works when no longer required and restore the land, at no cost to the City, to the specifications and satisfaction of the City.
- 106. The Owner shall decommission any abandoned infrastructure (eg. septic tanks, overland wires, etc.), at no cost to the City, including cutting the water service and capping it at the watermain, all to the specifications and satisfaction of the City.

- 107. The Owner shall remove all existing accesses and restore all affected areas, all to the satisfaction of the City, at no cost to the City.
- 108. All costs related to the plan of subdivision shall be at the expense of the Owner, unless specifically stated otherwise in this approval.
- 109. In conjunction with the first submission of engineering drawings Design Studies submission, the Owner shall submit confirmation that they have complied with any requirements of the Upper Thames River Conservation Authority.
- 110. The Owner shall co-ordinate the work associated with this Plan of Subdivision with the City's proposed construction of the sanitary trunk sewer and SWM Facility, to the satisfaction of the City, at no cost to the City.
- 111. Prior to Final Approval of the 1st phase of this subdivision the owner shall work with City staff to allow for the City's acquisition of Block 177. If the City cannot acquire Block 177, the Owner shall negotiate the sale of this block to the land owner to the west(and have it consolidated on title to those lands) or acquire an easement from the adjacent land owner to allow for future access to this block.
- 112. The Owner shall obtain the necessary approvals pursuant to Section 28 of the Conservation Authorities Act from the UTRCA prior to undertaking any site alteration or development within the regulated area.
- 113. In conjunction with the first submission of engineering drawings Design Studies submission the Owner shall submit a final consolidated geotechnical report /slope assessment to the satisfaction of the UTRCA.
- 114. In conjunction with the first submission of engineering drawings Design Studies submission the Owner shall have a qualified fluvial geomorphologist submit a fluvial geomorphological assessment and meander belt analysis to the satisfaction of the UTRCA for the proposed channel.
- 115. In conjunction with the first submission of engineering drawings Design Studies submission the Owner shall submit a final Floodplain Analysis report to the satisfaction of the UTRCA's which addresses the Conservation Authorities concerns and which implements the recommendations of the Courtney Subdivision Floodplain Analysis (Stantec November 6, 2015).
- 116. In conjunction with the first submission of engineering drawings Design Studies submission the Owner shall submit a final consolidated EIS report to the satisfaction of the UTRCA and the City of London. The final EIS shall address issues such as wetland and ESA protection, compensation for the loss of the westerly tributary, and shall include recommendations for the plantings for the new channel to be incorporated into a Landscape Plan.
- 117. If, during the building or constructing of all buildings or works and services within this subdivision, any deposits of organic materials or refuse are encountered, the Owner shall report these deposits to the City Engineer and Chief Building Official immediately, and if required by the City Engineer and Chief Building Official, the Owner shall, at his own expense, retain a professional engineer competent in the field of methane gas to investigate these deposits and submit a full report on them to the City Engineer and Chief Building Official. Should the report indicate the presence of methane gas then all of the recommendations of the engineer contained in any such report submitted to the City Engineer and Chief Building Official shall be implemented and carried out under the supervision of the professional engineer, to the satisfaction of the City Engineer and Chief Building Official and at the expense of the Owner, before any construction progresses in such an instance. The report shall include provision for an ongoing methane gas

monitoring program, if required, subject to the approval of the City engineer and review for the duration of the approval program.

If a permanent venting system or facility is recommended in the report, the Owner shall register a covenant on the title of each affected lot and block to the effect that the Owner of the subject lots and blocks must have the required system or facility designed, constructed and monitored to the specifications of the City Engineer, and that the Owners must maintain the installed system or facilities in perpetuity at no cost to the City. The report shall also include measures to control the migration of any methane gas to abutting lands outside the Plan.

118. The Owner shall make all necessary arrangements with any required owner(s) to have any existing easement(s) in this plan quit claimed to the satisfaction of the City and at no cost to the City. The Owner shall protect any existing private services in the said easement(s) until such time as they are removed and replaced with appropriate municipal and/or private services at no cost to the City.

Following the removal of any existing private services from the said easement and the appropriate municipal services and/or private services are installed and operational, the Owner shall make all necessary arrangement to have any section(s) of easement(s) in this plan quit claimed to the satisfaction of the City, at no cost to the City.

- 119. In conjunction with engineering drawings submission, the Owner shall submit a Development Charge work plan outlining the costs associated with the design and construction of the DC eligible works. The work plan must be approved by the City Engineer and City Treasurer (as outlined in the most current DC By-law) prior to advancing a report to Planning and Environment Committee recommending approval of the special provisions for the subdivision agreement.
- 120. The Owner shall remove any temporary DICBS, etc. and any existing easements may be quit claimed, all to the satisfaction and specifications of the City Engineer and at no cost to the City.