



SITE PLAN CONTROL GUIDE

January 13, 2022

REV 1 - APPENDIX D UPDATED 2023-08-11 TO REFERENCE CGS SWM GUIDE IN SECTION 12



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I. FORWARD

This manual has been prepared by the Planning Services Division to assist both developers and the general public in understanding the Site Plan approval process within the City of Greater Sudbury. The manual outlines:

- the Site Plan application process;
- submission requirements for pre-consultation and site plan approval;
- Site Plan design;
- costs (including fees, securities, etc.);
- timelines; and,
- final review and deposit release requirements.

Matters considered necessary for good development such as site layout, landscaping, drainage, municipal services, vehicle and pedestrian access, and site and building design are not adequately covered within the context of zoning by-laws. A common perception remains among many that development proposals can proceed simply because they have satisfied existing zoning requirements, and not because they were appropriately planned and designed in the context of site plan control. For this reason the Ontario provincial government introduced Site Plan Control in their planning legislation (Section 35(a) of The Planning Act 1973), thereby providing the legislative authority for municipalities to implement the Site Plan Control process.

The City of Greater Sudbury's goal is to ensure that the urban environment is developed in a safe, convenient, efficient and aesthetically pleasing manner. Additionally, the site plan process ensures developments are environmentally sensitive, accessible, functional and achieve the preferred design objectives of the City.

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Should you have any questions regarding the Site Plan Application Manual, please contact the Planning Services Division at:

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Planning Services Division
Subdivision/Site Plan Control
200 Brady Street
Sudbury, Ontario P3A 5P3

Telephone: (705) 671-2489 ext. 4274/4334

Fax: (705) 673-2200

Email: linda.harnish@greatersudbury.ca (Site Plan Control Officer)
jonathan.clark@greatersudbury.ca (Site Plan Control Engineer)
kathy.heroux@greatersudbury.ca (Site Plan Control Coordinator)

These guidelines are subject to periodic updates, therefore it is recommended that the Owner or their authorized agent contact Planning Services to confirm current site plan requirements.

The Planning Services Division wishes to acknowledge the efforts of the City of Greater Sudbury Development Liason Advisory Committee, and the various City Departments involved in the preparation of this document.

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1.0 SITE PLAN AUTHORITY

Site Plan Control is a planning tool provided to municipalities under Section 41 of the Planning Act (RSO 1990). Its purpose is to provide municipalities with the ability to control or influence matters such as:

- the massing and conceptual design of buildings;
- the relationship of proposed buildings to their surroundings;
- vehicular and pedestrian access and walkways;
- exterior design (character, scale and appearance of buildings) and their sustainable design;
- sustainable design elements (planting, street furniture, bus shelters, benches, bicycle parking facilities, waste and recycling enclosures);
- facilities designed for accessibility;
- traffic direction signs;
- road widening;
- loading and parking facilities and their surface treatment;
- emergency vehicle and transit access;
- lighting;
- landscaping (trees and plantings);
- easements to the municipality for the construction, maintenance or improvement of drainage and municipal services and utilities and stormwater management.

The Planning Act provides the authority to require that a developer/owner enter into an agreement with the municipality to ensure that these matters are provided and maintained in accordance with the approved plans. Site Plan approval is between the developer/owner and a municipality. Third parties including members of the public are generally not considered to have any authorized status in the consideration of a site plan application.

The City has passed a Site Plan Control By-Law 2010-220 (as amended) which places the entire City under Site Plan Control with the exception of the following zoned areas and certain classes of development as follows:

A. Excluded Zoned Areas:

- lands zoned R1, Low Density Residential One

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- lands zoned R2-1 and R2-2, Low Density Residential Two
- lands zoned P, Public Park
- lands zoned RU, Rural
- lands zoned RS, Rural Shoreline
- lands zoned A, Agricultural Reserve
- lands zoned SLS, Seasonal Limited Service, and
- lands that are located in any of the Industrial Zones located more than 152.4

metres (500 feet) from both the nearest Residential Zone and from the nearest Municipal Road (Designated with an 'MR Number) or Provincial Highway are exempt except for matters under Section 41, Subsections (7)(a)1, (7)(a)2, and (7)(a)8 of the Planning Act, R.S.O. 1990, Chapter P.13.

B. Notwithstanding the above, the following classes of development are excluded from Site Plan Control:

- single detached dwellings
- semi-detached dwellings, linked dwellings or duplex dwellings
- multiple dwellings not exceeding four units
- seasonal dwellings;
- buildings accessory to the above four uses

In addition to the above the City may also impose site plan control on exempted properties during the development application approval process, where Council determines that site plan control is required. Developments subject to site plan control within the City of Greater Sudbury must obtain site plan approval prior to the issuance of a building permit. Commercial parking lots are also subject to site plan control.

The Owner or their authorized agent is advised to contact the Planning Services Division to confirm whether or not the particular development is subject to site plan approval. *Proposals for minor additions or developments that do not substantially increase the usability of the land, building or structure (i.e. patio, vestibules, signs, minor additions, etc.) may be exempt from site plan review and approval.*

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NOTE: For the current Site Plan Control by-law visit the City of Greater Sudbury website at: <http://www.greatersudbury.ca/inside-city-hall/by-laws>

1.1. Site Plan Control Agreement

A Site Plan Control Agreement is a legal agreement registered on title at the Land Registry Office. The Agreement describes the manner in which a property is to be developed and maintained after construction. The Agreement also provides for land transfers for easements and municipal right of way widening along with required financial guarantees in the form of deposits that are to be returned to the developer upon completion of construction and in some cases cash contributions to the City to pay for specific improvements to City infrastructure.

It is important to determine whether there is an existing site plan agreement on your property. These agreements may require that any new development be built and maintained according to earlier approved plans or require that other specific conditions be fulfilled. This information may be obtained from the title to your property, or through the City Clerk's Services. Previous agreements may be amended or discharged as part of the approval for any redevelopment of the property.

NOTE: *If a development does not obtain a building permit within a period of three (3) years from the registration date of the Site Plan Agreement, or any area has not been completed within three (3) years from the issuance of any building permit the contents of the agreement related to the uncompleted works will be subject to review and renegotiation and a new site plan control agreement or amendment will be required containing up-to-date standards for the City and any other review agencies. Applicable fees will be required for the amendment/extension in accordance with the City's User Fee By-law.*

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2.0 CITY OF GREATER SUDBURY SITE PLAN APPROVAL PROCESS

The following is an outline of the Site Plan Approval Process from pre-consultation to final construction. Each process is presented in a flow chart (Appendix B) in order to clarify the connection between each process, and provide a timeline of events.

2.1. Pre-Consultation Process

2.1.1. Pre-consultation Meeting

The City of Greater Sudbury requires Pre-Consultation service on site plans prior to making a formal application for Site Plan Approval.

The purpose of pre-consultation is to confirm the appropriate planning approvals required for the development of a site. Pre-consultation will also identify required drawings, supporting studies and reports that are necessary for the application(s) to be deemed complete. The applicant is also provided the opportunity to find out what planning policies apply to the property, processing timelines, as well as discovering potential areas of concern.

The Sudbury Planning Application Review Team (S.P.A.R.T.) meets every 2 weeks to provide pre-consultation. A meeting schedule and application for pre-consultation is available on the following City website.

<https://www.greatersudbury.ca/inside-city-hall/landuseplanning/application-forms/pdf-documents/pre-application-consultation/>

2.1.2. Capacity/Feasibility Review

A fire flow capacity review will be provided as part of the formal site plan application submission, at no additional cost. However, a capacity review can be requested ahead of the Site Plan Application Submission. Review fees for the capacity review will be charged as per the City's User Fee By-law, and will be credited towards the application fee when the development progresses to that stage. Capacity reviews are only valid for one year. Additional reviews and fees will be required if an application is not received within 1 year of the date of the capacity review report.

Requests for Capacity Review must be made to the Site Plan Control Engineer. Results of the capacity review may take 1 to 2 months to be finalized. ***Note, this time period is currently under review.***

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The following must be provided for a capacity/feasibility review:

- The address and approximate location of the proposed service connections identified on a sketch indicating adjacent roads.
- Applicable fees, as per the City's User Fee By-law.

2.2. Site Plan Review and Approval Process (Refer to Process Flow Chart in Appendix B)

2.2.1. Pre-consultation Meeting, (Refer to item 2.1.1 above)

The Owner or their authorized agent is required to attend a Pre-Consultation meeting prior to submitting a Site Plan Application. It is recommended that the Owner or their authorized agent have their consultants attend the meeting to help clarify comments and ensure that all comments are addressed when the application is submitted.

2.2.2. Site plan application submission

It is the Owner or their authorized agent's responsibility to submit a complete Site Plan Approval Application with appropriate plans and fees, to the Planning Services Division for consideration by staff. A copy of the current Site Plan Approval Application can be obtained at the Planning Department, 3rd Floor, Tom Davies Square, or on the City of Greater Sudbury website (<https://www.greatersudbury.ca/do-business/planning-and-development/start-a-planning-application/planning-application-forms/site-plan-control-agreement-application-form/>).

A checklist is included in the application to help ensure that the key drawing and report submission requirements have been met. A thorough review of the submission requirements (Appendix D) should be made prior to submission, as this will assist in reducing the review time and additional fees resulting from multiple submissions.

When the Site Plan Application package is deemed to be complete with all the required information, the Site Plan Control Officer (SPCO) circulates the submission to the following Review Agencies for their comments:

City Review:

- Planning Services
- Development Engineering
- Infrastructure Capital Planning Services
- Building Services
- Fire Services

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- Greater Sudbury Development Corporation
- Transit Services
- Source Water Protection (developments located in regulated areas)
- Housing Services (Government Funded Projects Only)

External Review Agencies:

- Conservation Sudbury - Nickel District Conservation Authority (developments located in regulated areas)
- Greater Sudbury Hydro (developments within service area)
- Canada Post (large residential developments)
- Ministry of Transportation (developments located within MTO control areas)
- Railway Companies (developments adjacent to railway lines and yards)

Note: To avoid concurrent process delays for the issuance of a building permit, it is possible to submit applications for both the building permit and site plan control agreement at the same time. If time is not of an essence and the Owner or their authorized agent wants to determine what is going to be required as part of Site Plan Control Agreement, it is beneficial to have the agreement in place prior to applying for a building permit, however, any changes to the building foot print and layout, resulting through the building permit process, may require the site plan to be amended.

2.2.3. Site Plan Application Comments

Within 10 business days of receiving the complete application and applicable fees the City will provide the Owner or their authorized agent with comments and a draft copy of the Site Plan Control Agreement for the application.

All subsequent reviews will be processed within 5 business days of re-submission, unless new reports are submitted or substantial changes are made to the drawings, in which case a 10 business day review period will apply.

Note: Review periods for external review agencies may take longer.

All resubmissions must be accompanied by the following:

- a. a letter outlining how each comment has been addressed and advising of any further revisions made to the drawings;

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- b. 5 full size copies of each drawing requiring revisions to address any comments;
- c. 3 copies of any revised reports; and
- d. 3 copies of any Plan and Profile Drawings required for the Off-site Servicing Agreement. These drawings will be reviewed under the Site Plan Approval process but will not form part of the Site Plan Agreement. Further approval may be required under the Environmental Compliance Approval application process (see section 2.4.3).
- e. applicable resubmission review fee for each resubmitted drawing.

For clarification of any site plan requirement from a particular department or agency, the Owner or their authorized agent is advised to contact the Development Engineering Technician (DET) assigned to the application. The Development Engineering Technician will contact the particular department or agency, if necessary, to obtain the requested clarification. Copies of any correspondence are to be sent to the Site Plan Control Officer (SPCO) in the Planning Services Division for file management purposes.

If there remain concerns regarding any of the comments a meeting can be arranged with the commenting department and the owner and/or their consultant through the Development Engineering Technician working on the application,

2.2.4. Registration of the Site Plan Control Agreement

All separate parcels/pins that form the property subject to a site plan control agreement must be placed under the same ownership prior to registration of the agreement.

Prior to registration of the site plan control agreement a digital plan must be provided by the applicant. The digital plan must be referenced to NAD83(CSRS) with grid coordinates expressed in UTM Zone 17 projection and connected to two (2) nearby City of Greater Sudbury Control Network monuments. The digital plan must be submitted in an AutoCAD compatible digital format. The submission shall be the final plan in content, form and format and properly geo-referenced. The digital plan must include all proposed and existing servicing, buildings, property lines, driveway locations and parking layout.

The Site Plan Control Agreement is prepared by Planning Services, upon City approval of all required drawings, and confirmation that all conditions within the Site Plan Control Agreement, noted to be fulfilled 'prior to registration of the agreement', have been complied with. The City's Legal

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Services will generate the agreement for signature and forward 2 copies of the agreement and 2 copies of the plans forming a part of the Site Plan Control Agreement to the property owner for final review, execution, authorization to register and return to the City. Additionally, the City's Legal Services will forward a copy of the Agreement to each mortgagee on title to seek the mortgagee's consent to postpone and subordinate its mortgage to the Site Plan Control Agreement. This will provide the City's agreement priority over the mortgage, although registered subsequent to the mortgage. Fees (in accordance with the City's Fee-Bylaw) will be charged to the applicant for the preparation of the documents and to recover disbursement costs.

Upon return of the signed copies of the agreement and schedules from the property owner, the agreement will be circulated to the Director of Building Services for signature on behalf of the City. Provided the approval to register any necessary postponements has also been received, the signed agreement and postponements will be registered on title to the affected property.

The processing for signature and registration of the agreement after receipt from the property owner will generally be effected within 5 business days. However, if there is a delay in receipt of the approvals to register the postponement, registration will be delayed until the postponements are received.

A copy of the signed agreement and schedules will be provided to the property owner after registration. A copy will also be returned to Planning Services and reported for storage.

2.2.5. Deposits

Deposits are required as part of all site plan agreements and are held by the City to ensure compliance with the agreement. These deposits are collected prior to issuance of any Building permit for the associated property or prior to issuance of a Road Occupancy Permit, whichever occurs first.

Once all conditions of the agreement have been satisfied, and upon expiry of the maintenance warranty, and subsequent inspection, these deposits will be returned to the then owner (refer to deposit release section 2.2.9 below). Note, these deposits are held in a non-interest bearing account.

There are typically 2 deposits retained as follows:

- a. On-site Deposit – 100% of all required landscaping to a maximum of \$20,000, plus 10% of the construction costs of all onsite works

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(including stormwater management facilities, excluding the building, rock blasting, grading, and site service pipes and structures). A deposit of \$1,000 will be required as a minimum. Note, the above calculation is used to estimate the required deposit only, and does not limit the use of the deposit to ensure compliance with all work required under the Site Plan Control Agreement, including but not limited to servicing, grading, rock faces, structures, lighting, landscaping, pavement, etc.

- b. Off-site Deposit – 100% of the construction costs for all works within the Municipal Right of Way, on other City property, or for municipal owned services on private property.

On-site deposit amounts are based on the estimated construction costs as determined by the Owner's consultant, subject to review by the City. Off-site deposit amounts are based on the City's estimate, using current City contract unit prices. All estimates shall include 15% administration and contingency. A unit price breakdown is required to be provided and may include a contractor's quote. All estimates will be rounded up to the nearest \$100.

2.2.6. Full Building Permit

Once the Site Plan Control Agreement has been registered, deposits collected, and any other conditions within the Site Plan Control Agreement that are noted to be fulfilled 'prior to the issuance of a full building permit' have been complied with; a letter of clearance from the Site Plan Control Officer will be provided to Building Services. At that time, providing all other approvals for the building permit have been obtained, a building permit may then be issued.

The development of the property must proceed in compliance with the registered Site Plan Control Agreements, and the Owner or their authorized agent must obtain any additional permits or approvals as required, see section 2.3 below. No work shall commence until all permits and approvals have been obtained.

Note: Site Plan approval is one of several prerequisites to the issuance of a building permit. Building permit applications for all structures are to be completed and submitted directly to Building Services for review and approval.

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2.2.7. Conditional Building Permit

In order for building construction to commence ahead of the Site Plan Control Agreement being registered, the Ontario Building Code Act, Section 8.(3) allows for a "Conditional Building Permit" which may be issued at the discretion of the Chief Building Official, provided:

- a. at least one circulation of the complete site plan application has been undertaken, with no comments that may affect the building design;
- b. any conditions within the Draft Site Plan Control Agreement that are required to be fulfilled 'prior to the issuance of a any building permit' have been complied with (including collection of all required deposits and cash contributions), and;
- c. the owner enters into a legal agreement with the City which formalizes the undertaking to register the Site Plan Control Agreement within a reasonably prescribed time frame.

2.2.8. Building Occupancy

Prior to receiving Building Occupancy, any condition within the Site Plan Control Agreement that are required to be fulfilled 'prior to the issuance of building occupancy' must be complied with, and all certification requirements (See Appendix E) for Rock faces, Sanitary Sewers, and Water Services must be provided to the Site Plan Control Officer for distribution to Development Engineering for review. The certificates will be reviewed within 10 business days, and any subsequent re-submission will be reviewed within 5 business days.

Note: Site Plan approval is one of several prerequisites to the issuance of building occupancy. Request for building occupancy for all structures are to be coordinated by the Owner or their authorized agent directly with Building Services for review and approval.

2.2.9. Site Plan Certification, Compliance Review, and Deposit Release

Upon completion of all work required under the Site Plan Agreement, the following must be provided to the Site Plan Control Officer:

- a. A letter or email from the owner or their authorized agent requesting a compliance review to release the deposits;
- b. Certification Package, (see appendix E);

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- c. Confirmation that all clauses have been addressed, (i.e. easements registered, as-builts provided, etc...).

The City will conduct a Site Plan Compliance Review within 3 weeks (Typically during the months of May through October; when tree foliage has formed, the ground is clear of snow, and road half load restrictions have been lifted) of receipt of item a) above. This review will be conducted by the following City Departments to confirm that all Site Plan Control Agreement Clauses have been satisfied:

- Development Engineering;
- Water/Wastewater (valves and fire hydrants only).
- Conservation Sudbury (where Section 28 permit is required)
- Source Water Protection (where section 59 notice is required)
- Transit (where transit infrastructure is required)

Once all the Conditions in the Site Plan Agreement have been complied with and there are no deficiencies noted during the Site Plan Compliance Review, the deposits will be released to the then owner of the property as follows:

- a. On-site Deposit – 50% of required landscaping deposit will be held until the end of the 1 year maintenance period, all other on-site deposits will be released.
- b. Off-site Deposit – reduced to 10% until the end of the 1 year maintenance period.

The Maintenance Period starts after the City's compliance review confirming that the work has been completed. Upon expiration of the 1 year maintenance period the Owner or their authorized agent must provide a letter or email to the Site Plan Control Officer noting that they have reviewed the site, and the works within the Municipal right of way, and that there are no deficiencies. Upon receipt of this letter the city will request a Site Plan Compliance Review within 3 weeks (During the months of May through October). This review will be conducted by Development Engineering.

The City will provide one Maintenance review at no charge. A fee will be assessed, in accordance with the City's User Fee By-law, for any subsequent on-site reviews required to determine if the deficiencies have been rectified. A certification package from the owners engineer is required for the correction of deficiencies observed during the warranty period.

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Note: The Site Plan Agreement is a legal agreement that is registered on Title with the property and carries over to consecutive owners. The Property must be kept in accordance with the Site Plan agreement and any changes to the property must be brought to the attention of the City, where it will be determined if an Amendment to the Site Plan Agreement is required.

2.2.10. Land Transfers, and Drainage and Servicing Easements

Where land is required to be transferred to the City or an easement is required to be registered in favour of the City as part of the Site Plan Control Agreement, the owner is responsible for creating a preliminary survey plan, registering the plan, and coordinating with the City's Legal department to have the land transferred or the easement created.

The Owner or their authorized agent must submit a copy of the preliminary survey plan to the SPCO for distribution and approval prior to registering the plan. Once the plan is approved and the owner has registered the plan, the Owner or their authorized agent must then contact the City's Legal Services Division to complete the land transfer or easement documents.

Once the land transfer or easement has been finalized, the owner or their authorized agent must notify the SPCO to confirm fulfillment of the agreement clauses.

Where the City agrees to pay for the costs associated with this work, the owner must submit the invoice to the SPCO, who will coordinate with the other City departments for payment. Note: where the registered plan is being used to register other easements, or land transfers, the City will pay a proportional cost.

Where a hydro easement is registered on land being transferred to the City for a road widening, this easement will need to be relocated entirely on the owner's property outside the land being transferred for the road widening.

2.3. Additional Permits and Approvals

The Owner or their authorized agent must obtain all necessary additional permits from the City and any other External Review agencies as indicated below. The following list is not exhaustive and the Owner or their authorized agent must ensure that all required permits and approvals are obtained prior to construction.

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City of Greater Sudbury Permits and Approvals

2.3.1. Road Occupancy Permit (typically obtained by the Owners Contractor)

A Road Occupancy Permit is required for all work that occurs within the City right-of-way including the driveway entrance, sidewalk, boulevard, servicing, etc.

Applications must be made at least 5 business days (15 business days for Road Closures) prior to construction so that Public Service Announcements can be made.

An application must be made with Technical Service. The following is a link to the application:

<https://www.greatersudbury.ca/live/transportation-parking-and-roads/traffic-interruptions-or-road-closures/road-occupancy-permit-pdf/>

2.3.2. Service Connection Permit (typically obtained by the Owners Contractor)

A Service Connection Permit is required for all sewer service connections or water service connections (less than 100mm) to existing service connections at the property line or within the site.

An application must be made with Technical Service.

2.3.3. Service Work Order (typically obtained by the Owners Contractor)

A Service Work Order is required for all sewer service connections or water service connections (100mm or greater) to the mains within the City right-of-way.

Applications must be made at least 5 business days prior to construction so that Public Service Announcements can be made. Fire Services must be contacted, by the Owner or their authorized agent, where proposed work may affect existing fire services.

An application must be made with Technical Service.

2.3.4. Sign Permit

All proposed signs must be installed in accordance with the City's current sign by-law, and the Ontario Building Code. A building permit will be required for all signs.

A Sign Permit Application is available on the City of Greater Sudbury's website, and the application must be made with By-law enforcement.

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A Building Permit Application is available on the City of Greater Sudbury's website, and the application can be made with Building Services.

2.3.5. Driveway Permit

If a driveway (permanent or temporary construction) is required ahead of the site plan agreement process, an application must be made for a driveway permit with Technical Service.

2.3.6. Site Alteration Permit

A site alteration permit, required under the City of Greater Sudbury's By-law #2009-170, shall be required for all blasting or changes in grade greater than 100mm, unless the following have been obtained:

- Registered site plan control agreement;
- Conditional or Full Building Permit;
- Approved Off-site Servicing or Subdivision drawings and a pre-construction/servicing meeting held;
- Approval under the Conservation Authorities Act or Aggregate Resources Act.

Depending on the work being proposed a grading plan, sediment and erosion control plan, Stormwater Management Report, Rock Blasting Report, Pre-blast Surveys, and/or Geotechnical report may be required.

An application must be made to Building Services.

2.3.7. Section 59 Notice (Source Water Protection Plan)

A Section 59 Notice Review is required for Owners choosing to proceed with a Building Permit or Planning Service in a Source Water Protection Area. Refer to the following link for additional information.

<https://www.greatersudbury.ca/live/water-and-wastewater-services/source-water-protection/>

The Owner or their Authorized Agent shall submit an application for a Section 59 Notice with the Site Plan Application.

2.3.8. Potable water agreements

Where the development does not utilize city services for potable water then the Owner must provide a chemical analysis of the supply water

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performed by a hydrogeologist or professional engineer to the satisfaction of the General Manager of Infrastructure Services showing that an adequate quantity of potable water is available for the development. If the water can only be made potable by treatment then a potable water agreement with the City must be registered on title. The City's Legal department through Technical Services, located at Tom Davies Square, 200 Brady Street, will create the potable water agreement in accordance with the City's Potable Water Policy upon receipt of all required documentation from the applicant,

External Review Agencies Permits and Approvals

2.3.9. Conservation Authority Act Application (Section 28, Ontario Regulation 156/06)

If the project involves work within or near a flood plain, wetland, natural drainage channel or any other regulated areas under the jurisdiction of Conservation Sudbury (Nickel District Conservation Authority) the Owner or their authorized agent must contact Conservation Sudbury directly to obtain any required permits or approvals.

Conservation Sudbury will be circulated as part of the Site Plan Application for all developments within their jurisdiction; however, any permits or approvals required by Conservation Sudbury must be obtained directly through Conservation Sudbury.

An additional Conservation Sudbury site plan review fee will be charged in accordance with the City of Greater Sudbury User Fee Bylaw in addition to any fees required directly by Conservation Sudbury.

For further guidance, refer to "Direction on the Administration of Ontario Regulation 156/06 – Wetland"

https://www.nickeldistrict.ca/images/uploaded_files/documents/Permits-Planning/Conservation_Sudbury_WetlandGuidelines.pdf

and,

https://conservationsudbury.ca/images/uploaded_files/documents/Permits-Planning/NDCA_Determination_of_Regulation_Limits-2021_Release.pdf

2.3.10. Ministry of Northern Development, Mines, Natural Resources and Forestry

If the project involves areas under the jurisdiction of the Ministry of Northern Development, Mines, Natural Resources and Forestry (i.e. Aggregate

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Resources Act, etc.), the Owner or their authorized agent must contact the Ministry directly.

2.3.11. Fisheries & Oceans Canada (DFO)

If the project involves areas under the jurisdiction of the Department of Fisheries & Oceans Canada, the Owner or their authorized agent must contact the Ministry directly.

2.3.12. Ministry of Transportation

If the project involves areas under the jurisdiction (permit control area) of the Ministry of Transportation (MTO), the Owner or their authorized agent must contact the MTO directly to obtain any required permits or approvals.

Permit Controlled Area: As of the date of this guide, "controlled area" means all of the area upon or within,

- a) 45m of any provincial or controlled access highway, for the purpose of placing buildings or other structures or any roads.
- b) 180m of the centre point of an interchange/intersection of a provincial highway, for the purpose of placing buildings or other structures or any roads.
- c) 395m of the centre point of an interchange/intersection of a controlled access highway, for the purpose of placing buildings or other structures or any roads.
- d) 400m of any provincial or controlled access highway, for the purpose of placing signs.
- e) 800m of any provincial or controlled access highway, for the purpose of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that cause persons to congregate in large numbers.
- f) Where a proposal is located within a study area of a specific highway planning study as carried out from time to time through the Environmental Assessment Planning process.

The MTO will be circulated as part of the Site Plan Application for all developments within the permit control area; however, any permits or approvals required by the MTO must be obtained directly through the MTO.

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2.3.13. Sudbury & District Health Unit

Where private water and/or sanitary treatment systems are being proposed, the Owner or their authorized agent must contact the Sudbury & District Health Unit directly to obtain any required permits or approvals. Depending on the flow rates proposed, approval from the MECP may be required.

2.3.14. Ministry of the Environment, Conservation and Parks (MECP)

All proposed water and/or sewage works that fall under the Transfer of Review (ToR) program or Limited Operational Flexibility (LOF) license, as defined in Appendix 3 of the Guide to Applying for an Environmental Compliance Approval, must be made directly with the City as indicated in Section 2.4.3 below.

For all proposed water and/or sewage works that are excluded from the transfer of review program, or for any other approvals under the MECP's area of review (i.e. Species at Risk Act, etc), the Owner or their authorized agent must contact the MECP directly to obtain any required permits or approvals.

2.3.15. Railway Companies

The Railway Companies will be circulated for comments as part of the Site Plan Application for all developments adjacent to a railway line or yard, or where railway comments were provided to the City as part of a rezoning or consent application; Comments from Railway Companies may affect building setbacks, fencing, noise and vibration requirements, and stormwater management.

If a project involving a noise sensitive land use is located within 300m of a Railway line or 1,000m of a Railway Yard, the Owner or their authorized agent should incorporate noise control into their design.

If the project is located within 75m of a Railway line or Yard, the Owner or their authorized agent should incorporate vibration control into their design.

For further guidance, refer to the "Guidelines for New Developments in Proximity to Railway Operations" (www.proximityissues.ca).

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2.4. Off-Site Servicing Plan Review and Approval Process (Refer to Process Flow Chart in Appendix B)

2.4.1. Off-Site Servicing Agreement

Where existing municipal infrastructure (roads, sidewalks, sewers, watermain, etc.) is insufficient to accommodate a proposed development, the developer may be required to improve the existing infrastructure. These costs may be borne solely by the Developer or may be shared with the City in accordance with the City's Cost Sharing Policy and approval of the application for cost sharing.

The following is a link to the Cost sharing application:

<https://www.greatersudbury.ca/do-business/planning-and-development/start-a-planning-application/planning-application-forms/cost-sharing-application-form/>

The Owner will need to enter into an Off-Site Servicing Agreement with the City for any required or proposed off-site works that meet the following criteria:

- a. Where Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks (MECP) is required (i.e. extension of any municipal sanitary, storm or watermain, not including service connections).
- b. Proposed work on a private or municipal looped watermain through a private site or on any municipally owned mains/services located on private property.
- c. The improvements affect municipal infrastructure outside the boulevard directly adjacent to the development property (not including service connections) i.e., proposed improvements to traffic signals or traffic lane configuration, etc.

The Off-site Servicing Agreement describes the owner's obligation for completion of the required work and also provides for required financial guarantees in the form of deposits that are to be returned to the owner upon completion of construction.

2.4.2. Off-Site Servicing Submission and Comments

Off-site Servicing Drawings will be reviewed through the Site Plan Process identified in Items 2.2.2, and 2.2.3 above.

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2.4.3. Environmental Compliance Approval Application

This approval process is completed through the Limited Operational Flexibility (LOF) certificate and the transfer of review program. Fees associated with the approval can be found in the City of Greater Sudbury user fee by-law. All ECA application documents (except those requiring a direct submission to the MECP) should be provided to the Site Plan Control Officer for distribution, and the following information provided as follows:

2.4.3.1. Limited Operational Flexibility (LOF) process;

- 3 copies of approved drawings including all design sheets and required information
- 3 copies of the Modification to sewer works form
- One cheque payable to the City of Greater Sudbury

2.4.3.2. Transfer of Review (ToR) process;

- 3 copies of approved drawings including all design sheets and required information
- 3 copies of the ECA application form which can be found at the following link;
<https://www.ontario.ca/document/environmental-compliance-approval-application>
- One cheque payable to the City of Greater Sudbury.

2.4.3.3. Sanitary Sewers

ECA through the LOF certificate is required for sanitary sewers in the former City of Sudbury and Garson. All other areas will be approved under the Transfer of Review program, see information under section 2.4.3.4. Refer to the following link for LOF process information:

<https://citylinks.greatersudbury.ca/departments/growth-and-infrastructure/waterwastewater/wastewater/>

2.4.3.4. Storm Sewers and Storm Water Management Facilities

- 1) ECA for all allowable works outlined in the City's Transfer of Review Agreement for Sewage works, Schedule A, must be filed through the City's transfer of review process as outlined in the Transfer of Review Agreement Schedule B, which can be found in the following link.

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<https://citylinks.greatersudbury.ca/departments/growth-and-infrastructure/waterwastewater/wastewater/>

- 2) Where Transfer of review is not applicable an ECA must be filed directly with the Ministry of the Environment, as per the Water Resource Act.
- 3) The Stormwater Management Report must indicate how the stormwater management facility meets the requirements of the 2003 Ministry of the Environment Stormwater Management Planning and Design Manual, and how the facility provides enhanced quality control.
- 4) An Operation and Maintenance Manual is required prior to initial acceptance of the stormwater management facility meeting the following requirements:
 - Inspection frequency of all structures, apertures and functional design elements (minimum of once annually).
 - Sediment removal frequency, technique, and equipment.
 - Method for the re-stabilization of all disturbed areas.
 - Sediments testing protocols and method of disposal.
 - Design life expectancy.
 - Replacement/refurbishment recommendations/plans at the conclusion of the stormwater management facilities life cycle.
 - Health and Safety Procedures (i.e. confined space procedures).
 - Copy of the ECA as an appendix.
 - Copy of the approved Stormwater Management Report.

2.4.3.5. Watermains

ECA for all Watermains is provided through a Record of Watermain alteration Form 1. The form can be found at the following link;

<http://citylinks.greatersudbury.ca/departments/growth-and-infrastructure/waterwastewater/municipal-drinking-water-licencing-program/>

2.4.3.6. Approval of Design Drawings

Once the MECP applications have been approved by the City, the developers Engineer will be notified by Development Engineering that the design has been approved. This letter will state how many copies of the drawings will be required in order to book a pre-construction meeting.

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2.4.4. Off-Site Servicing Agreement

The Off-Site Servicing Agreement is prepared by Development Engineering, upon City approval of all required drawings and obtaining an ECA. The City's Planning Services will generate the agreement for signature and forward 2 copies of the agreement to the property owner for final review and execution, and return to the City. Fees will be charged to the property owner for the preparation of the documents and to recover disbursement costs.

Upon return of the signed copies of the agreement and schedules from the property owner, the agreement will be circulated to the General Manager of Growth and Infrastructure for signature on behalf of the City.

The processing for signature of the agreement after receipt from the property owner will generally be effected within 5 business days.

A copy of the signed agreement and schedules will be provided to the property owner. A copy will also be returned to Planning Services, Engineering Services, Legal Services, Clerks and reported for storage.

2.4.5. Pre-construction Meeting

Prior to construction the Owner's Engineer must schedule a Pre-Construction meeting with the Development Engineering Review Technician assigned to the application. A meeting invite will be sent to all applicable City Departments, External Review agencies and Utilities, who may provide additional construction related comments.

Construction shall not commence until this meeting is attended by the Owner's Engineer and the General Contractor, and the following documentation has been provided to the City:

- a. Proof of Insurance;
- b. Deposits;
- c. Construction Schedule;
- d. Road Occupancy Permit;
- e. Environmental Compliance Approval;
- f. Pre-construction Survey, as defined in the Certification Requirements, Appendix F;
- g. Approval of the proposed construction drawings;
- h. Execution of the Off-site Servicing Agreement;
- i. Any additional conditions raised at the Pre-construction meeting.

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2.4.6. Deposits

A deposit for 100% of the construction costs (plus 10% contingency and administration) are required as part of the Off-Site Servicing Agreement and are held by the City to ensure compliance with the agreement. This deposit is collected prior to issuance of any Building permit for the associated property or prior to issuance of a Road Occupancy Permit, whichever occurs first.

Once all conditions of the Off-Site Servicing Agreement have been satisfied, these deposits will be returned to the owner (refer to deposit release section 2.4.7 & 2.4.8 below). Note: these deposits are held in a non-interest bearing account.

The deposit amount is based on the estimated construction costs as determined by the Owner's consultant, subject to review by the City. A unit price breakdown is required to be provided and may include a contractor's quote. All estimates will be rounded up to the nearest \$1,000.

2.4.7. Off-site Servicing Initial Acceptance Certification, Compliance Review, and Deposit Reduction

Upon completion of all work required under the Off-Site Servicing Agreement, the following must be provided to the Site Plan Control Officer:

- a. A letter or email from the owner or their authorized agent requesting a compliance review to reduce the deposits;
- b. Certification package, (see appendix F);
- c. Confirmation that all clauses have been addressed, (i.e easements registered, as-builts provided, etc...).
- d. A statutory declaration that all accounts relative to the installation of the completed works have been paid; and,
- e. All certificates of substantial performance for all contracts and sub-contracts as required by the Lien Act, for such completed works together with the proof of publication thereof.

The City will conduct an Initial Acceptance Compliance Review within 3 weeks (Typically during the months of May through October; when the ground is clear of snow, and road half load restrictions have been lifted) of receipt of item a) and b), above. This review will be conducted by the following City Departments to confirm that all Off-Site Servicing Agreement clauses have been satisfied:

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- Development Engineering;
- Water/Wastewater (valves and fire hydrants only);
- Infrastructure Capital Planning (for signalization work, line painting or lane widening only).

Once the Compliance review has been completed and all items a) through e), noted above, have been received to the satisfaction of the General Manager of Growth and Infrastructure, the deposit will be reduced to 10% Maintenance + the cost of any outstanding deficiencies+15% where the Lien Act requirements have not been met.

Upon the City's acceptance of the Initial Acceptance Package, the 2 year maintenance period will commence. All "Major Deficiencies" identified in the Compliance review must be corrected as soon as possible, within the first available construction season. A separate 2 year maintenance period will commence for these deficiencies and any affected surface works, upon the City's approval of the corrected "Major Deficiencies". The follow-up review of the work will be conducted within 3 weeks (during the months of May through October).

A "Major Deficiency" is defined and identified by the City as any deficiency which adversely affects the safety of the public, usability of the service, surrounding properties, or is related to underground works, which to correct, requires the removal and replacement of any surface works.

The City will provide one compliance review at no charge during initial acceptance. A fee will be assessed, in accordance with the City's User Fee By-law, for any subsequent compliance reviews required to determine if the deficiencies have been rectified.

Note: Where signalization or traffic marking work is required, the developer must notify the Site Plan Control Officer to arrange for an inspection from the City's Roads and Transportation Division, 48hrs prior to inspection. The Roads and Transportation Division will review the signalization work and the Pre-markings prior to the traffic signals being energized and the traffic markings being installed.

2.4.8. Off-site Servicing Final Acceptance Certification, Compliance Review, and Deposit Release

Upon the expiration of the 2 year maintenance period the Owner's Engineer must attend the site and perform a final inspection of the work, and the following must be provided to the Site Plan Control Officer:

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- a. A letter or email from the owner or their authorized agent requesting a compliance review to release the deposits;
- b. A sealed letter from the owner's Engineer stating that they have reviewed the site and verify the works are in general conformance with the City approved construction drawings and that there are no deficiencies;
- c. Certification package, (see appendix F).

The City will conduct a final acceptance compliance review within 3 weeks (Typically during the months of May through October; when the ground is clear of snow, and road half load restrictions have been lifted) of receipt of the above items. This review will be conducted by the following City Departments to confirm that there are no deficiencies:

- Development Engineering;
- Water/Wastewater (valves and fire hydrants only).

All Deficiencies identified in this compliance and certification package review must be corrected prior to the release of the maintenance deposit. An additional 2 year maintenance period will be required for any major deficiencies noted during the final acceptance review.

The City will provide one compliance review at no charge during final acceptance. A fee will be assessed, in accordance with the City's User Fee By-law, for any subsequent compliance reviews required to determine if the deficiencies have been rectified.

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APPENDIX A

DEPARTMENTAL CONTACTS & ROLES

Appendix A: Departmental Contacts and Roles

January 13, 2022

CITY REVIEW DEPARTMENTS
(705) 674-4455

	PHONE	EMAIL
Site Plan Control:		
Site Plan Control Officer (SPCO) – Linda Harnish	ext.4274	linda.harnish@greatersudbury.ca
Role: Receiving and processing Site Plan Applications; receiving and circulating submissions; processing comments; preparation of Agreements; receiving deposits; arranging for registration; coordinate inspections and deposit release.		
Site Plan Control Engineer (SPEC) – Jonathan Clark	ext. 2381	jonathan.clark@greatersudbury.ca
Role: Pre-consultation; Supervise Site Plan Control and Development Engineering Staff.		
Planning Services:		
Role: Review of Plans with regard to landscape design, lighting, pedestrian circulation, refuse, and zoning by-law requirements.		
Development Engineering:		
Role: Review of Plans with regard to grading, drainage, servicing, stormwater management and access.		
Infrastructure Capital Planning Services:		
Role: Review of Plans with regard to active transportation, capital works projects, vehicle access, internal vehicle circulation, road widening/improvements, stormwater management watershed requirements and downstream system capacity related to storm sewers.		
Building Services:		
Role: Review of Plans with regard to Ontario Building Code, Zoning By-law compliance, Site Alteration Permits, and Geotechnical and Blasting Reports.		
Fire Services:		
Role: Review of Plans with regard to fire routes, and other fire department requirements.		
Transit Services:		
Role: Review of Plans with regard to transit routes and GOVA + Service on site.		
Source Water Protection:		
Role: Review of Plans with regard to the Clean Water Act, 2006 related to any adverse effects on the quality or quantity of any water that is or may be used as a source of drinking water.		

Appendix A: Departmental Contacts and Roles

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Linear Infrastructure Services:

Role: Review of Plans with regard to the service connection tie-ins, and downstream system capacity for sanitary and water..

OUTSIDE REVIEW AGENCIES:

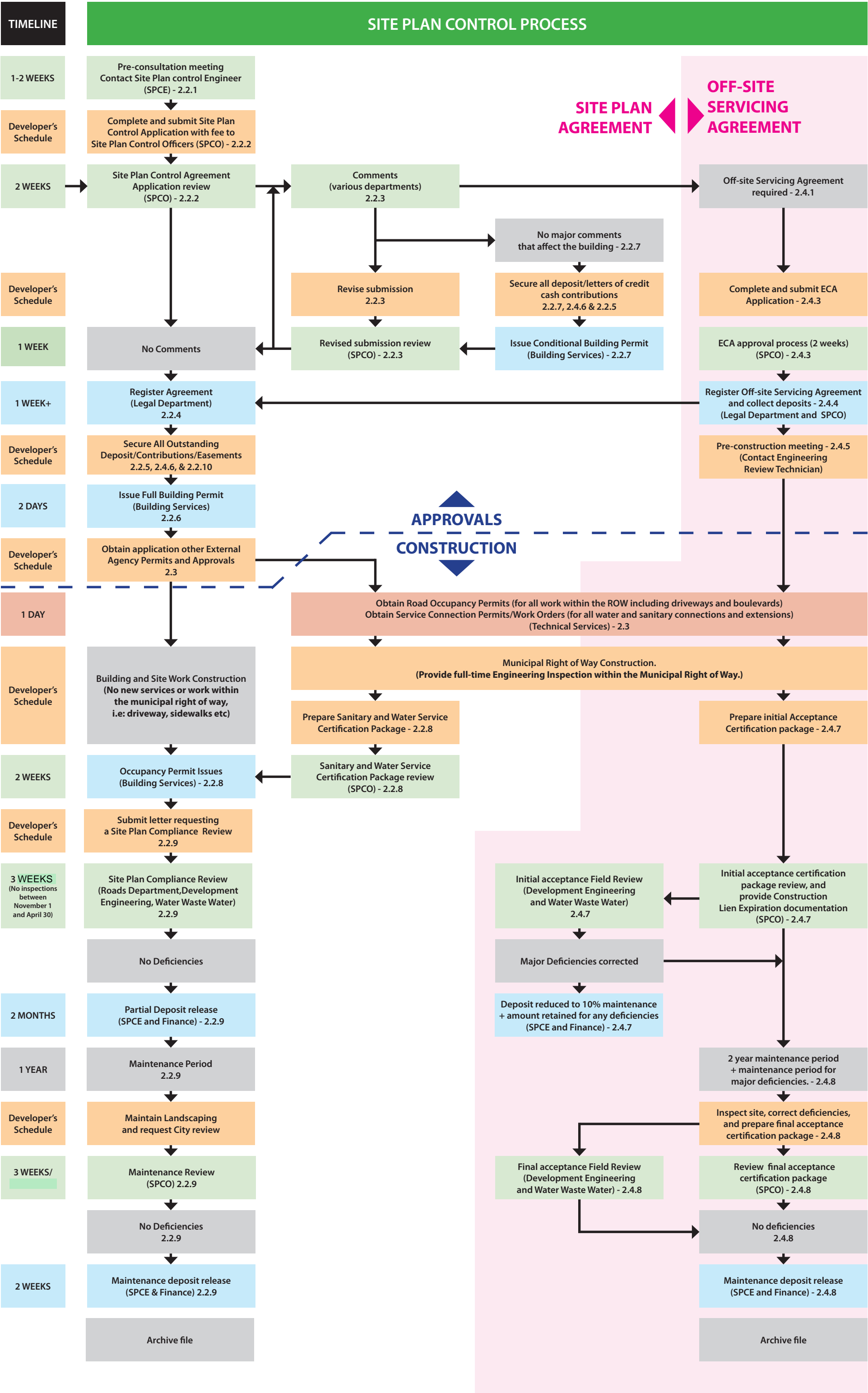
	PHONE	EMAIL
Conservation Sudbury (Nickel District Conservation Authority):		
Watershed Planner – Bailey Chabot	(705) 674-5249	bailey.chabot@ConservationSudbury.ca
Role: Review of Plans with regard to Section 28, Ontario Regulation 156/06 related to sediment and erosion, stormwater management, wetlands, cut/fill, and flood control.		
Canada Post:		
Delivery Service Officer – Mark Bolotenko	(613) 462-9506	mark.bolotenko@canadapost.ca
Role: Review of Plans with regard to mail delivery service, requirement for and location of postal boxes		
Greater Sudbury Hydro:		
Senior Project Coordinator – Chris MacDonald	(705) 675-7536	chrism@gsuinc.ca
Role: Review of Plans with regard to hydro services and connections, and required easements		
Hydro One:		
Land Use Planning – Dennis De Rango	(905) 946-6237	LandUsePlanning@HydroOne.com
Role: Review of Plans with regard to high voltage distribution facilities and impact of development on lands within or along the Hydro One corridor lands		
Ministry of Transportation:		
Corridor Management Planner – Carla Riche	(705) 497-5456	NER.CorridorManagement@ontario.ca
Role: Review of Plans depending on location with regard to stormwater management, entrances, traffic impact, signage and Land Use Permits		
CN Business Development & Real Estate:		
Proximity Review –		proximity@cn.ca
Canadian Pacific Railway:		
Proximity Review –		CP_Proximity-Ontario@cpr.ca
Role: Review of Plans in relation to the “Guidelines for New Developments in Proximity to Railway Operations” (Noise and vibration Studies, Storm Water Management, Setbacks, etc)		

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APPENDIX B

SITE PLAN CONTROL PROCESS FLOW CHART



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APPENDIX C

SAMPLE SITE PLAN CONTROL AGREEMENT

THIS SITE PLAN CONTROL AGREEMENT, made in triplicate, this day of, .

B E T W E E N:

CITY OF GREATER SUDBURY
hereinafter called the "City"
OF THE FIRST PART

- a n d -

NAME OF OWNER
hereinafter called the "Owner"
OF THE SECOND PART

WHEREAS the City has enacted Site Plan Control Provisions in By-law 85-205 pursuant to the provisions of Section 41 of the *Planning Act*, R.S.O. 1990, Chapter P.13;

AND WHEREAS the Owner owns the lands described as:

Legal Description of Property

AND WHEREAS the Owner has applied to the City for approval of the Site Plan as received by the City on the prescribed forms pursuant to the Site Plan Control Guide and the City has approved of said plan subject to the Owner entering into a Site Plan Control Agreement;

NOW THEREFORE IN CONSIDERATION OF THE MUTUAL COVENANTS CONTAINED HEREIN, THE PARTIES COVENANT AND AGREE AS FOLLOWS:

1.(1) This Agreement shall apply to the Owner's land which is described above and in Schedule "A" (the "Subject Land") and to the development or redevelopment of the "Subject Land".

1.(2) Schedule "A", referred to in this Agreement is the plan prepared by XXXXXXXXXX, identified as Drawing XXX, dated XXXXXXXX and received by Planning Services on XXXXXXXXXX.

2. The Owner covenants and agrees that no development or redevelopment will proceed on the "Subject Land" except in accordance with the plan approved by the City pursuant to Section 41 of the *Planning Act* and more particularly identified in the Schedule attached hereto.

3. The Owner further agrees that the proposed buildings, structures and other works shown on the plans which are identified as Schedule "A" shall be completed in conformity with the said plans and shall do all acts to provide for the maintenance and use of the requirements set out in this Agreement.

4.(1) The Owner further covenants and agrees, in addition to Conditions 2 and 3 above and without limiting the generality of Conditions 2 and 3 or any other sections of this Agreement, and at the Owner's cost:

- (a) to complete the installation of all services, works and facilities as shown on Schedule "A" within the specified time;
- (b) to provide and maintain at all times such parking and loading facilities convenient to users and ensuring orderly and safe vehicular and pedestrian movements as shown on Schedule "A" and further agrees that the said areas shall be surfaced with asphalt and to mark all parking stalls and maintain all pavement markings and stop signs at each driveway entrance as shown on Schedule "A";

- (c) to provide and construct all drainage as shown on Schedule "A" to the satisfaction of the City;
- (d) to construct an entrance in the location as shown on Schedule "A" to the satisfaction and according to the specifications of the City;
- (e) to provide such walls, fences, hedges, trees and/or shrubs and to landscape the "Subject Land" as shown on Schedule "A" and further agrees to maintain or replace them to the satisfaction of the City;
- (f) to provide a garbage storage area as shown on Schedule "A" and to screen it accordingly;
- (g) to provide onsite lighting that shall be designed to:
 - (i) provide adequate onsite lighting for the safety of vehicular and pedestrian traffic;
 - (ii) provide illumination in accordance with the standards for lighting in the *Ontario Building Code*;
 - (iii) not interfere with the enjoyment of adjacent properties; and
 - (iv) use "full cut off" lighting, i.e. light fixture is constructed in such a manner that all light emitted directly or by a diffusing element, or indirectly by reflection or refraction from any part of the luminary, is projected below the horizontal;
- (h) although not shown on the attached Schedule, the Owner further agrees to install and maintain Fire Route No Parking signs in such manner and number as required by the City's Traffic and Parking By-law 2010-1T and in the form set out on Schedule "W" to By-law 2010-1T, as By-law 2010-1T is amended or replaced from time to time. These signs do not require sign permits pursuant to 4.(9) of this Agreement;

or

- (i) to install and maintain fire route No Parking signs as provided by the City of Greater Sudbury By-Law 2010-1T as amended and as shown on Schedule "A", which signs do not require sign permits pursuant to 4.(XXX) of this Agreement; and
- (j) to be responsible for the maintenance of the pedestrian and vehicular connections to the municipal sidewalk and road.

4.(2) The Owner understands and agrees that:

- (a) Municipal sewer and water is available for this development. The Owner will be responsible for filling out a Work Order with the Infrastructure Services Department to have these services installed to the property line. All costs associated with this work will be borne totally by the Owner.
- (b) **PRIOR TO THE REGISTRATION OF THE AGREEMENT** the Owner will be required to enter into an Offsite Servicing Agreement. This agreement will deal with items such as Performance Guarantee, Maintenance Guarantee, Insurance, etc.
- (c) **PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT** the deposit for the works in the right-of-way shall be collected as part of the Offsite Servicing Agreement.
- (d) **PRIOR TO THE ISSUANCE OF BUILDING OCCUPANCY** the works outlined in the off-site servicing agreement shall be Initially Accepted and completed to the satisfaction of the General Manager of Infrastructure.

- (e) The Owner will be required to make arrangements for the necessary Ministry of the Environment, Environmental Compliance Approval (ECA) for all storm sewer, sanitary sewer, and watermain extension or upgrading for this development that will be carried out on the municipal right-of-way.
PRIOR TO THE ISSUANCE OF A FULL BUILDING PERMIT MOE Approval must be provided and pipe construction shall not commence until MOE Approvals have been received.
- (f) All work performed and all materials installed for the water, sanitary sewer, storm sewer, stormwater management facility and entrance on private and/or municipal property must be specified to be in compliance with the current City Standards and Specifications.
- (g) The Owner shall hire a licensed Engineer to design, inspect, test and certify the water, sanitary sewer, storm sewer, stormwater management facility, rock faces and slopes, road work and entrance on private and municipal property.
- (h) **PRIOR TO THE RELEASE OF DEPOSITS** the Owners Engineer must submit to the Development Engineering Section, a certification package in accordance with the City's Certification Requirements for acceptance of the water, sanitary and storm sewer, stormwater management facility, rock faces and slopes, road work and entrance work and a letter certifying that all site works have been completed in general conformance with the approved drawings and that the works completed in the Municipal right of way have been installed under full time supervision in accordance with City Standards and Specifications.
- (i) Siltation control shall remain in place until all disturbed areas on the site have been stabilized. All sediment and erosion control measures shall be inspected daily to ensure that they are functioning properly and are maintained and/or updated as required. If the sediment and erosion control measures are not functioning properly, no further work shall occur until the sediment and/or erosion problem is addressed.
- (j) Upon receiving a building permit, the Owner or the Owner's contractor must obtain the necessary permits from Infrastructure Services. No work shall commence until all permits have been obtained.
- (k) Servicing and utility easements across the subject lands in locations required by the City or applicable utility must be registered on title.
- (l) **PRIOR TO THE ISSUANCE OF BUILDING OCCUPANCY** a certification letter must be provided for all new rock faces, in accordance with the City Certification Requirements.
- (m) **PRIOR TO THE RELEASE OF DEPOSITS**, and once the work associated with the Site Plan Control Agreement has been completed, the Owner will update the City as built drawings for XXXXXXXX Avenue to show the as-constructed data for the servicing, entrance details, storm water management facilities, etc. The method of updating the as-built drawings will be determined by the General Manager of Growth and Development.
- (n) All works proposed along the property line, which may require excavation or regrading of the adjacent property, must be brought to the attention of the adjacent property owner and may proceed only with the adjacent property owners consent.
- (o) The Owner understands that a 150mm diameter connection to the existing municipal 250 mm water main on XXXXXXXX Avenue can provide a Fire Flow Rate of xxxxx L/s with 20 p.s.i. residual, a Domestic Max Day Pressure of xxxxxxxx p.s.i. and a Domestic Max Hour Pressure of xxxxxxxx p.s.i. at an elevation of xxxxxx m at the property line. These results are

derived at by utilizing a theoretical computer model based on the City's available data. Should the owner require additional Fire Flow or a higher Domestic Pressure for the development than presently exists, the Owner will be responsible for carrying out all the necessary work on the municipal watermain systems and/or private property to ensure that the Owner's needs are satisfied. All costs associated with this work will be borne totally by the Owner and all the work will be carried out to the satisfaction of the General Manager of Infrastructure Services and/or the Chief Building Official and/or the Fire Department.

- (p) Upon completion of the construction of the private water system and prior to connection to the municipal system, the Owner's engineer will make the necessary arrangements to test the system in accordance with current City Standards. This work shall be completed in accordance with the City's "Protocol for New Watermain, Water Service and Wastewater Connections."
- (q) **PRIOR TO THE ISSUANCE OF BUILDING OCCUPANCY** the owner will submit the certification package for the water service installation in accordance with the City's certification package requirements.
- (r) The owner understands that they are responsible for the maintenance of the private fire hydrants, and that they should contact the City to arrange for an annual inspection. The owner agrees that the City, its authorized employees, contractors and agents together with such equipment, machinery, vehicles as may be required, shall from time to time, enter upon the site for the purpose of inspecting the private fire hydrant in accordance with the water/waste water systems bylaw.
- (s) **PRIOR TO THE ISSUANCE OF BUILDING OCCUPANCY** the owner will submit the certification package for the sanitary service installation in accordance with the City's certification package requirements.
- (t) The owner understands and agrees that they are responsible for the maintenance of all walkway and driveway connections to the Municipal road and sidewalk; including all snow and ice removal, repair of any uneven surfaces, repair of damaged curb depressions and related accessibility requirements, and refreshment of zebra striping and/or stop bars.
- (u) All work on the municipal right-of-way must be constructed by an approved contractor, after the Owner has obtained a "Road Occupancy Permit" from the City's Infrastructure Services Department.
- (v) All work carried out on the municipal right-of-way will require the Owner to obtain insurance coverage in respect to liability for property damage and personal injury and issued in the joint names of the Owner and/or Contractor and the City (or include the City as an additional insured) in respect of any one accident or occurrence in the amount of at least Five Million (\$5,000,000.⁰⁰) Dollars exclusive of interest and costs. This coverage must be in effect until the work in the right-of-way is completed and accepted. It must contain a clause indicating that the insurance provision of the policy or policies will not be changed or cancelled without at least thirty days prior written notice being given to the City.
- (w) The Owner agrees to implement and maintain the measures indicated in the storm water management report for the quality control of the site storm water, and also agrees to the following:
 - i) The Owner shall adequately maintain the stormwater management facilities as set out in the Stormwater Management Maintenance Protocol and attached as Schedule XXX to the Agreement. This includes all pipes and channels built to convey stormwater to the

facility, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the stormwater. Adequate maintenance is herein defined as good working condition so that these facilities are performing their design functions.

- ii) **The Owner agrees to provide the City with an annual maintenance report as set out in the Stormwater Management Maintenance Protocol for the Storm Water Management Facilities;** indicating the work performed, the remaining capacity of the facility, and the quantity of any material removed. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire facilities, berms, outlet structure, pond areas, access roads, etc. All deficiencies shall be corrected prior to submitting the report to the City. Copies of the Maintenance reports must be retained on the site and made readily available to the City's By-law enforcement officers.
- iii) All uncontrolled discharges observed leaving the storm water management facility must be brought to the attention of the City immediately.
- iv) The Owner hereby grants permission to the City, its authorized agents and employees, to enter upon the Property and to inspect the stormwater management facilities whenever the City deems necessary. The purpose of inspection is to follow-up on reported deficiencies and/or to respond to citizen complaints. The City shall provide the Owner copies of the inspection findings and a directive to commence with the repairs if necessary.
- vi) In the event the Owner fails to maintain the stormwater management facilities in good working condition acceptable to the City, the City may enter upon the Property and take whatever steps necessary to correct deficiencies identified in the inspection report and to charge the costs of such repairs to the Owner. This provision shall not be construed to allow the City to erect any structure of permanent nature on the land of the Owner. It is expressly understood and agreed that the City is under no obligation to routinely maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the City.
- vii) The Owner will perform the work necessary to keep these facilities in good working order as appropriate.
- viii) In the event the City pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work or labour, use of equipment, supplies, materials, and the like, the Owner shall reimburse the City upon demand, within thirty (30) days of receipt thereof for all actual costs incurred by the City hereunder.
- vix) This Agreement imposes no liability of any kind whatsoever on the City and the Owner agrees to hold the City harmless from any liability in the event the stormwater management facilities fail to operate properly
- (x) The stormwater generated on site will be contained on the property and discharged into the existing municipal drainage system. No stormwater will be permitted to flow onto the travelled portion of Second Avenue and/or abutting properties, unless a drainage agreement is in place.

4.(3) The Owner understands and agrees that the Owner must sign and complete all Agreements as required by Greater Sudbury Hydro Inc. for the installation/connection

and/or continued Hydro service to the "Subject Land", as well as, being subject to existing Greater Sudbury Hydro Inc. Service Requirements.

4.(4) The Owner understands and agrees that the Owner must transfer an easement, to be registered on title to the "Subject Land", to Greater Sudbury Hydro Inc. for any plant installed on the "Subject Land" to the satisfaction of the Manager of the Engineering Department and further agrees that all survey and legal costs associated with the above will be borne by the Owner. The Owner is also responsible for obtaining/providing a Postponement in favour of Greater Sudbury Hydro Inc.'s interest with respect to any and all existing Charge/Mortgage of Land registered on title to the "Subject Land". The Owner will be responsible for all costs associated with obtaining the said postponement.

4.(5) The Owner understands and agrees that the Owner must transfer a four (4) metre wide easement, to be registered on title to the "Subject Land", to Greater Sudbury Hydro Inc. for that portion of the "Subject Land" that fronts on any existing or proposed road allowances, to the satisfaction of the Manager of the Engineering Department and further agrees that all survey and legal costs associated with the above will be borne by the Owner. The Owner is also responsible for obtaining/providing a Postponement in favour of Greater Sudbury Hydro Inc.'s interest with respect to any and all existing Charge/Mortgage of Land registered on title to the "Subject Land". The Owner will be responsible for all costs associated with obtaining the said postponement.

4.(6) The Owner understands and agrees that prior to the connection of an electric service to the "Subject Land" an "Agreement to Grant Easement" must be registered on title to the "Subject Land" in favour of Greater Sudbury Hydro Inc. This document should be registered at the same time as the Site Plan Control Agreement is registered on title. The Owner further agrees that all legal costs associated with the above will be borne by the Owner. The Owners is also responsible for obtaining/providing a Postponement in favour of Greater Sudbury Hydro Inc.'s interest with respect to any and all existing Charge/Mortgage of Land registered on title to the "Subject Land". The Owner will be responsible for all costs associated with obtaining the said postponement.

4.(7) The Owner understands and agrees that the upgrading, rearrangements or replacement of existing Hydro plant to provide the required grade clearances and/or service supply (continued or new) to the "Subject Land" will be at one hundred (100) percent cost to the Owner.

4.(8) The Owner understands and agrees that the "Subject Land" shall be considered as one parcel of land and that no part shall be independently sold, mortgaged or otherwise dealt with, but must be sold, mortgaged or otherwise dealt with as a single unit.

4.(9) The Owner understands and agrees that prior to erecting any signs on the "Subject Land", the Owner must obtain a sign permit from the City By-Law Section. All signs must conform to the applicable by-law.

4.(10) The Owner understands and agrees that gabion baskets are not permitted and further agrees that any rock rubble slopes must be treated with topsoil, grass and trees.

4.(11) Notwithstanding Schedule "A", the minimum size at the time of planting for deciduous trees must be seventy (70) millimetres caliper measured at one hundred and fifty (150) millimetres above ground and the minimum height for coniferous trees must be one point six (1.6) metres.

4.(12) The Owner understands and agrees that based on anticipated removal of rock through blasting, for both infrastructure and building construction, the following conditions will be imposed:

- (a) the Owner will be required to provide a geotechnical report on how the work related to blasting shall be undertaken safely to protect adjoining structures and other infrastructure. The geotechnical report shall be undertaken by a blasting consultant defined as a professional engineer

licensed in the Province of Ontario with a minimum of five (5) years experience related to blasting;

- (b) a blasting consultant shall be retained by the Owner and shall be independent of the contractor and any subcontractor doing blasting work. The blasting consultant shall be required to complete specified monitoring recommended in his/her report of vibration levels and provide a report detailing those recorded vibration levels. Copies of the recorded ground vibration documents shall be provided to the contractor and contract administrator weekly or upon request for this specific project;
- (c) the geotechnical report will provide recommendations and specifications on the following activity as a minimum but not limited to:
 - (i) pre-blast survey of surface structures and infrastructure within affected area;
 - (ii) trial blast activities;
 - (iii) procedures during blasting;
 - (iv) procedures for addressing blasting damage complaints;
 - (v) blast notification mechanism to adjoining residences; and
 - (vi) structural stability of exposed rock faces;
- (d) the geotechnical report shall be submitted for review to the satisfaction of the Chief Building Official prior to the commencement of any removal of rock by blasting; and
- (e) should the Owner's schedule require to commence blasting and rock removal prior to the Site Plan Control Agreement having been signed and registered, a site alteration permit shall be required under the City of Greater Sudbury's By-law 2009-170 and shall require a similar geotechnical report as a minimum prior to its issuance.

4.(13) The Owner agrees to maintain sight lines through the hatched area on Schedule "A" labelled as "Area to Remain Open (sight Distances)". This includes clearing vegetation and snow.

5. The Owner covenants and agrees that all conditions as set out in Sections 2, 3, and 4 and as shown on Schedule "A", shall be completed within two (2) years of the issuance of any building permit or of the execution of this Agreement.

6. The Owner further covenants and agrees that **PRIOR TO RECEIVING ANY BUILDING PERMIT** the Owner will deposit with the City Treasurer the sum of **(\$_____.00) DOLLARS** in Canadian dollars or by way of an Irrevocable Letter of Credit to ensure fulfilment of all the terms and conditions of this Agreement.

The Irrevocable Letter of Credit must be in a form satisfactory to the City Solicitor, and must allow draws to be made by the City, if necessary, in accordance with the terms and conditions of this Agreement.

Upon completion of all works and services required by this Agreement to the satisfaction of the Director of Planning Services, the City shall return any deposit to the then-Owner of the "Subject Land", without interest.

Should the Owner default in any of the Owner's obligations as contained in this Agreement, or fail to provide or construct any of the works described in this Agreement in the time limit provided herein, the City, at its option, may enter upon the "Subject Land" and complete such obligations or works and charge the total cost thereof to the Owner who shall pay the same to the City forthwith upon demand.

Should the Owner fail to pay the City forthwith upon demand, the City shall apply all or such portion of the deposit as may be required towards the cost.

Should the cost exceed the amount of the deposit, the balance shall be added to the Collector's Tax Roll and collected in a like manner as taxes.

In case of default the City may also, at its option, first place a demand upon the Irrevocable Letter of Credit or take the deposit and place such amount into an account, and then secondly take steps to have the work performed, and in such event the above provisions relating to the cost of the completion of the obligations shall apply.

7. The Owner further covenants and agrees that the Owner shall, **PRIOR TO THE REGISTRATION OF THIS AGREEMENT OR RECEIVING ANY BUILDING PERMIT**, deposit with the City Treasurer the sum of (\$_____.00) **DOLLARS** in Canadian Dollars or by way of an Irrevocable Letter of Credit in a form acceptable to the City Solicitor to ensure the satisfactory performance of all work to be done on Municipal public streets or highways or on what are to become Municipal streets or highways.

The Irrevocable Letter of Credit must be in a form satisfactory to the City Solicitor, and must allow the City to make draws, if necessary, to perform this work or any part of it, or to pay or settle any Construction Lien claims, or for payment into court under Section 17(4) of the *Construction Lien Act*, R.S.O. 1990, Chapter C.30.

Upon completion of all works and services required by this clause to the satisfaction of the General Manager of Infrastructure Services of the City of Greater Sudbury and upon the expiry of the time for filing Construction Lien claims, and if no such claims have been received, the City shall return any deposit to the then-Owner of the "Subject Land", without interest, as described in the City's current Site Plan Control Guide. Upon expiration of any warranty period described in the City's current Site Plan Control Guide, the City shall return the remaining deposits to the then-Owner of the "Subject Land", without interest.

In case of default the City may also, at its option, first place a demand upon the Irrevocable Letter of Credit or take the deposit and place such amount into an account, and then secondly take steps to have the work performed, and in such event the above provisions relating to the cost of the completion of the obligations shall apply.

8. The Owner will indemnify the City and each of their officers, servants and agents from all loss, damage, damages, costs, expenses, claims, demands, actions, suits or other proceedings of every nature and kind arising from or in consequence of the execution, non-execution or imperfect execution of any of the work hereinbefore mentioned or of the supply or non-supply of material therefor, whether such loss, damage, damages, costs, expenses, claims, demands, actions, suits or other proceedings arise by reason of negligence or without negligence on the part of the Owner or the Owner's contractors, officers, servants or agents, or whether such loss, damage, damages, costs, expenses, claims, demands, actions, suits or other proceedings are occasioned to or made or brought against the Owner or the Owner's contractors, officers, servants, or agents, or the City, or their officers, servants or agents, unless the loss, damage, damages, costs, expenses, claims, demands, actions, suits or other proceedings is caused solely by the negligence of the City, its employees or agents while acting within the scope of their employment, roles or duties.

9. Unless otherwise specifically provided in this agreement, no consent or approval of the City shall be unreasonably withheld or delayed and all determinations and decisions by the City shall be made by the City acting reasonably. Nothing herein shall prevent the City from withholding its consent or approval or granting same subject to conditions.

10. The Owner hereby consents to the registration of this Agreement against the "Subject Land" and understand that the said Agreement shall remain on title in perpetuity. The Owner also authorizes and directs the City Solicitor to register

electronically on the Owner's behalf this Agreement as well as any other documents required to complete the transaction or agreement.

In this regard, the Schedules referred to in this Agreement **may be viewed at the City of Greater Sudbury Clerk's Office.**

11. The Owner understands and agrees that the Owner shall be responsible for all fees incurred in the registration of this Agreement against the title to the "Subject Land" and for all registration fees incurred in the registration of any subsequent amendment or deletion of the Agreement from title and for any approvals or consents required to register the Agreement.

12. The Owner shall arrange for and shall be responsible for all fees incurred in the registration of postponements of all debentures, charges, mortgages, or other similar documents registered prior to the registration of this Agreement.

13. The Owner shall pay to the City upon the execution of this Agreement the fees for the preparation of the agreement and for the preparation of any postponements of any mortgages or other encumbrances in the amount determined in accordance with the City's Miscellaneous User Fees By-law then in effect and the actual associated costs incurred or to be incurred by the City for search of title, registration and related expenses, as provided for in the City's Miscellaneous User Fee By-law.

14. The Owner understands and agrees that no additional structures, building additions or new buildings on the "Subject Land", and no removal of any elements shown on Schedule "A", shall take place without an amendment to this Agreement first occurring.

15. The Owner understands and agrees that nothing in this Agreement authorizes the use of the "Subject Land" for any use other than that permitted by the existing zoning.

16. The Owner understands and agrees that the City will provide one inspection at no charge to determine whether or not the work shown on the site plan(s) has been complied with. A fee will be assessed, in accordance with City Council's Policy, for any subsequent inspections required to determine if the deficiencies have been rectified.

17. The Owner understands and agrees that if the development does not proceed within a period of three (3) years from the date of this Agreement the contents of this Site Plan Control Agreement will have to be reviewed and renegotiated between the parties and a new Site Plan Control Agreement or Amendment containing up-to-date standards for the City and for all commenting agencies will apply. If any area on the Plan is not completed within the three (3) year period outlined herein, reexamination and renegotiation of a new Site Plan Control Agreement or Amendment will be required with up-to-date standards applicable.

18. Nothing in this Site Plan Control Agreement:

- (a) is intended to impose or shall impose upon the City any duty or obligation to inspect or examine the "Subject Land" for compliance or non-compliance or to provide an opinion or view respecting any condition of development or to request or require compliance with the conditions of this Agreement; or
- (b) is intended to be or shall be construed to be a representation by the City regarding compliance of the "Subject Land" with applicable environmental laws, regulations, policies, standards, permits or approvals.

In this regard, the Owner acknowledge that the onus is upon the person developing the "Subject Land" to comply with all applicable environmental laws, regulations, policies, standards, permits and approvals, including where applicable, compliance with the *Ontario Environmental Protection Act* and Ontario Regulation 153/04 pertaining to records of site condition.

19. The terms of this Agreement may be amended, altered, substituted, deleted, replaced or added to only if such modification is in writing, signed by both parties and expressly stated to be a modification of this Agreement.

20. This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and enforced in the Superior Court in the District of Sudbury.

21. If any provision of this Agreement shall be held to be invalid or unenforceable, it shall be considered separate and severable from this Agreement and the remaining provisions of this Agreement shall not be affected thereby and shall remain in full force and effect and shall be binding as though such invalid or unenforceable provision had not been included in this Agreement.

22. In this agreement the use of the singular number includes the plural and vice versa and the use of any gender includes all genders.

23. Should any provisions of this agreement require judicial interpretation, mediation or arbitration, it is agreed that the court, mediator or arbitrator interpreting or construing the same shall not apply a presumption that the terms thereof shall be more strictly construed against one Party by reason of the rule of construction that a document is to be construed more strictly against the Party who itself or through its agent prepared the same, it being agreed that both Parties, directly or through their agents have participated in the preparation of this agreement.

24. The Owner acknowledges that the Owner has been advised to consult a lawyer before executing this Agreement. The Owner represents and warrants that the Owner has either obtained independent legal advice from the Owner's own lawyer with respect to the terms of this Agreement prior to execution or declined seeking such independent legal advice. The Owner represents and warrants that the Owner has read this Agreement and understands the terms and conditions and the Owner's rights and obligations under this Agreement and agrees to be bound by it.

25. This agreement shall be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have hereunto placed their respective hands and seals to these presents.

CITY OF GREATER SUDBURY

CHIEF BUILDING OFFICIAL

NAME OF OWNER

Per: _____

Name,
Position

Per: _____

Name,
Position

I/We have authority to bind the Corporation.

CITY OF GREATER SUDBURY
SITE PLAN CONTROL GUIDE

Last Update: January 13, 2022

APPENDIX D

**SUBMISSION (DRAFTING AND DESIGN) DETAILS FOR SITE PLAN
APPLICATIONS**

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1.0 Preface and Definitions

Attractive and functional design is expected for all developments within the City of Greater Sudbury. This Guide is intended to compliment the various federal, provincial, and municipal acts, guidelines, manuals and by-laws that apply to developments by providing clarification and setting minimum design standards to encourage attractive and functional design; however, the City of Greater Sudbury encourages Site Plan proposals to exceed these standards.

For the purpose of this Appendix refer to the following definitions:

Should: Where should is used, the design detail is considered to be a best practice and the owner must make a reasonable attempt to satisfy the design detail.

Must/Shall: Where must or shall are used, the design detail is considered mandatory and must be satisfied.

Geotechnical/Soils Report: A report that indicates the water table elevation and/or bedrock, and analyses soil composition to determine its infiltration rate, structural stability and ability to accommodate development.

Lot Grading Professional – An Engineer, Architect, Land Surveyor, Landscape Architect and /or company providing these services. The Lot Grading Professional must be approved by the City and have a valid Certificate of Authorization to practice in their profession in the province of Ontario and valid professional liability insurance (i.e. errors and omissions insurance). Other individuals/companies meeting the above criteria/conditions may also qualify as a Lot Grading Professional.

Site: The entire area under development, redevelopment or Intensification.

2.0 General Plan Drafting and Topographic Survey Details

- 1) The plans must be legible. All drawings shall be submitted with metric dimensions, to a standard metric scale (1:100, 1:200, 1:250, 1:300, 1:400, 1:500). Minimum scale to be 1:500.
- 2) Drawing size should generally be submitted on ARCH D (24x36) sheet size. Drawings size ARCH E (36x48) may be accepted for larger sites with building sizes greater than 3000m². Drawing size ARCH C (18 x 24) or ANSI B (11x17) may be accepted for smaller buildings less than 500m² where minimal grading and servicing information is required.
- 3) Drawings must be oriented to read in landscape view.
- 4) Drawings must be folded to 8.5x11 or 8.5x14.
- 5) Drawings must be reproducible in black and white/greyscale and must not use colour or contain screenshot or photo quality images.
- 6) Drawings must not contain copy write notation that limits the ability to reproduce and distribute the drawings.
- 7) Existing conditions should appear faded in comparison to proposed work, and use a text size of 1.6mm or 2.0mm on the final hard copy.
- 8) Various utility lines should be identified and appear slightly darker than existing topography.
- 9) Proposed work should appear heavier than existing conditions, and use a text size of at least 2.0mm for notes elevations and dimensions on the final hardcopy.
- 10) key plan, indicating location of the site in respect to the City street network;

The following information should be included on all of the submitted plans

- ☐ note the date the topographic survey, used as a base for the plans, was completed and the name of the Lot Grading Professional responsible for the topographic survey information;
- ☐ identification of the proposed use of the site;
- ☐ name and address of firm preparing the plan;
- ☐ municipal address and/or Legal Description (Reference Plan, Lot, Concession and Registered Plan Lot Number);
- ☐ north arrow;
- ☐ legend;
- ☐ title block and revision block with dates for each revision;
- ☐ existing building structures and site details such as driveways, sidewalks, utilities, surface types etc. located, wherever possible and with the permission of the adjacent landowners, within 6.0m of the site;
- ☐ all existing and proposed driveways, road shoulders, traffic markings, curbs, curb cuts/depression, sidewalks, and ramps on both sides of the adjacent street;
- ☐ all man-made or natural features (i.e. watercourse, swale, culvert, retaining wall, embankment, catch basin) on or adjacent to the site;
- ☐ all main proposed features of the site shall be shown (all buildings, parking areas, driveways, above ground utilities, landscape areas, fencing and handrails, ditches, retaining walls, berms, trees, etc.);
- ☐ all existing utility services within the site, and on adjacent street, road allowance, boulevards and within 6.0m of the site, including all light standards and fixture location, traffic signals, utility structures, hydro transformer boxes, vaults and Bell chambers, hydro/telephone/cable poles, guys and pedestals;
- ☐ all necessary construction details and general notes are to be provided so as to accurately convey the design intent of the elements on the plan and to address the proposed built form;

Appendix D: Submission (Drafting & Design) Details for Site Plan Applications

Last updated: August 11, 2023

- ☐ location of all vehicle and pedestrian entrances to and from the building;
- ☐ location and description of all existing and proposed property boundaries, adjacent street names, easements, right of-way widening, and reserves within or adjacent to the subject lands;
- ☐ sight triangles; and,
- ☐ signs (municipal and private) and parking meters.
- ☐ required professional seals.

3.0 Site Plan

All information on the Site Plan must be in conformance with the City of Greater Sudbury Zoning By-law, Ontario Building Code, and any other applicable bylaws and design standards. All information within the Municipal Right-of-Way must be in conformance with the CGS Design Standards for Linear Construction. In addition the following design details and drawing information should also be presented.

3.1 Additional Planning Design Details

- 1) Relate the size, character and setting of proposed projects to the functions of adjacent streets and pedestrian networks. Buildings should generally be oriented parallel to the public rights-of-way or along the edge of a park or open spaces with a consistent front yard setback and close to pedestrian movement. On a corner site, development and intensification should be located along both street frontages and give prominence to the corner. On a site that terminates a street corridor, the development should acknowledge the prominence of that site.
- 2) Developments should be designed for the ease of pedestrians both on and Off-Site and encourage the separation of pedestrians and automobiles. Developments should be convenient to and accessible by persons with physical limitations and disabilities.
- 3) Incorporate architectural and landscape elements at the pedestrian level.
- 4) Consider the function and location of service and loading areas early in design development.
- 5) Crime Prevention Through Environmental Design (C.P.T.E.D) principles (i.e. elimination of ambiguous areas or entrapment areas, improved sightlines including ground floor views from the building, lighting levels and uniformity, clear definitions between public and private space, etc...) should be applied throughout the site to reduce the likelihood of criminal activity occurring on the site.
- 6) Opaque fencing, where required, must be constructed of solid materials (e.g. slats woven through chainlink fencing would not be permitted).
- 7) Orient buildings to take advantage of climatic conditions and utilize passive solar heating and cooling techniques. Minimize shadowing and uncomfortable wind conditions on surrounding streets, parks and open spaces to preserve their utility.
- 8) Consider the preservation and enhancement of the City's design features, scenic views and corridors in accordance with the CGS Official Plan.
- 9) In shoreline areas, particular consideration should be given to surface materials and design techniques that promote infiltration, as well as the maintenance and establishment of native vegetation.

3.2 Additional Vehicle Movement, and Parking Layout Design Details

- 1) Vehicles are required to enter and exit the site in a forward motion. Vehicle turning path templates may be required to ensure adequate turning radius and hammer heads are provided.
- 2) Surface parking should be limited between the front face of the building and the public right of way wherever possible.
- 3) Gova Plus Vehicles, must be accommodated onsite from the driveway entrance to the main building entrance without affecting the flow of two way traffic, and so that the vehicle can navigate the site in a forward motion at all times . Gova Plus vehicles must be modeled as a Medium

Single Unit (MSU) vehicles as per the TAC standards, using the following dimensions: 2.5m wide, 8.5m long, 5.3m wheel base, 0.9m overhang (Inside radius 6.0m and outside radius 11.0m.)

- 4) Where canopies/awnings are proposed over a driveway required for loading or fire access, the minimum clear height should be 4.2m.
- 5) Hard surface (i.e. asphalt, unit pavers, concrete, etc.) must be provided as follows:
 - Residential and Commercial zoned properties must provide hard surface for all proposed drive aisles, parking, loading spaces, and outdoor storage areas.
 - Institutional and Industrial zoned properties must provide hard surface for all required drive aisles, and parking spaces; except where the property is adjacent to a residential zoned property in which case loading spaces, and outdoor storage areas must be hard surface pavement as well.
 - Required for all accessible parking spaces and barrier free paths of travel.
- 6) A barrier curb or car park barrier system is required along all parking stalls that abut landscaped areas and buildings to prevent vehicles from overextending the parking space and impeding adjacent pedestrian routes or damaging landscaped areas or buildings. Precast bumper curbs may shift during snow removal activities and therefore should not be used for new development or where alternative measures can be implemented.
- 7) Snow storage areas must be identified and must not interfere with the required parking, drive aisles or loading areas. Snow storage areas must drain to stormwater quality treatment facilities but should not be located so as to negatively affect the treatment efficiency of the facility. Where sufficient room is not available on site for snow storage, accommodations must be made for snow removal to a certified off-site snow storage area.
- 8) Driveways and aisles should not exceed 35m in length. Where this length is exceeded, speed bumps, raised pedestrian cross walks or alternate traffic calming measures should be introduced.
- 9) Drive-through queuing lanes must accommodate turning radii for P type passenger vehicles as per the TAC standard. Minimum inside turning radius of 4.5m and outside turning radius of 8m
- 10) Refer to Section 10 below for additional design details for work within the Municipal Right-of-Way.

3.3 Additional Driveway Entrance Design Details

- 1) Generally, developments will be limited to one driveway entrance. Shared driveway entrances with adjacent property owners should be utilized on Arterial and Collector Roads, wherever possible. A reciprocal access agreement will be required in these circumstances.
- 2) Driveway entrance widths must not be wider than 9.1m. Where a driveway entrance wider than 9.1m is required for larger vehicles, vehicle turning path templates, and lane configurations must be shown on the drawings.
- 3) Where the Road adjacent to the property is constructed with curb and gutter and/or sidewalks, or where there is an asphalt shoulder, the access driveway located within the road right of way must have concrete curbs. Where there is an asphalt shoulder the curbs must extend to the shoulder and must include spillways, and tapers as per OPSD 604.01.
- 4) Zebra stripe markings to be provided at all driveway entrances where municipal sidewalks exist or are being proposed. Zebra stripes should be made with durable paint (to reduce fading and upkeep), 3.0m long, 0.6m thick and offset 1.2m.
- 5) Where municipal sidewalks do not cross the driveway entrance a 45cm thick stop bars must be installed along the width of the outbound lane, located 1.0m from the back of the curb depression.
- 6) Where gravel parking and drive aisles are permitted, at minimum the first 15m of the driveway entrance must be paved.
- 7) Entrances located in close proximity to signalized intersections should be located as far as possible (greater than 30m) from the intersection.

- 8) A sightline analysis may be required where an entrance is proposed along a vertical or horizontal curve in the road.
- 9) Further entrance requirements related with locations, width, slope and maintenance may be found in the Use of Private Entrance Bylaw (2011-220).

3.4 Additional Active Transportation Design Details

- 1) Main building entrances must be clearly visible and easily accessible from the public sidewalk.
- 2) A safe and well defined pedestrian walkway in accordance with AODA requirements, constructed with an approved hard surface, must be provided to all main building entrances with connections to municipal sidewalks, accessible parking spaces, and transit areas;
- 3) The pedestrian walkway should have a minimum width of 1.5m clear from vehicle overhang and shall be defined across driveways through line painting (zebra stripes) or raised pedestrian crossing/traffic calming humps.
- 4) Where municipal sidewalks do not exist along the frontage of the property, and where it is identified in the CGS Official Plan that sidewalks are required, the owner shall either contribute to the cost of the future installation of the sidewalk or install the sidewalk along the frontage of the site as determined by CGS staff.

The contribution cost will be based on the City's contract unit prices for sidewalk work, and will be revised each year in June, as necessary. For estimate purposes, 2016 unit prices for sidewalk are as follows:

- | | |
|--|----------------|
| • Sidewalk (as per City Standard) | = \$300.00/l.m |
| • Boulevard Restoration (topsoil and sod) | =\$ 38.00/sq.m |
| • Boulevard Restoration (asphalt and granular) | =\$ 58.00/sq.m |

- 5) Where an existing sidewalk network is located within 100m of the site, the developer will be responsible to connect to the existing sidewalk from the site.
- 6) Bike racks should be located in a highly visible location within 15m of the main entrance, and must be securely fastened to the ground or building to prevent the rack from being removed. Bicycle racks must not be secured to interlocking pavers, stones or other surfaces that may easily be removed.
- 7) Bike racks must provide support to both maintain a bicycle in an upright position and lock the bicycle frame and wheel to the bicycle rack with a single U-lock. Refer to the Essential of Bike Parking Guide (by APBP) for further information on bike rack design.
- 8) Sidewalks should be provided within parking areas at 36m intervals, parallel with the desired path of travel to the building.
- 9) Bus shelters may be required for larger developments where increased ridership, generated by the development, is expected to meet the bus shelter policy.

3.5 Site Plan Drafting Details

In addition to the General Plan Drafting Details noted in Section 2.0 the following information should be included on all Site Plans, prepared and sealed by an OAA Licensed Professional or Lot Grading Professional:

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- ☐ use of existing and proposed buildings and number of storeys, including building blocks to be numbered and number of units (if there is more than one use in a building or on a lot, provide the floor area allocated to each use);
- ☐ overall dimensions (in metric) of all property boundaries and all buildings and structures (including retaining walls) existing or proposed on the site and abutting properties (where possible), including dimensions and setbacks sufficient to show the position of buildings and structures in relation to site boundaries;
- ☐ zoning of adjacent properties;
- ☐ location, design and construction details of garbage collection area, including required screening and method of collection;
- ☐ location of all outdoor storage and enclosure details;
- ☐ Layout of parking area and dimensions of parking spaces, barrier-free parking spaces, loading spaces, aisles, driveways, ramps, fire routes;
- ☐ identify type of parking area (i.e. open, underground, garage);
- ☐ layout and details of all curbs and vehicle stops.
- ☐ truck routes, turning radii and required fire access routes;
- ☐ location and dimension of all vehicle entrances, including width, turning radii and sight triangles;
- ☐ queuing requirements for drive-through, service stations, etc.
- ☐ label existing and proposed surface treatment (i.e. grass, paved, gravel).
- ☐ abutting road right-of-way width including the location and width of traffic islands, hydro poles, fire hydrants, sidewalks, etc.;
- ☐ location of all existing and proposed traffic signs;
- ☐ location and dimension of snow storage area or plans for snow removal off-site where space is constricted;
- ☐ identify material type and width of Municipal and private sidewalks and walkways;
- ☐ location and type of bicycle racks and method of securing to the ground;
- ☐ Identify regulated hazards (flood plains, wetlands, water courses, etc), and provide setbacks to all limits of development.
- ☐ Provide a completed site statistic table as per Table 3.1:

Site Statistics Table 3.1

Zoning		
Use(s) of Building(s) by Floor Area and/or Number of Residential Units		
	Provided	Required
Lot Area		
Lot Frontage		
Density in Dwelling Units/Hectare (residential lots only)		
Front Yard		
Rear Yard		
Interior Side or Corner Side Yard		
Interior Side or Corner Side Yard		
Building Area		
Gross Floor Area		
Net Floor Area		
% Lot Coverage and calculation		
% Lot Coverage Accessory Buildings (residential lots only) and calculation		
Height of Building(s)		
Number of Storeys		
Permitted Encroachments for Accessory Buildings, Structures and Ornamental Features		
Height of Accessory Building or Structure		
% Landscaped Open Space and calculation		
% Landscaping in a Surface Parking Area with >75 parking spaces and calculation		
% Paved Area and calculation		
% Graveled Area and calculation		
Parking Spaces, Calculation and Dimensions		
Spaces Provided Within a Structure or Garage, Dimensions		
Barrier Free Spaces, Calculation and Dimensions		
Bicycle Parking, Calculation and Dimensions		
Loading Spaces, Calculation and Dimensions		
Queueing Spaces, Calculation and Dimensions		
Width of Parking Aisles		
Width of Access Ramps and Driveways		
Yards Where Parking Areas are Permitted - Setbacks		
Site Triangle Distance		
Refuse Storage Area Setback		
Fence Height		
% Outdoor Display and Sales and calculation		
Outdoor Storage Setback, Fence Height and Screening		
Railroad Setback		
Clearing of Shoreline Buffer Area		
Fire Flow		

4.0 Landscape Plan

Landscape information may be included on the Site Plan or Grading Plan for smaller sites. All information on the Landscape Plan must be in conformance with the City of Greater Sudbury Zoning By-law. In addition the following design details and drawing information should also be presented.

4.1 Additional Landscaping Design Details

- 1) Landscaping is an important component of any development. Generally, the landscape design of any development or redevelopment should :
 - Contribute to the overall city image;
 - Enhance the public perception of the proposed development;
 - Preserve existing mature trees in order to provide shade canopy and maintain their aesthetic and heritage value;
 - Integrate existing natural features, including rock outcrops and hilltops that provide visual assets;
 - Provide a diversity of plant material and naturalizing;
 - Be integrated with stormwater management features;
 - Be easy to maintain without catchment areas that attract debris;
 - Provide all-season open space for the enjoyment of outdoor activities of the residents of the property (e.g. consider shading in summer and opportunities for wind breaks during winter);
 - Screen or buffer less attractive elements of the development such as the parking areas, loading areas, storage areas, garbage enclosures, with exceptions where opaque fencing is required.
- 2) Any part of any lot which is not occupied by buildings, structures, parking areas, driveways, loading spaces, agricultural uses, outdoor storage areas or any other permitted use, shall be maintained as landscaped open space.
- 3) All plant material is to be Canadian Nursery Trades Association standards as per guide specification for nursery stock. When possible all plant material is to be native Ontario materials. All plant substitutions are to be approved prior to planting.
- 4) Whenever possible, species native to the Greater Sudbury Area should be used (Refer to table 4.1 below). The use of native species helps to reduce the spread of invasive species and helps ensure the overall success of the planting. Deciduous trees are to be a minimum 70mm calliper (2.75") measured at 150mm (4.9') above ground;
- 5) Coniferous trees are to be a minimum height of 1.6m (5.25');
- 6) Adequate soil drainage and volume should be provided for all trees and landscaping to promote vigorous root growth, and to negate the effects of any road salt use. Tree pits or raised planter should be considered where sufficient room is not available.
- 7) At least 15m³ of high quality soil should be provided per tree and each tree (through sharing or alone) should have direct access to at least 30m³ of high quality soil. High quality soil must consists of a minimum 0.9m and maximum 1.2m depth, over and above any required drainage system and/or granular material, be uncompacted, and be sandy loam with the following composition.
 - Sand (50%-60%)
 - Silt (20%-40%)
 - Clay (6%-10%)
 - Organic (2%-5%)

- pH = 7.5 or less
- 8) Tree species within the municipal right of way must meet the City's tree planting bylaw (2011-243).
 - 9) The following trees are recommended for planting in areas that have high exposure to soil salt and aerosol salt. A Horticulturalist should be consulted for further tree species recommendations.
 - Chokecherry
 - Japanese Tree Lilac
 - tree form Pea shrubs
 - Ohio Buckeye
 - Blue Spruce
 - Honey Locust
 - 10) Trees within the landscaped open space adjacent to the Right of Way, at a minimum, must be planted 6m on centre and be offset sufficiently from any services with appropriate root shields installed. Alternative landscape proposals will be considered to allow for more open space or where bedrock is high; however, it is anticipated that an equivalent number of trees will be provided as set out above.
 - 11) Where property for a municipal right of way widening is required, the required landscape strip must be set back from the future property line.
 - 12) Where a continuous hedgerow is required for screening, hedge species must be a minimum of 1m in height and be planted at minimum 600mm on centre or as recommended by a horticulturist.
 - 13) The relocation of plants that would be destroyed by development activities is permitted, especially if the species are difficult to source through commercial greenhouses. However, the transplant of wild trees and hedges is generally not permitted.
 - 14) Landscaping within the sight triangle must be in accordance with the Zoning By-law.
 - 15) Existing and proposed services must be indicated on the landscape plan to confirm there are no conflicts with the landscaping.
 - 16) Where street trees are planted near utilities, they should be planted as per the ESA "Planting Under Or Around Power line and Electrical Equipment Guide", or other guidelines provided by specific utilities, whichever is more stringent.

4.2 Landscaping Plan Drafting Details

In addition to the General Plan Details noted in Section 2.0 the following information should be included on all Landscape Plans:

- ☐ location and identification (in landscape industry standard symbols and notations) of all existing or proposed plant material, planting beds, sodded areas, berms and other soft surfaces;
- ☐ location, height and description of all existing and proposed retaining walls, fences, walls, vegetative screening, including cross section;
- ☐ plant list indicating full botanical name, common name, quality, caliper, height, spread, and any special plant material;
- ☐ trees along right-of-way;
- ☐ clearly indicate the location of all vegetation to be retained or removed;
- ☐ identify all recreational areas (i.e. tennis courts, swimming pools, splash pads, sports fields, play equipment).

Table 4.1 – Native Plant List for Sudbury and Surrounding Area

Aquatic and Wetland Plants		Herbaceous Plants	
Scientific Name	English	Scientific Name	English
Acorus calamus	Sweetflag	Allium cernuum	Nodding Wild Onion
Caltha palustris	Marsh Marigold	Anaphalis margaritacea	Pearly Everlasting
Eupatorium maculatum	Spotted Joe-Pye Weed	Andropogon gerardii	Big Bluestemmed Grass
Iris versicolor	Blue Flag (Wild Iris)	Apocynum androsaemifolium	Spreading Dogbane
Ledum groenlandicum	Labrador Tea	Aquilegia canadensis	Wild Columbine
Nuphar variegatum	Yellow Pond Lily	Arctostaphylos uva-ursi	Bearberry
Nymphaea odorata	Fragrant Water Lily	Asclepias incarnata	Swamp Milkweed
Pontederia cordata	Pickerselweed	Aster lateriflorus	Calico Aster
Sarracenia purpurea	Northern Pitcher Plant	Aster umbellatus	Flat-topped White Aster
Sparganium americanum	Bur Reed	Aster undulatus	Wavy Leaved Aster
Typha latifolia	Common Cattail	Campanula rotundifolia	Harebell
Vaccinium macrocarpon	Cranberry	Clematis virginiana	Virgin's Bower
Juncus effusus	Soft Rush	Clintonia borealis	Bluebead lily
Woody Plants		Cornus canadensis	Bunchberry
Scientific Name	English	Corydalis sempervirens	Pale Corydalis
Abies balsamea	Balsam Fir	Cypripedium acaule	Pink Lady Slipper
Acer spicatum	Mountain Maple	Drosera rotundifolia	Round-Leaved Sundew
Acer saccharinum	Silver Maple	Epilobium angustifolium	Fireweed
Acer rubrum	Red Maple	Erigeron philadelphicus	Common Fleabane
Acer pennsylvanicum	Striped Maple	Fragaria virginiana	Wild Strawberry
Alnus rugosa	Speckled Alder	Gaultheria procumbens	Wintergreen
Amelanchier canadensis	Saskatoon Berry	Impatiens capensis	Jewelweed
Betula papyrifera	Paper Birch	Kalmia angustifolia	Sheep Laurel
Betula alleghaniensis	Yellow Birch	Lilium canadense	Canada Lily
Cornus sericea	Red-Osier Dogwood	Linnaea borealis	Twinflower
Corylus cornuta	Beaked Hazelnut	Lobelia cardinalis	Cardinal Flower
Fraxinus nigra	Black Ash	Maianthemum canadense	Canada Mayflower
Fraxinus pennsylvanica	Green Ash	Monarda fistulosa	Wild Bergamot
Juglans cinerea	Butternut	Oenothera biennis	Evening Primrose
Juniperus communis	Common Juniper	Potentilla anserina	Silverweed
Larix laricina	Tamarack	Rubus odoratus	Purple Flowering Raspberry
		Rudbeckia hirta	Black-Eyed Susan
		Saxifraga oppositifolia	Purple Saxifrage
		Saxifraga virginensis	Early Saxifrage
		Silene acaulis	Moss Campion
		Sisyrinchium angustifolium	Pointed Blue-Eyed Grass
		Solidago rugosa	Rough-Stemmed Goldenrod
		Solidago rigida	Hard-Leaved Goldenrod
		Thalictrum polygamum	Tall Meadow Rue
		Tiarella cordifolia	Foamflower
		Trillium grandiflorum	Large Flowered Trillium
		Vaccinium sps.	Blueberry
		Veronica arvensis	Corn Speedwell
		Veronica serpyllifolia	Thyme-Leaved Speedwell
		Viola papilionacea	Common Blue Violet
		Zizia aurea	Golden Alexanders

5.0 Lighting Plan

Lighting information may be included on the Site Plan or Servicing Plan for smaller sites. The following design details and drawing information should also be presented, where the development is adjacent to existing residential properties, or other light sensitive uses.

5.1 Additional Lighting Design Details

- 1) Lighting should provide visible, well-lit and safe spaces by considering Crime Prevention through Environmental Design principles.
- 2) Reduce light trespass on adjacent properties and municipal or regional road by incorporating the use of full cut-off fixtures, low wattage bulbs and flat glass fixtures to reduce glare and by directing it away from adjacent natural, residential and other sensitive areas.
- 3) Maximum of 1 foot-candle at the property line must be maintained.
- 4) Lighting should be designed to Illumination Engineering Society (I.E.S.) Guidelines to promote pedestrian and vehicle safety while minimizing ambient light pollution.
- 5) Lighting should be designed for dark sky protection.

5.2 Lighting Plan Drafting Details

In addition to the General Plan Details noted in Section 2.0 the following information should be included on all Lighting Plans, prepared and sealed by a Professional Engineer Licensed in the Province of Ontario with a valid Certificate of Authorization:

- ☐ location and design of all exterior lighting, including lighting fixture details;
- ☐ a separate lighting photometric plan for infill projects and major developments may be required, as determined by the City.

6.0 Building Elevation Plan (Architectural Plan)

Elevation Plans are generally required for all Site Plans with a CGS Official Plan designation of Downtown or Town Centre, or where the site abuts or is visible from an Arterial Road, Provincial Highway, or Navigable Waterbody.

6.1 Additional Building Elevation Design Details

- 1) Buildings, structures and other design elements that complement existing built form and character are encouraged by massing buildings to define the edges of streets, parks and open spaces in good proportion, and by creating appropriate transitions in scale to neighbouring existing or planned buildings.
- 2) Integrate servicing and utility functions within the building, where possible, or locate towards the sides or rear of the building and screen from adjacent streets.
- 3) Strive for a complementary design relationship adjacent to heritage resources.

The following information should be included on all Elevation Plans, prepared and sealed by an Architect:

6.2 Elevation Plan Drafting Details

- ☐ exterior material type and colour; Note, plans must not be in colour refer to Section 2.0.
- ☐ all roof structures, screening and mechanical equipment (penthouses, chimneys, roof top units, vents, air conditioning, etc.);
- ☐ location and dimensions of any existing or proposed roof or fascia signs.

7.0 Grading Plan

Grading information may be included on the Site Plan or Servicing Plan for smaller sites. Where grading information is indicated on other plans the grades indicated on the grading plan will take precedence, all other grading information should be removed or coordinated with the grading plan. All information on the Grading Plan must be in conformance with the City of Greater Sudbury Lot Grading Policy, Ontario Building Code, and any other applicable by-laws and design standards. In addition the following design details and drawing information should also be presented.

7.1 Additional Grading Design Details

- 1) All Retaining walls greater than 1.0m in height must comply with the Ontario Building Code, the Zoning By-law, and will require a Building Permit.
- 2) All slopes greater than 2:1 and greater than 1.0m in height shall include a pedestrian guard, designed in accordance with the requirements of the Ontario Building Code, fastened securely along the top of the slope. Where pedestrian access to the high part of the slope is not easily accessible, a 1.8m (6ft) high chain link fence may be used in place of a pedestrian guard.
- 3) All slopes greater than 2:1 and greater than 0.6m in height located adjacent to vehicular traffic shall include a vehicle guard, designed in accordance with the requirements of the Ontario Building Code, fastened securely along the top of the slope.
- 4) Slopes steeper than 3:1 are not walkable slopes, and are not permitted on residential developments or for surfaces where pedestrian traffic may be expected to occur.
- 5) Barrier free path of travel to all barrier free building entrances as per the Ontario Building code, must be provided for all accessible parking stalls and along all exterior walkways that connect to the municipal right of way.
- 6) Where ramps are not installed on a barrier free path of travel, a maximum grade of 5% with a maximum 3% cross fall must be used.
- 7) Where a ramp is required along a barrier free path of travel it must meet the requirements of the Ontario Building Code, where applicable; otherwise, the ramp must meet AODA requirements.
- 8) Maximum gradients for vehicles should be 6%, with a maximum 4% cross fall, and in no case shall the maximum gradient be greater than 8% with a maximum 6% cross fall.
- 9) Slopes less than 1% should generally be avoided on all vehicle and pedestrian areas. A minimum 2% slope is preferred.
- 10) Swales located in required privacy yards must include sub-drains where the slope is between 0.3% and 1.0% and must not be deeper than 300mm, with 3:1 side slopes.
- 11) Grades within required privacy yards must range between 1 and 7%, as per the Lot Grading Design Guidelines.
- 12) Grading within the site along the Municipal right of way should accommodate an urban cross section within the right of way. (i.e, a 2-4% cross fall from the property line to the curb or future curb)
- 13) Any existing Municipal ditch along the property line shall be regraded to meet City standards and shall be realigned to be located entirely within the right of way, where possible.
- 14) All new rock cuts greater than 2m in height must be designed and constructed to meet a Class B or Class C hazard rating with 100% rock fall debris retention based on the Ministry of Transportation publication "RHRON: Ontario Rockfall Hazard Rating System – Field Procedures Manual"

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- 15) The clear zone width for the rock cut shall be measured from the edge of the traveled lane, sidewalk or Public Way whichever is closer. (Public way means a sidewalk, street, highway, square or another open space to which the public has access, as of right or by invitation, expressed or implied.)
- 16) Rock faces must be designed in accordance with OPSD 201.010 and/or the Roadside Design Manual (including Interceptor ditches, overburden removal, rock face slopes, etc.)
- 17) Rock faces must be located a sufficient distance from the property line so that, freeze thaw cycles do not cause the rock face to undermine adjacent properties overtime, and any required fencing or interceptor ditches can be maintained from the owners property and are located entirely on the owners property, unless an agreement registered on title is entered into with the adjacent property owner outlining maintenance requirements, etc.
- 18) Where rock blasting must occur a rock blasting report, prepared by an Engineer with a minimum of 5 years of rock blasting experience, must be provided to building services for review.
- 19) Gabion baskets and rock rubble slopes are not permitted.
- 20) Refer to Section 11 below for additional design details for work within the Municipal Right of Way.

7.2 Grading Plan Drafting Details

In addition to the General Plan Details noted in Section 2.0 the following information should be included on the Grading Plan prepared and sealed by a Lot Grading Professional:

- ☐ All Plans containing proposed grading information must be sealed by a Lot Grading Professional;
- ☐ Sufficient proposed and existing elevations at property line, back edge of sidewalk, top and bottom of curbs and retaining walls, road crown, site entrances and along the frontage of the property as required to show the design intent, ensure all drainage is retained within the site, and to reflect how the proposed grades match into the existing condition;
- ☐ arrows indicating the direction and slope of surface drainage on all paved, granular and grassed areas;
- ☐ proposed elevations at all locations where the grade changes on the site, including cross sections of any changes of elevation required to convey the design intent;
- ☐ proposed elevations at all building corners and all building access points, (i.e. ramps, entrances, and loading bays);
- ☐ drainage swales with cross section details,
- ☐ roof downspout locations and direction of drainage;
- ☐ rim elevations on all catchbasins and maintenance hole;
- ☐ wherever possible and with the permission of the adjacent landowners, existing elevations are required to be shown at 3.0m and 6.0m beyond the site limits;
- ☐ indicate locations where rock removal is required;
- ☐ erosion protection measures;
- ☐ geodetic grades as well as finished ground floor and lowest opening elevations, including basement floor elevations for all buildings requiring servicing.
- ☐ Slopes indicated as a percent or Horizontal:Vertical.

8.0 Servicing Plan

Servicing information may be included on the Site Plan or Grading Plan for smaller sites. All servicing information within the Municipal Right of Way must be in conformance with the CGS Design Standards for Linear Construction, and all servicing information within the site must be in conformance with all applicable provincial regulations and guides, Ontario Building Code, the City's Sewer Use By-law (2010-188), and City's Water and Wastewater Systems By-law (2010-214) and the Backflow prevention bylaw (2017-217). In addition, the following design details and drawing information should also be presented.

8.1 Additional Water Service Design Details

- 1) Only one water service connection to the municipal system is allowed per site;
- 2) Water services or sewers serving multiple buildings located on the same property, and water services 100mm or greater, must be designed and installed according to MECP guidelines
- 3) Generally, a live tap shall be made where service connections are two pipe sizes smaller than the main;
- 4) A single, or bulk water meter is required for all developments (residential, commercial, industrial). The water meter must be located on the domestic water service prior to splitting the flow to multiple buildings. The meter must be installed either in a water meter chamber or in a heated outbuilding easily accessible by City staff;
- 5) Blow-offs must be installed on all dead end watermains/services, or where a service is shared with multiple owners (condominium developments).
- 6) Ensure the length and size of the water service, relative to the demand, provides sufficient turnover time to maintain adequate residual chlorine levels;
- 7) Hydrant leads on site should not exceed 30m after the last domestic service connection.
- 8) Hydrants must be located in areas accessible directly from the required Fire route and must not be blocked by fences, ditches, parked cars, loading areas or any other barrier that would impede access. A 1.5m clearance must be maintained around a hydrant at all times.
- 9) The available fire flow, and pressure for domestic max day and hour at the property line, from the existing municipal watermains adjacent to the site, will be modeled by the City and the results provided to the owner. The owner or their authorized representative must confirm sufficient capacity is available for the water services within the site;
- 10) Required fire flows, in municipally serviced areas must be based on Fire Underwriter's Survey Guidelines; and on the Ontario Fire Marshal Guidelines in unserviced areas.
- 11) Service connections and disconnections must be in accordance with City's Protocol for New Watermain, Water Service and Wastewater Connections. Existing unused services must be abandoned at the Main.
- 12) Where existing services are proposed to be reused, an assessment of the service must be completed to ensure the service is suitable for reuse. Existing services with lead solder must not be reused, and must be abandoned at the main.
- 13) Prior to completing any construction activity within 10m of a trunk watermain greater than 350mm diameter, the owner will contact the City's Technical Services department to obtain a full list of requirements (i.e. contingency plan, communication plan, etc.).
- 14) Refer to Section 11 below for additional design details for work within the Municipal Right-of-Way.

8.2 Additional Sanitary Service Design Details

- 1) Only one sanitary service connection to the municipal system is allowed per site;
- 2) Sanitary services 150mm or greater shall be designed as a main, and must meet MECP guideline design requirements;
- 3) Sanitary test maintenance holes must be located entirely on the site, and are required for all non-residential sites;
- 4) Service connections 200mm or greater must be made with a maintenance hole located on the Main.
- 5) Provide a letter, sealed by an engineer, indicating the existing and proposed sanitary peak flow calculations in accordance with the CGS Design Standards for Linear Construction. The letter must also confirm there is capacity in the service connection to the site.
- 6) Service connections and disconnections must be in accordance with City's Protocol for New Watermain, Water Service and Wastewater Connections. Existing unused services must be abandoned at the Main.
- 7) Where existing services are proposed to be reused, an assessment of the service must be completed to ensure the service is structurally suitable for reuse. Existing clay pipes must not be reused, and must be abandoned at the main.
- 8) Refer to Section 11 below for additional design details for work within the Municipal Right of Way.

8.3 Additional Storm Service Design Details

- 1) Storm service connections should be limited to one per site;
- 2) All proposed catchbasins must contain a goss trap as per the City's Sewer Use By-law, unless a downstream quality control facility is in place. If catchbasin maintenance holes are being proposed the goss trap design must address upstream flows and associated water levels.
- 3) Refer to Section 11 below for additional design details for work within the Municipal Right of Way.

8.4 Servicing Drafting Guidelines

In addition to the General Plan Details noted in Section 2.0 the following information should be included on the Servicing Plan, prepared and sealed by a Professional Engineer Licensed in the Province of Ontario with a valid Certificate of Authorization:

- ☐ all Plans containing proposed servicing information must be sealed by a Professional Engineer.
- ☐ watermain services to the building with pipe material, diameters and obvert elevations at critical locations;
- ☐ details of any service connections to the City infrastructure;
- ☐ hydrant flange elevations and adjacent finished ground elevations shall be shown on all hydrants within or immediately adjacent to the site;
- ☐ well locations (if required);
- ☐ existing and proposed service locations, pipe material and diameter;
- ☐ Location of all hydrants including dimensions to the proposed building;

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- ☐ sanitary sewers, storm sewers labeled with the following: pipe material, diameter, slope, pipe bedding, and pipe inverts at all manholes, catchbasins, points of connection to main, building face and at property line;
- ☐ identify and dimension catch basins, double catchbasins, ditches, culverts, ditch inlets and ditch outlets, manholes, hydrants, valves (boxes and chambers), Siamese connections and service shutoffs (municipal curb stops to be located within the right of way, 0.3m from the property line);
- ☐ rim elevations of all manholes and catchbasins;
- ☐ location and details of all proposed stormwater management controls/facilities indicated in the stormwater Management Report (if required);
- ☐ finished ground floor and basement floor elevations;
- ☐ septic system location (if required);
- ☐ drainage swales;

9.0 Construction Siltation Control Plan

Construction Erosion and Siltation Control (ESC) information may be included on the Site Plan, or Grading Plan, for smaller sites. All Siltation control must be in conformance with all applicable provincial regulations (OPSS 805) and best management practices, including Sustainable Technologies “Erosion and Sediment Control Guide for Urban Construction” and the CGS Stormwater Management Guidelines. In addition, the following design details and drawing information should also be presented.

9.1 Additional Construction Siltation Design Details

- 1) Erosion and Sediment Control methods should consider approaches that;
 - Firstly, eliminate or reduce erosion, and;
 - Secondly, control sediment release.
- 2) Given the importance of Low Impact Development Systems (LIDS) in stormwater management, it is imperative that LIDS are not to be used for sediment control.
- 3) Generally, single control points should be avoided, and multiple systems and barriers should be used;
- 4) Erosion control measures must be applied to bare or under-stabilized soils in order to improve resistance to erosion by water and wind. Key areas of the site where erosion controls should be applied include:
 - Areas inactive for 30 days or longer,
 - Slopes,
 - Soil stockpiles,
 - Runoff conveyance channels,
 - Areas immediately downstream of water outlets,
 - Banks of detention ponds and sediment traps,
 - Other areas where erosion risk is high and runoff flows directly towards a sensitive area downstream.
- 5) Heavy duty sediment control fences are to be installed downslope of all disturbed areas.
- 6) Double row sediment control fence with at least one row being Heavy Duty are required upstream of natural heritage features and as Site conditions require.
- 7) Temporary check dams are to be provided in all downstream swales and ditches.
- 8) Include the following notes as a minimum:
 - a) Sediment barriers, check dams, and temporary construction access to be installed prior to the beginning of construction.
 - b) All sediment control devices to be routinely inspected and maintained in proper working order until areas are stabilized.
 - c) Maximum allowed sediment accumulation at the sediment fencing is half the fence fabric height.
 - d) After significant rain event, all sediment and erosion controls must be inspected and rectified as soon as possible.
 - e) If necessary, trucks will be washed down before leaving the site.
 - f) The site will be wet down if necessary to control dust.
 - g) Calcium chloride dust control must not be used in ground water protection areas and immediately upstream of bodies of water.
 - h) All construction activity will comply with City of Greater Sudbury Noise Bylaw.

Appendix D: Submission (Drafting & Design) Details for Site Plan Applications

Last updated: August 11, 2023

- i) All construction vehicles to enter and exit site from temporary construction access as approved by the City of Greater Sudbury.
- j) All topsoil stockpiles to be surrounded with sediment control fencing.
- k) Filter fabric to be placed under grates and lids on all onsite and downstream catchbasins to trap sediment. Silt traps are to be cleaned regularly and are not to be removed until all construction activity is complete. Filter fabric for silt control to be Terra Fix 270R or approved equivalent.
- l) Where construction activity occurs within the City right of way, sediment controls will be placed on the catchbasins on public streets across the property's frontage.
- m) Street sweeping, catchbasin cleaning and dust control are the responsibility of the developer and must be kept under control on all roadways to the satisfaction of the General Manager of Growth and Infrastructure.
- n) Surface erosion protection must be applied for all disturbed areas, subject to erosion, until vegetation is established.
- o) A logbook shall be kept onsite indicating inspection schedules, repairs made, & any concerns noted.
- p) Additional materials such as clear stone, filter fabric, pumps, hoses and siltsoxx, or approved equivalent to be always kept onsite for conducting repairs to sediment control measures.
- q) Engineered changes to the ESC measures may be required as site conditions change.
- r) Any dewatering occurring onsite must be in accordance with an approved dewatering plan, which must include silt traps.
- s) Refuelling, equipment maintenance, and hazardous material storage must take place a minimum of 30m from any watercourse or environmentally sensitive area.
- t) An approved spill management plan is to be always kept onsite.
- u) Spills are to be reported immediately to the MECP spills action center at 1-800-268-6060
- v) Temporary fuel and other hazardous material storage is to be located minimum 30m away from any watercourse or environmentally sensitive area.

9.2 Construction Siltation Drafting Guidelines

In addition to the General Plan Details noted in Section 2.0 the following information must be included on the Construction Siltation Control Plan prepared and sealed by a Lot Grading Professional:

- ☐ all plans containing proposed sediment and erosion control information must be sealed by a Lot Grading Professional;
- ☐ location and details of all temporary surface erosion protection required until vegetation is established;
- ☐ location and details of all sediment barriers, check dams, ponds, etc. required to prevent erosion and prevent the transfer of sediment off-site via construction vehicles;
- ☐ location and details of all temporary construction access and measures to be taken to prevent the transfer of sediment off-site;

10.0 Details, Cross Sections, and General Notes

Details, Cross Sections, and General Notes may be included on other drawings or on a separate Plan.

- ☐ Cross Sections should be provided at minimum when:
 - requested by City staff to provide further clarification;
 - service locations are in close proximity to building foundations;
 - major changes in grade occur on the site;
 - complex storm water management systems are proposed.
 - Service connections are proposed within the right of way, to show sufficient clearance with existing services and utilities.

- ☐ The followings general notes must be provided as a minimum:
 - The Engineer's certification submission for all work completed in the municipal right of way and all pipe work constructed on private property shall be in conformance with the City's Certification Requirements.
 - Prior to commencing any work within the municipal right of way, the contractor or developer will obtain all necessary road occupancy permits, and service connection permits from the City's Engineering Services.
 - All work within the City right-of-way shall be constructed in accordance with City of Greater Sudbury design standards and specification, or the Ontario Provincial Standards may, subject to the approval of the City of Greater Sudbury, be used where no standard or specification is noted.
 - All disturbed areas within the municipal right-of-way shall be rectified to the original condition or better and to the satisfaction of the General Manager of Growth and Infrastructure.

11.0 Off-Site Servicing Plan

An Off-Site Servicing Plan is required where an Environmental Compliance Approval (ECA) from the Ministry of Environment, Conservation and Parks (MECP) is required (i.e., extension of any municipal sanitary, storm or watermain, not including service connections) or improvements are required within the Municipal Right of Way that effect municipal infrastructure outside the boulevard directly adjacent to the development property (not including service connections).

Off-Site Servicing information must be presented on separate plan and profile drawings, intersection drawings, and/or pavement marking drawings in accordance with the CGS Engineering Drawing Standards. All information presented on the off-site servicing plan and profile plans must be in accordance with all applicable Provincial and Municipal standards and guidelines (Including the CGS Design Standards for Linear Construction, Ontario Traffic Manual, etc.). In addition, the following design details and drawing information should also be presented.

11.1 Additional Off-Site Servicing Plan Design Details (including all Plans where work is proposed within the Municipal Right-of-Way)

- 1) All asphalt cuts within the Municipal right of way must be located outside the travelled portion of the roadway, along lane traffic markings.
- 2) Asphalt cuts for proposed curb work must be located minimum 0.6m from the edge of asphalt.
- 3) Edge treatment must be installed along all asphalt joints.
 - For all arterial/collector roads Denso-band size 15mmx45mm or approved equivalent shall be used.
 - For all local roads Denso-reinstatement tape size 2mmx 50mm or approved equivalent shall be used.
- 4) Specify Cathodic protection to be Denso tape, or approved equivalent, wrapped around all metal pipes and appurtenances, water services and fittings, excluding copper services, as per the manufactures specifications.
- 5) Appropriate cover for all services and mains should be provided in conformance with the CGS Design Standards for Linear Construction. Where this cover cannot be obtained, and upon approval of the General Manager of Growth and Infrastructure, the pipe must be pre-insulated.
- 6) All service connections must be made perpendicular to the main, unless otherwise approved by the General Manager of Growth and Infrastructure.
- 7) Culverts must be no longer than 30m.
- 8) All Culverts larger than 900mm diameter must be Poly-Coated CSP or Concrete, where culverts greater than 1.8m diameter must be concrete box culverts.
- 9) All new rock cuts greater than 2m in height must be designed and constructed to meet a Class B or Class C hazard rating with 100% rock fall debris retention based on the Ministry of Transportation publication "RHRON: Ontario Rockfall Hazard Rating System – Field Procedures Manual"
- 10) The clear zone width for the rock cut shall be measured from the edge of the traveled lane, sidewalk or Public Way whichever is closer. (Public way means a sidewalk, street, highway, square or another open space to which the public has access, as of right or by invitation, expressed or implied.)

Appendix D: Submission (Drafting & Design) Details for Site Plan Applications

Last updated: August 11, 2023

- 11) Rock faces must be designed in accordance with OPSD 201.010 and/or the Roadside Design Manual (including Interceptor ditches, overburden removal, rock face slopes, etc.)
- 12) Rock faces must be located a sufficient distance from the property line so that, the freeze thaw cycles do not cause the rock face to undermine adjacent properties overtime, and any required fencing or interceptor ditches can be maintained from the owners property and are located entirely on the owners property, unless an agreement registered on title is entered into with the adjacent property owner outlining maintenance requirements, etc.
- 13) Where rock blasting must occur a rock blasting report, prepared by an Engineer with a minimum of 5 years of rock blasting experience, must be provided to building services for review.

12.0 Stormwater Management Report

Stormwater Management Controls must be in conformance with the current Ministry of the Environment, Conservation and Parks (MECP) Guidelines as well as the City of Greater Sudbury's Stormwater Management Guide and Supplemental Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains, watershed studies, and Conservation Sudbury (Nickel District Conservation Authority) requirements.

13.0 Additional Reports

13.1 Traffic Impact Study

The City of Greater Sudbury may require the completion of a Traffic Impact Study for any development regardless of size and land use. All proposed developments are considered on an individual basis to assess the need for a Traffic Impact Study; however, generally any development that generates more than 100 new vehicle trips in the peak hour will require a Traffic Impact Study. The Traffic Impact Study must provide an assessment of the adequacy of the existing or future transportation system to accommodate additional traffic generated by the proposed development or redevelopment. It shall recommend what, if any, improvements will be required to the roadway system to maintain a satisfactory level of service. The Traffic Impact Study must be prepared, signed, and stamped by a qualified Professional Engineer.

Existing traffic information or clarification regarding the report requirements can be obtained directly through the Roads and Transportation department.

This Study must be provided through the Site Plan review process when requested.

13.2 Geotechnical Assessment

The purpose of a Geotechnical Assessment is to evaluate the soils and subsurface conditions of a site and to provide recommendations for the design and construction of the site pavement, services, building, etc. The Geotechnical Assessment must be prepared, signed, and stamped by a qualified Professional Engineer.

This Study must be provided directly to Building Services and must form the basis of the pavement and servicing design. Where there is a Regulated Hazard on or adjacent to the development the Geotechnical report must be provided directly to Conservation Sudbury.

13.3 Rock Blasting Report

The purpose of the rock blasting report is to ensure that all rock blasting, removal, and any proposed rock faces are constructed in a safe manner that does not negatively impact the surrounding properties and provides for the long-term stability of any rock faces.

The rock blasting report can be included in the geotechnical report, but it must be prepared in accordance with OPSS 120 by a Professional Engineer, with a minimum of five (5) years' experience related to blasting. The report must include the following as a minimum:

- a) How the work related to blasting shall be undertaken safely to protect adjoining structures and other infrastructure.
- b) Recommendation and specifications as a minimum but not be limited to the following;
 - Pre-blast survey of surface structures and infrastructure within affected area,
 - Trial blast activities,
 - Procedures during blasting,
 - Procedures for blasting near Critical infrastructure with special vibration considerations, including but not limited to rock tunnels, concrete pressure pipe, etc."

- Procedures for addressing blasting damage complaints,
- Blast notification mechanism to adjoining residences,
- Structural stability and certification of exposed rock faces

The blasting consultant retained by the Owner shall be independent of the contractor and any subcontractors doing blasting work. The blasting consultant shall be required to complete specified monitoring recommended in the report of vibrations levels and provide a report detailing those recorded vibration levels. Copies of the recorded ground vibration documents shall be provided to the contractor and contract administration weekly or upon request for this specific project.

The above noted report shall be submitted for review to the satisfaction of the Chief Building Official prior to the commencement of any removal of rock by blasting. Should the Owner's schedule require to commence blasting and rock removal prior to the site plan agreement having been signed, a site alteration permit shall be required.

After construction is complete the blasting consultant will be required to provide a PEO sealed Certification letter for all rock faces, created during the blasting, prior to building occupancy.

13.4 Hydrogeology Study

A Hydrogeology Study is required for all applications in areas serviced by private water and septic services. The Hydrogeology Study must be prepared, signed, and stamped by a qualified Professional Engineer.

This Study must be provided to the Sudbury & District Health Unit.

13.5 Environmental Impact Study

An Environmental Impact Study is required for applications that affect significant or environmentally sensitive lands and/or waters. In addition to any external review agency requirements, the report shall include as a minimum a description of the environment that will be affected, description of the development proposal, an assessment of the expected impacts on the environment, a list of assumptions used in the assessment and recommendations regarding the actions necessary to prevent, mitigate or remedy the effects on the environment of the development proposal. The Environmental Impact Study must be prepared by a qualified Professional with relevant environmental expertise.

This Study must be provided through the Site Plan review process when requested.

13.6 Phase I Environmental Site Assessment

The first phase of the systematic identification and evaluation of the potential impacts of proposed developments relative to the physical, chemical, and biological components of the environment. A Phase II or III Environmental Report may be required depending upon the recommendations of the Phase 1 Report.

This Assessment including an additional reports or records must be provided directly to Building Services, when requested.

13.7 Noise and Vibration Study

A Noise and/or Vibration Study is required where a sensitive land use (i.e., Residential, Hotel, Hospital, etc.) is proposed near a noise source (i.e., Railway, major roadway, industry) or where a

noise source (commercial or industrial use) is proposed adjacent to a sensitive land use. The report should follow the Ministry of the Environment's OCC guidelines and demonstrate that the appropriate criteria can be achieved. The report must include indoor and outdoor sound levels and recommend mitigation measures for the development which could include sound barriers, ventilation requirements, special building components and necessary warning clauses. The Noise and/or Vibration Study must be prepared, signed, and stamped by a qualified Professional Engineer.

This Study must be provided through the Site Plan review process when requested, and a copy will be provided to Building Services.

13.8 Environmental Site Assessment

Generally, an Environmental Site Assessment is required for all applications where a land use change is proposed from an industrial or commercial use to a more sensitive land use (i.e., Residential). Initially a Phase I Environmental Site Assessment is required. Further investigation would be required when the Phase I Environmental Site Assessment identifies the possibility of site contamination. A Record of Site Condition may be required where a land use change is proposed to a more sensitive land use in accordance with Ontario Regulation 153/04.

This Study must be provided to Building Services.

13.9 Archaeological Report

An Archaeological Report is required for all applications in or near areas of archaeological potential, as determined by the criteria set out by the Ministry of Culture and the CGS Archeological Master Plan. Reports must be completed by an individual holding a valid archaeological license.

This Study must be provided through the Site Plan review process when requested.

13.10 Sun/Shadow Study (6 Storeys or Greater)

A study showing the effects of a development on sunlight reaching surrounding properties, buildings, and adjacent public realm areas by calculating the shadow that will be cast by the development at different times of day in different seasons. Sun/Shadow Studies maybe required for official plan amendments, zoning by-law amendments and site plan applications for developments usually 20 metres or 6 storeys and greater in height.

Sun/Shadow tests should be done for March 21 and September 21 between the hours of 9 AM and 6 PM. The Sun/Shadow diagram should identify permanently shaded areas between the start of December to the end of February.

This Study must be provided through the Site Plan review process when requested.

13.11 Wind Study (6 Storeys or Greater)

A pedestrian wind model analysis is required for all six storey or taller buildings. For official plan and zoning by-law amendment applications a preliminary "Wind Impact Statement" by a qualified, registered Professional Engineer to professional standards is required. For site plan applications a detailed wind tunnel impact study shall be prepared by a qualified, registered professional engineer, and shall be based on a scale model simulation analysis, prepared to professional standards.

This Study must be provided through the Site Plan review process when requested.

CITY OF GREATER SUDBURY
SITE PLAN CONTROL GUIDE

Last Update: January 13, 2022

APPENDIX E

SITE PLAN CERTIFICATION REQUIREMENTS

SITE PLAN CERTIFICATION REQUIREMENTS

Rev 3 – May 11, 2021

I. CONSTRUCTION PREREQUISITES

1.1. Pre-construction Survey

A preconstruction survey of all existing infrastructure within the right of way (ROW) affected by the work must be submitted to the City prior to construction activity within the ROW. The survey must include photos and clearly identify and locate all pre-existing conditions.

The developer should also confirm that all existing topographic and as-built information presented on the approved design drawings accurately reflects the existing field condition.

II. CERTIFICATION PACKAGE REQUIREMENTS

The following support documentation will constitute the minimum requirements for acceptance of the works:

1.1. Letter of General Conformance for services onsite and works within the right of way

Provide a General Conformance letter signed and sealed by a Professional Engineer verifying that all servicing works within the site have been installed in general conformance with the approved project drawings and specifications.

For works within the Municipal Right of Way, the letter must certify that the servicing and road works completed in the municipal right of way have been installed under full time supervision and were constructed in accordance with City Standards and Specifications.

1.2. Watermain/service Certification

1.2.1. Bedding Gradation Analysis (R.O.W. works only)

A bedding gradation analysis from a certified lab must be provided to verify the bedding conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

1.2.2. Bedding Compaction(R.O.W. works only)

Bedding compaction results are not required to form part of the certification package.

1.2.3. CGS – Watermain Test Report / Procedures (for watermains/services ≥100mm)

A City of Greater Sudbury Watermain Test Report / Procedures form must be completed in full and submitted to both the Manager of Construction Services and the Chief Field Inspector prior to connection to the existing main.

1.2.4. Water Quality Test Results (for watermains/services $\geq 100\text{mm}$)

The certification package must include results of the water quality tests performed in conjunction with the CGS – Watermain Test Report/Procedures. These tests must indicate that the minimum requirements of the Ministry of the Environment – Ontario Drinking Water Objectives have been met. These results are to be forwarded to the Manager of Construction Services and the Chief Field Inspector.

1.2.5. Tracer Wire Field Inspection Report (R.O.W. works only; however, tracer wire should also be installed throughout the site.)

For all non-metallic water services and mains, submit a “Tracer Wire Field Inspection Report” completed by a third party.

1.3. **Sanitary/Storm Sewer and Subdrain Certification**

1.3.1. Bedding Gradation Analysis (R.O.W. works only)

A bedding gradation analysis must be provided from a certified lab to verify the bedding conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

1.3.2. CCTV Camera Inspection (R.O.W. Sewer mains only, unless the pressure leakage test cannot be completed for the service)

Results of the CCTV camera inspection must indicate that the sanitary sewer, storm sewer and subdrain was placed on the proper alignment without damage, sags or debris.

Close circuit television (CCTV) camera inspections requirements (of sewer mains) are as follows:

- All digital data are to be coded following the WRc Manual of Sewer Condition Classification, WRc 4th edition, American Society of Civil Engineers or a comparable manual.
- All videos are to be coded utilizing WRc codes, and provided in .wmv format along with the database.mdb (or other approved .mxd) files.
- All photos are to be provided in .jpg and reports in .pdf.

All digital image recordings shall be of quality that all minor defects (hairline cracks, etc.) be clearly visible, and in the main sewers, the colour of the pipe inspected be true to the actual conditions.

Video files shall commence with a minimum 10 second data information screen including: data and time of inspection, location description, contractor and operator name.

Technicians assigned to data gathering shall have a minimum of three (3) years related experience in sewer inspection, using Closed Circuit Television Equipment and Data Collection and shall be capable of report all conditions using WRc defect codes.

The Engineer shall confirm they have reviewed the CCTV reports and will provide their comments. Comments will verify the pipes are satisfactory and/or identify areas of damage, sags, debris etc. that should be discussed with City representatives prior to City acceptance.

1.3.3. Pressure Leakage Tests

Infiltration or exfiltration testing shall be completed and meet the requirements of OPSS 410. Where exfiltration testing is required, sanitary sewer test results shall be submitted. Where infiltration testing is required, storm and sanitary test results shall be submitted. Where infiltration or exfiltration testing cannot be conducted on service connections a CCTV camera inspection may be accepted upon approval of the Site Plan Control Engineer.

1.3.4. Maintenance Hole Leakage Tests

Sanitary sewer maintenance holes shall be tested for leakage as per GSSS 407.07.25

1.4. Roads / Curbs Certification (R.O.W. works only)

1.4.1. Backfill Material

A letter must be provided from the engineer stating that the backfill material conforms to City requirements and the site specific geotechnical report. This letter must also state that sufficient compaction was obtained on this material.

1.4.2. Base Material – Granular “B” (Greater than 9m2)

a. Gradation Analysis

A gradation analysis must be provided from a certified lab to verify the Granular “B” conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

b. Compaction Tests

Provide a certification letter signed and sealed by a Professional Engineer to verify that compaction conforms to OPSS 501 and GSSS 501.

The letter must also confirm that the Granular B, Type II has been compacted using single drum, vibratory, smooth steel drum rollers, with a minimum static drum weight of 8 tonnes (8000 kilograms) and minimum operating dynamic force of 150 kilonewtons. One hundred percent roller pass coverage with a minimum number of four passes shall be provided. Each roller pass shall overlap the coverage of the preceding pass by a minimum of 0.5 m.

Note that the material specified on the City approved construction drawings must be used. If an alternate type of Granular 'B' material is to be contemplated, this must be done as part of the construction drawing review process.

1.4.3. Base Material – Granular “A” (Greater than 9m2)

a. Gradation Analysis

A gradation analysis must be provided from a certified lab to verify the Granular “A” conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

b. Compaction Tests

Results of the compaction testing must indicate that the Granular “A” material has been compacted according to the requirements set out in GSSS 501 and Method A of OPSS 501.

Compaction testing must be performed at 15 metre intervals along the roadway in a 3-point cross-section and all test results must be supplied to the City.

1.4.4. Asphalt Works(Greater than 9m2)

a. Materials Analysis

The analysis of the asphalt material in accordance with GSSS 310 and OPSS 310 must be provided from a certified lab to show that this material conforms to the minimum requirements defined in OPSS 1150 and the job mix formula reviewed and approved by the Developers Engineer prior to placement.

If a field adjustment of the Job mix formula is required, after placement, this must be provided to the Developers Engineer 24hrs after QA test results have been completed. The Developers Engineer is responsible for approving the Job Mix Formula changes. Field adjustments to the JMF shall be limited as per GSSD 310 and OPSS 1150. Any borderline results in the field adjusted Job Mix Formula will be considered rejectable.

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b. Compaction Tests

Results of the compaction testing must indicate that the asphalt material has been compacted according to the requirements set out in GSSS 310 and OPSS 310.

Compaction testing must be performed at 15 meter intervals along the roadway in a 3-point cross-section for each lift of material and all test results must be supplied to the City.

1.4.5. Concrete works(Greater than 3 cu.m)

a. Concrete Mix Design

Provide a copy of the concrete mix design and the applicable performance requirements as required to verify compliance with OPSS.MUNI 1350.

b. Slump, Air and Compressive Strength of Concrete

- i. For concrete curb and gutter systems, concrete testing must indicate that the concrete used meets the requirements set out in OPSS 353 and GSSS 353.
- ii. For sidewalk installations, concrete testing must indicate that the concrete used meets the requirements set out in OPSS 351 and GSSS 351.
- iii. For any other concrete works, materials, construction, and testing must comply with the relevant GSSS, OPSS, GSSD, OPSD, and any additional requirements set forth on the City approved construction drawings.

The submitted compressive strength test results from a certified lab must meet the requirements set out within the relevant GSSS and OPSS (for example, if 28 day test results are the standard, the submitted results must meet this requirement).

1.5. Stormwater Management Facilities

The certification package for stormwater management facilities (where applicable) must be in the form of a letter signed and sealed by a Professional Engineer stating that the storm water management facilities have been constructed in compliance with the approved construction drawings and Stormwater Management Report.

1.6. Additional Requirements

In addition to the above noted requirements, the following will form part of the certification package:

1.6.1. Inspection Photos (R.O.W. Work only)

Digital photographs of the installation of each major appurtenance installed (maintenance holes, catchbasins, valves, hydrants) must be provided. These photographs must be clearly labeled and provide sufficient as-constructed information (number of grade adjustment rings, height of hydrant above grade, etc.).

1.6.2. As-built Drawings

As-built drawing requirements are as follows:

- City as-built files in CAD or TIFF must be updated with the current as-constructed information to the City's as-built standards (see links below), including but not limited to all new or modified pipe sizes, lengths, material, inverts, structures, municipal and private fire hydrants, curbs, driveway entrances, sidewalks, property lines, easements, building footprints, etc.

- Where new property lines or easements are created as part of the proposed work, the Property Fabric must be labeled as per CGS standards including but not limited to Pin Blocks & PINs, property plans including M-Plans, S-Plans, 53R-Plans, easements, including easement number and dimensions and type of easement.
- All drafting for as-constructed information must conform to CGS standards. See Drafting Standards Manual / Drafting procedures (links below) for naming conventions, text styles & fonts, hatching, scales, blocks, colour & pen codes, linetypes and layering conventions.

Links to City Standards for As-constructed Drawings:

- (<https://www.greatersudbury.ca/business/engineering-standards/example-drawings/>)
- (<https://www.greatersudbury.ca/business/engineering-standards/drafting-procedures/>)
- (<https://www.greatersudbury.ca/business/engineering-standards/surveying-for-contractors/>)

In addition to the above requirements, if there are significant as-constructed changes from the approved site plan drawings, as built drawings for the site in PDF format must be provided.

1.6.3. Certification Letter for rock faces

A certification letter for all new rock faces shall be provided and must be sealed by a Professional Engineer prequalified through the MTO. Refer to the following link for a list of Prequalified Engineers.

<https://www.raqs.mto.gov.on.ca/login/raqs.nsf/English/Graphic/frmViewApproveConsultants?OpenForm&Start=1&Count=1000&Expand=2.7&Seq=4>

The certification letter shall indicate and confirm the following:

- i. All required pedestrian and/or vehicle guards/fencing have been installed.
- ii. The rock face meets a Class B or Class C hazard rating with 100% rock fall debris retention based on the Ministry of Transportation publication “RHRON: Ontario Rockfall Hazard Rating System – Field Procedures Manual” and that the rock face has been cleaned and is free of any loose or hazard rocks.
- iii. Freeze thaw cycles acting on the rock face will result in undermining of the adjacent properties.
- iv. Outline a monitoring and maintenance plan for the rock face.

1.6.4. CCTV camera inspection of existing sewer mains and services

Where rock blasting has occurred for the installation of sewer mains or services, or where the main has been crossed below, a CCTV inspection of the existing adjacent mains and services must be completed as per Item 1.3.2 above. It is advisable that these mains and services be CCTV camera inspected as part of the pre-construction survey.

III. CONSTRUCTION APPROVAL AND INSPECTION

Upon the City's acceptance of the Certification Package, the developer will request an inspection for release of deposits once all work identified in the site plan control agreement has been completed. The City will conduct their inspection within 3 months (During the months of May through October). *Note this time period is under review.* All Deficiencies identified in this inspection must be corrected prior to the release of any deposits. Partial deposit releases may be considered depending on the deficiencies identified.

The City will provide only one inspection at no charge. A fee will be assessed, in accordance with City Council's Policy, for any subsequent inspections required to determine if the deficiencies have been rectified.

Rev 1 – 2016.05.31

- Clarify general conformance letter requirements
- Clarify certification requirements for R.O.W. work and for site work.
- Revised Granular B compaction requirements

Rev 2 – 2017-05-25

- Update as-built requirements
- Update CCTV requirements
- Update general conformance letter requirements
- Asphalt analysis

Rev 3 – 2021-05-11

- Add leakage test requirement for sanitary maintenance holes
- Update rock face certification requirements

CITY OF GREATER SUDBURY
SITE PLAN CONTROL GUIDE

Last Update: January 13, 2022

APPENDIX F

SUBDIVISION AND OFF-SITE SERVICING CERTIFICATION REQUIREMENTS

SUBDIVISION AND OFF-SITE SERVICING **CERTIFICATION REQUIREMENTS**

Rev 6 – February 22, 2018

I. CONSTRUCTION PREREQUISITES

1.0 Pre-construction Survey

A pre-construction survey of all existing infrastructure within the right of way (ROW) affected by the work must be submitted to the City prior to construction activity within the ROW. The survey must include photos and clearly identify and locate all pre-existing conditions.

The developer should also confirm that all existing topographic and as-built information presented on the approved design drawings accurately reflects the existing field condition.

2.0 Construction Schedule

A construction schedule must be provided to the City prior to construction within the existing ROW or future ROW. The construction schedule must identify the estimated start dates and duration of work for the following key construction activities:

- sewer and/or watermain installation,
- connection to existing sewer or watermain (Development Engineering to be contacted 24hrs prior to connecting to the existing sewer or watermain),
- sub-grade proof rolling,
- granular A and B placement,
- curb layout,
- base asphalt placement.

The City must be notified of any changes to the above start dates.

II. INITIAL ACCEPTANCE OF THE WORKS

1.0 Certification Packages Issued for Initial Acceptance

The following support documentation will constitute the minimum requirements for initial acceptance:

1.1. Watermain Certification

1.1.1. Certification

Provide a certification letter signed and sealed by a Professional Engineer to verify general conformance with the approved project drawings and specifications.

1.1.2. Bedding Gradation Analysis

A bedding gradation analysis must be provided from a certified lab to verify the bedding conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

1.1.3. Bedding Compaction

Bedding compaction results are required as defined in GSSS 501.

1.1.4. CGS – Watermain Test Report / Procedures

A City of Greater Sudbury Watermain Test Report / Procedures form must be completed in full and submitted to both the Manager of Construction Services and the Chief Field Inspector prior to connection to the existing main.

1.1.5. Water Quality Test Results

The certification package must include results of the water quality tests performed in conjunction with the CGS – Watermain Test Report/Procedures. These tests must indicate that the minimum requirements of the Ministry of the Environment – Ontario Drinking Water Objectives have been met. These results are to be forwarded to the Manager of Construction Services and the Chief Field Inspector.

1.1.6. Tracer Wire Field Inspection Report

Submit the City's "Tracer Wire Field Inspection Report" which shall be completed by a third party.

1.2. Sanitary/Storm Sewer and Subdrain Certification

1.2.1. Certification

Provide a certification letter signed and sealed by a Professional Engineer to verify general conformance with the approved project drawings and specifications.

1.2.2. Bedding Gradation and Compaction Analysis

A bedding gradation analysis must be provided from a certified lab to verify the bedding conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

Bedding compaction results are required as defined in GSSS 501.

1.2.3. CCTV Camera Inspection

Results of the CCTV camera inspection must indicate that the sanitary sewer, sanitary laterals, storm sewer and subdrain was placed on the proper alignment without damage, sags or debris.

Close circuit television (CCTV) camera inspections requirements (of sewer mains and lateral) are as follows:

All observations shall be coded in accordance with NASSCO PACP Version 6.0.4 or greater and the findings shall be submitted in a digital inspection report format to be approved by the City prior to initiating the project with corresponding sewer.dat, PACP export files and video on a portable hard drive.

and

The pipe defect coding method shall be PACP Version 6.0.4 or greater. This coding schema shall be used in conjunction with the Contractor's onboard CCTV inspection program for field data collection which will be capable of exporting PACP database (mdb) files for direct use with the City's CCTV processor solution. Additionally, the CCTV digital file format requirements will be provided to the Contractor upon contract award.

All digital image recordings shall be of quality that all minor defects (hairline cracks, etc.) be clearly visible, and in the main sewers, the colour of the pipe inspected be true to the actual conditions.

Video files shall commence with a minimum 10 second data information screen including: data and time of inspection, location description, contractor and operator name.

Technicians assigned to data gathering shall have a minimum of three (3) years related experience in sewer inspection, using Closed Circuit Television Equipment and Data Collection and shall be capable of report all conditions using NASSCO PACP.

The Engineer shall confirm they have reviewed the CCTV reports and will provide their comments. Comments will verify the pipes are satisfactory and/or identify areas of damage, sags, debris etc. that should be discussed with City representatives prior to City acceptance.

1.2.4. Pressure Leakage Tests

Infiltration or exfiltration testing shall be completed and meet the requirements of OPSS 410. Where exfiltration testing is required, sanitary sewer test results shall be submitted. Where infiltration testing is required, storm and sanitary test results shall be submitted.

1.3. Roads / Curbs Certification

1.3.1. Certification

Provide a certification letter signed and sealed by a Professional Engineer to verify general conformance with the approved project drawings and specifications.

1.3.2. Backfill Material

A letter must be provided from the engineer stating that the backfill material conforms to City requirements and the site specific geotechnical report. This letter must also state that sufficient compaction was obtained on this material.

1.3.3. Base Material – Granular “B” (Greater than 9m2)

a. Gradation Analysis

A gradation analysis must be provided from a certified lab to verify the Granular “B” conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

b. Compaction Tests

Provide a certification letter signed and sealed by a Professional Engineer to verify that compaction conforms to OPSS 501 and GSSS 501.

The letter must also confirm that the Granular B, Type II has been compacted using single drum, vibratory, smooth steel drum rollers, with a minimum static drum weight of 8 tonnes (8000 kilograms) and minimum operating dynamic force of 150 kilonewtons. One hundred percent roller pass coverage with a minimum number of four passes shall be provided. Each roller pass shall overlap the coverage of the preceding pass by a minimum of 0.5 m.

Note that the material specified on the City approved construction drawings must be used. If an alternate type of Granular ‘B’ material is to be contemplated, this must be done as part of the construction drawing review process.

1.3.4. Base Material – Granular “A” (Greater than 9m2)

a. Gradation Analysis

A gradation analysis must be provided from a certified lab to verify the Granular “A” conforms to the minimum gradation requirements defined in Table 2A of GSSS 1010.

b. Compaction Tests

Results of the compaction testing must indicate that the Granular “A” material has been compacted according to the requirements set out in GSSS 501 and Method A of OPSS 501.

Compaction testing must be performed at 15 metre intervals along the roadway in a 3-point cross-section and all test results must be supplied to the City.

1.3.5. Asphalt Works (Greater than 9m2)

a. Materials Analysis

The analysis of the asphalt material in accordance with GSSS 310 and OPSS 310 must be provided from a certified lab to show that this material conforms to the minimum requirements defined in OPSS 1150 and the job mix formula approved by the City and Developers Engineer at the Pre-construction meeting.

If a field adjustment of the Job mix formula is required, after placement, this must be provided to the Developers Engineer 24hrs after QA test results have been completed. The Developers Engineer is responsible for approving the Job Mix Formula changes. Field adjustments to the JMF shall be limited as per GSSD 310 and OPSS 1150. Any borderline results in the field adjusted Job Mix Formula will be considered rejectable.

b. Compaction Tests

Results of the compaction testing must indicate that the asphalt material has been compacted according to the requirements set out in GSSS 310 and OPSS 310.

Compaction testing must be performed at 15 meter intervals along the roadway in a 3-point cross-section for each lift of material and all test results must be supplied to the City.

1.3.6. Concrete works (Greater than 3 cu.m)

a. Concrete Mix Design

Provide a copy of the concrete mix design and the applicable performance requirements as required to verify compliance with OPSS.MUNI 1350.

b. Slump, Air and Compressive Strength of Concrete

- i. For concrete curb and gutter systems, concrete testing must indicate that the concrete used meets the requirements set out in OPSS 353 and GSSS 353.
- ii. For sidewalk installations, concrete testing must indicate that the concrete used meets the requirements set out in OPSS 351 and GSSS 351.
- iii. For any other concrete works, materials, construction, and testing must comply with the relevant GSSS, OPSS, GSSD, OPSD, and any additional requirements set forth on the City approved construction drawings.

The submitted compressive strength test results from a certified lab must meet the requirements set out within the relevant GSSS and OPSS (for example, if 28 day test results are the standard, the submitted results must meet this requirement).

1.3.7. Surface Features

All surface features that form part of the City approved construction drawings must be constructed prior to initial acceptance. This includes all fencing, noise berms, and drainage ditching (excluding rear yard swales), etc.

1.4. Stormwater Management Facilities

The certification package for stormwater management facilities (where applicable) must be in the form of a letter from the Developer's Engineer stating that these facilities have been constructed in compliance with the City approved construction drawings and the City approved Stormwater Management Report. This letter must be accompanied by all relevant materials testing data.

1.5. Additional Requirements

In addition to the above noted requirements, the following will form part of the initial acceptance package:

1.5.1. Inspection Photographs

Digital photographs of the installation of each major appurtenance installed (maintenance holes, catchbasins, valves, hydrants) must be provided. These photographs must be clearly labeled and provide sufficient as-constructed information (number of grade adjustment rings, height of hydrant above grade, etc.).

1.5.2. As-built Drawings

A red-line drawing showing as-constructed data must be provided to the City as part of the initial acceptance package. As-built drawings to City drafting standards (see links below) must be submitted to the City within 3 months of the initial acceptance date for the works.

As-built drawing requirements are as follows:

- Where City as-built files in CAD or TIFF are available these must be updated with the current as-constructed information to the City's as-built standards (see links below), including but not limited to all new or modified pipe sizes, lengths, material, inverts, structures, municipal and private fire hydrants, curbs, driveway entrances, sidewalks, property lines, easements, building footprints, etc.
- Where City as-built files in CAD or TIFF are not available, CAD versions of the approved construction drawings must be provided showing as-constructed information for the newly constructed work to the City's as-built drawing standards (see links below).
- Where as-built drawings are provided as part of a Subdivision or Consent or where new property lines or easements are created as part of the proposed work, the Property Fabric must be labeled as per CGS standards including but not limited to

Pin Blocks & PINs, property plans including M-Plans, S-Plans, 53R-Plans, easements, including easement number and dimensions and type of easement.

- All drafting for as-constructed information must conform to CGS standards. See Drafting Standards Manual / Drafting procedures (links below) for naming conventions, text styles & fonts, hatching, scales, blocks, colour & pen codes, linetypes and layering conventions.

Links to City Standards for As-constructed Drawings:

- (<https://www.greatersudbury.ca/business/engineering-standards/example-drawings/>)
- (<https://www.greatersudbury.ca/business/engineering-standards/drafting-procedures/>)
- (<https://www.greatersudbury.ca/business/engineering-standards/surveying-for-contractors/>)

1.5.3. Certification Letter for rock faces

A certification letter for all new rock faces shall be provided and must be sealed by a Professional Engineer, with a minimum of 5 years experience related to blasting. The letter must also certify that all pedestrian and vehicle guards/fencing required for the new rock face have been installed.

1.5.4. CCTV camera inspection of existing sewer mains and services

Where rock blasting has occurred for the installation of sewer mains or services, or where the main has been crossed below, a CCTV inspection of the existing adjacent mains and services must be completed as per Item 1.3.2 above. It is advisable that these mains and services be CCTV camera inspected as part of the pre-construction survey.

2.0 Construction Review for Initial Acceptance

Refer to the Site Plan Control Guide Section 2.4.7, “Off-site Servicing Initial Acceptance Certification, Compliance Review, and Deposit Reduction” for further details.

The City will provide one field review at no charge during initial acceptance. A fee will be assessed, in accordance with City Council’s Policy, for any subsequent field reviews required to determine if the deficiencies have been rectified.

III. FINAL ACCEPTANCE OF THE WORKS

1.0 Certification Packages Issued For Final Acceptance

1.1.1. Certification

- a. Once the maintenance period has expired, the Consultant's Engineer must attend the site and perform a final inspection of the works. This includes, but is not limited

- to; CCTV camera inspections completed in accordance with the Initial Acceptance requirements for sanitary mains, sanitary laterals, storm sewers, and subdrains, adjustment of appurtenances as required (valves, hydrants, curb stops), review of grading, sodding, and other surface features (swales, boulevards, fencing, walkways, easements, etc.), and a review of all concrete works.
- b. A sealed letter must be provided from the Consultant's Engineer stating that they have reviewed the site and verify the works are in general conformance with the City approved construction drawings and standards and that there are no deficiencies.

2.0 Construction Review for Final Acceptance

Refer to the Site Plan Control Guide Section 2.4.8, "Off-site Servicing Final Acceptance Certification, Compliance Review, and Deposit Reduction" for further details.

The City will provide one field review at no charge during initial acceptance. A fee will be assessed, in accordance with City Council's Policy, for any subsequent field reviews required to determine if the deficiencies have been rectified.

Rev 1 - 2013.03.08

- certification letter added for clarification
- tracer wire report added
- sanitary laterals added for clarification
- consulting engineer to review cctv added for clarification
- submission of concrete mix design added

Rev 2 – 2014.02.28

- clarification of cctv requirements at final acceptance

Rev 3 – 2015.01.30

- construction prerequisites added
- construction approval and inspection policies for initial and final acceptance of the works added

Rev 3b – 2015.11.19

- Revise timelines and definition in Section II, item 2.0.

Rev 4 – 2016.05.31

- Clarify as-built drawing requirements
- Revise Granular B compaction requirements
- Incorporate into the Site Plan Control/Off-Site Servicing Guide

Rev 5 – 2017.05.25

- Update as-built requirements
- Update CCTV requirements
- Update asphalt material analysis

Rev 6 – 2018.02.22

- Bedding gradation requirements
- Update CCTV requirements