DEVELOPMENT REQUIREMENTS

SECTION 3 - ENGINEERING SUBMISSION REQUIREMENTS FOR MUNICIPAL INFRASTRUCTURE

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3.0 Introduction

The purpose of this section is to outline the general engineering submission requirements for municipal infrastructure works to support a development application including Plans of Subdivision, Rezoning, Lifting of the "H" Holding Zone, Site Plan and Consent applications.

These municipal infrastructure works are contained within schedules of a Subdivision Agreement, Development Agreement or Site Plan Agreement.

Standard templates for these agreements can be obtained from the Planning and Building Department.

3.1 Engineering Fees

City of Mississauga (City) Engineering Fees are calculated in accordance with the current City Fees and Charges By-law provided on the City's website (http://www.mississauga.ca/portal/cityhall/bylaws) under "Fees and Charges By-law: Planning Act Processing".

City Engineering Fees are to be paid to the Transportation and Works Department Customer Service Counter located at 3185 Mavis Road, Mississauga, Ontario, L5C 1T7.

All City Engineering Fees are to be submitted by certified cheque, bank draft or money order. All cheques are to be made out to the City of Mississauga.

Region of Peel Engineering Fees are to be paid directly to the Region of Peel. For the Region's portion of engineering fees, please contact the Development Services Section of the Public Works Department.

3.1.1 Total Engineering Fee

The Total Engineering Fee is a requirement prior to finalizing the Municipal Infrastructure Schedules of the Agreement. This fee is calculated in accordance with the Current Fees and Charges By-law noted above. To calculate the City's Total Engineering Fee, the total cost of all servicing works is used to determine the fee bracket. Once the fee bracket is determined, the Total Engineering Fee is a percentage of the City's portion of the servicing works or a minimum of, based on the fee bracket. The Preliminary Engineering Fee is credited towards this fee.

3.1.2 Preliminary Engineering Fee

A Preliminary Engineering Fee of \$1,500.00 must be paid prior to review and circulation of the First Engineering Submission. This non-refudable fee will be credited towards the Total Engineering Fee required for the municipal infrastructure works.

3.1.3 Interim Engineering Fee

An Interim Engineering Fee is a requirement of an Interim Engineering Submission. This fee is calculated in accordance with the Current Fees and Charges By-law noted above. This non-refundable fee is not credited towards the Total Engineering Fee required for the municipal infrastructure works.

3.1.4 Final Engineering Fee

A Final Engineering Fee is a requirement of a Final Engineering Submission. This fee is calculated in accordance with the Current Fees and Charges By-law noted above as the Total Engineering Fee minus the Preliminary Engineering Fee.

3.2 Municipal Infrastructure Schedules (Subdivision Agreement)

• SCHEDULE "D" – Works and Servicing

Servicing works and additional terms, provisions, conditions and notes for the municipal infrastructure are placed in this schedule.

- SCHEDULE "D-1" Drawings, Plans and Specifications of the Engineering Works
 List of survey and engineering plans that are applicable to the municipal works.
- SCHEDULE "D-2" Drawings, Plans and Specifications of the Landscaping Works
 List of survey and landscape plans that are applicable to the municipal works.

SCHEDULE "D-3" - Timing of Municipal Infrastructure

The Owner agrees to complete the engineering works as listed in Schedule "G", in accordance with the timing provisions outlined in Schedule "D-3" of this Agreement. Any extension of these completion dates is to be approved by the Commissioner of Transportation and Works and/or the Regional Commissioner of Public Works.

- SCHEDULE "D-4" Land Dedication and Conveyances
 Land dedications and conveyances required for the development.
- SCHEDULE "D-5" Development Charge Credits
- SCHEDULE "E" Region of Peel Conditions (Subdivision Agreement)
 The Owner is to consult with the Region of Peel for inclusion of their conditions within this schedule.
- SCHEDULE "G" Securities

The cost of all municipal infrastructure structure works are to be included within this schedule, including cash contributions. Refer to Appendix A for examples of the summarized and detailed cost estimate formats.

3.3 Municipal Infrastructure Schedules (Development/Site Plan Agreement)

• SCHEDULE "D"/"C" – Municipal Infrastructure

Servicing works and additional terms, provisions, conditions and notes for the municipal infrastructure are placed in this schedule.

- SCHEDULE "D-1"/"C-1" Drawings, Plans and Specifications of the Servicing Works
 List of survey, engineering and landscape plans that are applicable to the development.
- SCHEDULE "D-2"/"C-2" Financial Contributions of the City and the Region to the Servicing Works

 Details of the participation, if any, of the City and/or Region with respect to the financing of
 the Works, are shown in this schedule of the Agreement.
- SCHEDULE "D-3"/"C-3" Timing of the Servicing Works

The Owner agrees to complete the engineering works as listed in Schedule "G", in accordance with the timing provisions outlined in Schedule "D-3"/"C-3" of this Agreement. Any extension of these completion dates is to be approved by the Commissioner of Transportation and Works and/or the Regional Commissioner of Public Works.

- SCHEDULE "D-4"/"C-4" Land Dedication and Conveyances
 Land dedications and conveyances required for the development.
- SCHEDULE "E" Region Conditions (Development Agreement Only)
 The Owner is to consult with the Region of Peel for inclusion of their conditions within this schedule.
- SCHEDULE "G"/"D" Securities

The cost of all municipal infrastructure structure works are to be included within this schedule, including cash contributions. Refer to Appendix A for examples of the summarized and detailed cost estimate formats.

3.4 Engineering Submissions

All engineering submissions are to be coordinated and submitted to the Development Engineering Section of the Transportation and Works Department by the Consulting Engineer. The Development Engineering Coordinator will circulate to internal departments and external agencies for comments and/or approvals. All comments and/or approvals will be returned to the Consulting Engineer through the Development Engineering Coordinator.

Draft copies of the Schedules are to be on legal size paper. Prints of drawings for all submissions shall be on A1 size paper (594mm x 841mm) individually folded to 210 mm x 297 mm size and placed in numerical order, with the title block out. The title block shall follow the City's title block template requirements (Refer to Appendix D). Each print shall be stamped with the submission number and date of submission.

Submissions are to be submitted in their entirety by ONE agent of the Owner in ONE complete package including a cover letter. Any incomplete submissions delivered to the City shall be returned immediately.

Separate submissions are to be made to the Regional Municipality of Peel in accordance with their requirements.

Items listed with the following bullet ">" are additional submission requirements for a Draft Plan of Subdivision application. An example is provided below.

Proposed Plan for Registration (M-Plan)

3.4.1.1 First Engineering Submission

PRIOR TO THE FIRST ENGINEERING SUBMISSION, PLEASE CONTACT THE DEVELOPMENT ENGINEERING COORDINATOR TO ARRANGE A MEETING TO REVIEW THE FIRST ENGINEERING SUBMISSION REQUIREMENTS IN DETAIL.

NOTE: AN INCOMPLETE ENGINEERING SUBMISSION WILL BE RETURNED WITHOUT A COMPLETE REVIEW AND COMMENTS. THIS CAN RESULT IN UNNECESSARY AND AVOIDABLE TIME DELAYS FOR THE OWNER WHO MAY INCUR AN INTERIM ENGINEERING SUBMISSION FEE.

The following material is required for the First Engineering Submission:

- (1) Two copies of the following, labeled "Development Engineering":
 - Reference Plans
 - General Above Ground Services Plan
 - General Underground Services Plan
 - Storm Drainage Plans
 - Storm Sewer Design Sheets
 - Stormwater Management Report
 - Plan and Profile Drawings
 - Miscellaneous and Special Detail Drawings (i.e. detailed drawings for outlets and watercourse improvements)
 - Grading Plans
 - Pavement Marking Plan
 - Signage Plan
 - Utility Plan
 - Streetscape/Landscape Plans
 - Geotechnical Soils Report
 - Phase One Environmental Site Assessment
 - Traffic Impact Study
 - Draft Agreement Schedules
 - Noise Report

- Proposed Plan for Registration (M-Plan)
- Tree Survey Plan
- Arborist Report
- (2) Two copies of the following, labeled "Environmental Services Storm Drainage":
 - Reference Plans
 - General Above Ground Services Plan
 - General Underground Services Plan
 - Storm Drainage Plans
 - Storm Sewer Design Sheets
 - Stormwater Management Report
 - Plan and Profile Drawings
 - Detailed Drawings for Outlets and Watercourse Improvements
 - Grading Plans
 - Draft Agreement Schedules
 - Proposed Plan for Registration (M-Plan)
- (3) Two copies of the following, labeled "Transportation Infrastructure Management Traffic":
 - Reference Plans
 - General Above Ground Services Plan
 - Plan and Profile Drawings
 - Pavement Marking Plan
 - Streetscape/Landscape Plans
 - Draft Agreement Schedules
 - Traffic Impact Study
 - Signage Plan
 - Utility Plan
 - Proposed Plan for Registration (M-Plan)
- (4) One copy of the following, labeled "Environmental Services Environmental Management & Compliance":
 - Reference Plans
 - General Above Ground Services Plan
 - General Underground Services Plan
 - Phase One Environmental Site Assessment
 - Draft Agreement Schedules
 - Proposed Plan for Registration (M-Plan)
- (5) Two copies of the following, labeled "*Community Services Park Planning*":
 - Reference Plans

- General Above Ground Services Plan
- General Underground Services Plan
- Grading Plans
- Utility Plan
- Streetscape/Landscape Plans
- Phase One Environmental Site Assessment
- Draft Agreement Schedules
- Proposed Plan for Registration (M-Plan)
- > Tree Survey Plan
- Arborist Report
- (6) One copy of the following, labeled "Alectra Mississauga":
 - A complete set of drawings, as per the Development Engineering set listed above.
 - A copy of the Consulting Engineer's Letter of Retention
 - Proposed Plan for Registration (M-Plan)
- (7) A Letter of Retention from the Consulting Engineer stating that they have been engaged for the design and complete general construction supervision of all municipal services (Refer to Appendix B).
- (8) A Letter of Retention from the Geotechnical Engineer stating that they have been retained to supervise, in total, the installation of bedding and the backfilling of all trenches within road allowances and easements, and to certify to the Owner and the City that they have supervised the backfilling operations, carried out sufficient tests to obtain a representative report as to the compaction of the backfill and that they find the backfill installation to be in compliance with the City's specifications (Refer to Appendix B).
- (9) A copy of the Consulting Engineer's letter to the *Region of Peel* forwarding the first engineering submission in accordance with their requirements.
- (10)Proof of payment of the Preliminary Engineering Fee in the amount of \$1,500.00 from the T&W Customer Service Counter.
- For Draft Plans of Subdivisions, please also include the following material:
- (11)A letter from the Ontario Land Surveyor confirming that the Development and Design Division of the Planning and Building Department is in receipt of the proposed plan for registration (M-Plan).

3.4.1.2 Second Engineering Submission

PLEASE BE ADVISED THAT THE CITY WILL NOT CIRCULATE TO PUCC AND MOECP (ITEMS 9 AND 10 BELOW) UNTIL THE CITY IS SATISFIED WITH THE ENGINEERING DESIGN. PRIOR TO THE SECOND ENGINEERING SUBMISSION, PLEASE CONTACT THE DEVELOPMENT ENGINEERING COORDINATOR PRIOR TO PREPARING THE PUCC AND MOECP PACKAGES FOR THIS COMFIRMATION AND SUBMISSION REQUIREMENTS.

The following material is required for the Second Engineering Submission:

- (1) All First Engineering Submission Plans, Drawings and Agreement Schedules that were marked up by Development Engineering as part of the First Engineering Submission review.
- (2) A comment response matrix explaining how each outstanding condition has been addressed.
- (3) Two complete sets labeled "Development Engineering":
 - All revised materials (i.e. plans, drawings, schedules, etc.), which must satisfactorily address the First Engineering Submission comments.
- (4) One complete set, labeled appropriately for each of the following reviewers, with all revised materials (i.e. plans, drawings, schedules, etc.) that must satisfactorily address the First Engineering Submission comments:
 - <u>Environmental Services Storm Drainage</u>
 - Transportation Infrastructure Management Traffic
 - Environmental Services Environmental Management & Compliance
- (5) Two complete sets labeled "Community Services Park Planning":
 - All revised materials (i.e. plans, drawings, schedules, etc.), which must satisfactorily address the First Engineering Submission comments.
- (6) Three complete sets, which must reflect all the required revisions from the First Engineering Submission comments, labeled "*Planning and Building Development & Design*":
 - General Above Ground Services Plan
 - Grading plan
 - Utility Plan (if required)
 - Streetscape/Landscape Plans
 - Draft Agreement Schedules
 - Fencing Plan
 - Proposed Plan for Registration (M Plan)
- (7) One complete set, which must reflect all the required revisions from the First Engineering Submission comments, labeled "<u>Survey Section</u>":
 - General Above Ground Services Plan
 - General Underground Services Plan
 - Reference Plans
 - Draft Agreement Schedule 'D-4'
 - Proposed Plan for Registration (M-Plan)

- (8) Two copies, which must reflect all the required revisions from the First Engineering Submission comments, labeled "MiWay Transit":
 - General Above Ground Services Plan
- (9) Six (6) prints and one (1) digital copy (CADD) of all applicable plans of existing roads on which additional services are to be installed for <u>P.U.C.C.</u> approval. These are to be divided into individual bundles. A key plan is to be provided on these plans.

NOTE: PUCC applications will not be forwarded until the City is satisfied with the engineering design. Please contact the Development Engineering Coordinator to confirm which drawings are required.

(10)One package labeled "Ministry of the Environment, Conservation and Parks (MOECP)":

- Two original sets, plus one copy, of the MOECP Environmental Compliance Approval application, which must be signed by the Owner and the Consulting Engineer
- Two copies of associated reports and storm sewer design sheets
- One set of all applicable drawings

If a Stormwater Management Pond Facility is included:

- Two copies of the Stormwater Management Pond Planting Plans prepared and stamped by a Landscape Architect, including detailed drawings, pond plant lists and a detailed cost schedule for the purposed landscaping works
- Two original sets, plus one copy, of the MOECP Environmental Compliance Approval application, which must be signed by the Owner and Consulting Engineer
- Two copies of associated reports
- One set of all applicable drawings

NOTE: MOECP ECA applications will not be forwarded until the City is satisfied with the engineering design. Please contact the Development Engineering Coordinator to confirm which drawings are required.

- (11)A letter from the electrical consultant confirming that a submission has been made to "<u>Alectra Mississauga"</u> for street lighting approval.
- (12)If approvals from <u>External Agencies</u> are required, two complete sets of drawings and Agreement Schedules and associated reports are to be provided for forwarding to the appropriate authorities by the City.
- For Draft Plans of Subdivisions, please also include the following material:
- (13)Two copies, which must reflect all the required revisions from the First Engineering Submission comments, labeled "Board of Education" and/or "Separate School Board":
 - General Above Ground Services Plan
 - Proposed Plan for Registration (M Plan)

- (14)Two copies, which must reflect all the required revisions from the First Engineering Submission comments, labeled "*Canada Post*":
 - General Above Ground Services Plan

3.4.1.3 Interim Engineering Submission

An Interim Engineering Submission is required when the current submission does not meet the City's requirements. This includes but is not limited to: lack of submission material for review, missing information, major outstanding conditions that have not been addressed, improperly submitted material. When an Interim Engineering Submission is required, the following will need to be submitted:

- (1) Submit two complete sets of all survey plans, engineering plans, landscape plans, agreement schedules, design material (reports, design sheets etc.) and return of the previous submission "mark ups".
- (2) A comment response matrix explaining how all outstanding conditions have been addressed.
- (3) Also provide separate labeled packages of revised materials for various divisions and agencies to ensure all of their previous comments have been addressed.
- (4) Proof of payment of the Interim Engineering Submission Fee from the T&W Customer Service Counter.

3.4.1.4 Final Engineering Submission

The following material is required for the Final Engineering Submission:

- (1) Two (2) complete sets of Municipal Infrastructure Schedules.
- (2) Eight (8) complete sets of all drawings (full size) listed in the Agreement.
- (3) Ten (10) additional copies of the Above Ground Services Plan showing the road network, emergency routes, temporary accesses, construction roads and fire hydrants etc.
- (4) One (1) set of mylars of all drawings listed in the Agreement.
- (5) Two (2) copies of the final Storm Drainage Plan, Storm Sewer Design Sheets and all associated drainage reports labeled "*Environmental Services Storm Drainage*".
- (6) An original Letter of Credit for the approved securities as per Schedule "G" of the Agreement, plus one copy.
- (7) Proof of payment from the T&W Customer Service Counter for (a) the Final Engineering Fee and, (b) any required cash contributions.
- (8) One (1) original Certificates of Insurance as per Article 'IV' or 'V' of the Agreement.

- (9) Written confirmation from the Region of Peel that includes a final approval letter for municipal works and payment confirmation of required Regional cash contributions and Region Engineering Fees.
- (10)The Owner must submit evidence, in writing, to the Commissioner of Transportation and Works that arrangements have been made with the Telecommunication and Hydro providers for the installation of their cables in a common trench in the prescribed locations on road allowances.
- (11)The Owner must submit evidence, in writing, to the Commissioner of Transportation and Works that satisfactory arrangements have been made with Alectra Mississauga for the installation of street lighting.

For Draft Plans of Subdivisions, please also include the following material:

- (12)One (1) copy of the final M-Plan, signed and dated by the Owner, and one (1) copy of the Above Ground Services Plan labeled "*Development Engineering*" for assignment of street numbers.
- (13)One (1) letter, and one (1) copy of the letter, from the Ontario Land Surveyor certifying that the final M-Plan has not been changed since the Zoning By-Law came into effect