



CONSULTING ENGINEERS AND PROJECT MANAGERS

CONSTRUCTION MANAGEMENT PLAN

FOR

PROPOSED LOW DENSITY RESIDENTIAL DEVELOPMENT

BY EDEN OAK (CREDITVIEW HEIGHTS) INC.

LOCATED AT

GLEN WILLIAMS AREA

CREDIT STREET SOUTH – ANN STREET NORTH

TOWN OF HALTON HILLS (GEORGETOWN)

September 27, 2019

C.E. FILE: 17-021



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APPENDIX 'A' Location Map

APPENDIX 'B' Please refer to Project Detailed Engineering Plans.



A.0. Introduction

The Eden Oak (Creditview Heights) Inc. property is located south of Credit Street and Parks Street east and immediately north of the former railway line, in the hamlet of Glen Williams, the Town of Halton Hills. The site is surrounded by existing low-density residential areas with a new development abutting the site's east limit. The adjacent development is known as GeorgeTown Investments Phase 2 and Gamble Street will be extended as Street %A+ within the subject site. The site area is approximately 8.073 hectares (19.95 acres) in size and is irregular in shape. Eden Oak (Creditview Heights) Inc. proposes to develop the above site as a single family house development consisting of 31 units.

A.1. Statement of Project Purpose and Objectives

The purpose of the Construction Management Report (CMR) is to address the detailed procedures, sequencing and construction methodology anticipated by the project team engaged in the planning, liaison, and construction of the project. This report in conjunction with the approved Engineering Plans, outlines proposals on traffic and environmental management measures to be adopted during construction and provides guidelines on construction related issues. Throughout the project development, approval, detailed design, construction and operation phases of the project, construction methods will be carefully developed to avoid, remedy or mitigate adverse environmental effects using best practice techniques.

The CMP has been developed in response to the identification of actual and potential adverse effects during the technical assessment and preliminary design phases of the project. The CMP will continue to evolve as more detail is developed relating to construction and monitoring activities.



The overall objectives of this CMR are:

- provide guidance on environmental management for construction activities; and
- avoid, remedy or mitigate any adverse environmental effects associated with construction activities.

The primary goals of this CMR are:

- describe the program for construction of each element;
- describe what actions will be taken to manage and avoid or reduce the risk of adverse environmental effects during construction;
- provide a list of key positions and points of contact during construction; and
- describe how stakeholders will be kept informed during construction and how issues will be managed.

A.2. Scope of the Project

Construction activities can be broken down into four separate locations:

- Credit Street external storm sewer installation.
 - a) Approximately 420m of storm sewer installation to provide outlet for the Eden Oak (Creditview Heights) stormwater management pond to the existing storm sewer on Confederation St. The existing storm sewers along Credit St. will not be removed or replaced.
- Eden Oak subdivision including upper and lower tier stormwater management pond.
 - a) Placing Erosion and Sedimentation controls, including sedimentation ponds, stripping of topsoil and stockpile on site, cut/fill earthwork operation and servicing of 31 detached house development including storm and sanitary sewer, watermain and upper and lower tier ponds.
Erosion and Sedimentation Controls
- Emergency access to Ann Street including the watermain connection.



- a) Placing Erosion and Sedimentation controls, Construction of 8.5m wide emergency access road, existing headwall removal and installation of new concrete headwall, and watermain connection work on Ann Street.
- Gamble Street cul-de-sac removal and restoration, watermain connection and external sewer installation.
 - a) 200mm watermain connection, sanitary sewer installation through directional drilling and cul-de-sac removal and road restoration.

All noted works are detailed and described within the Project Engineering Plan.



B.0. Construction Schedule and Implementation

The following table provides a brief outline of our anticipated construction schedule for the Eden Oak (Creditview Heights) Inc. subdivision. Please note that these dates represent our best estimate at the time of authoring this plan and are to provide a general guidance for the overall timing of construction activities. Specific activities and their associated schedules will be reviewed throughout the construction process. The anticipated schedule is as follows:

Table B.0 – Construction Schedule

CONSTRUCTION ACTIVITY	ESTIMATED DURATION	ANTICIPATED START	ANTICIPATED COMPLETION
Credit Street External Storm Sewer Installation			
Erosion & Sediment Control	1 week	5 October,2019	20 October,2019
Underground Servicing and Road Restoration	3 weeks	5 October,2019	20 October,2019
Gamble Street Sanitary Sewer Installation and Watermain Connection			
Erosion & Sediment Control	1 week	15 October,2019	Oct/Nov 2019
Underground Servicing and Road Restoration	2 weeks	20 October,2019	Nov/Dec 2019
Eden Oak Subdivision			
Erosion & Sediment Control	1 week	Partially completed	15 Sept,2019
Bulk Earthworks	4 weeks	15 October,2019	20 November, 2019
Underground Servicing and Base Road Building	2 months	20 Oct, 2019	Nov/Dec 2019
Utility Installation	3 weeks	(TBD)	(TBD)
Home Construction	12 months	(TBD)	(TBD)
Resident Occupancy		(TBD)	(TBD)



B.1. Implementation

- The general contractor will assume the responsibility of ordering and placing all signage and pavement markings as required for traffic control and traffic notification in accordance with requirements of the Ontario Traffic Manual book 7. The general contractor will keep the consultant apprised of any changes to the construction schedule as it relates to the construction impact mitigation plan.
- Traffic Management plans for the works on Credit Street and on Gamble Street and detailed on Drawings 17021-28 and 17021-31
- As the project progresses, any potential pedestrian safety issues that arise will be addressed through signage or circulation plan modifications. Upon completion of the project all affected areas will be restored to pre-construction condition of the facilities and/or in accordance with the approved site development plans.
- Condeland Engineering Ltd. will be the point of contact for the Town of Halton Hills and the public. The consultant will oversee the implementation of this plan by the general contractor.
- Construction access to the subdivision will be limited to Gamble Street only. School board and school bus services may have disruptions on Credit Street; notification of alternative access will be discussed with the respective school boards.
- The consultant and general contractor will ensure that community mailboxes will remain accessible throughout the construction program.
- Public utilities such as gas, hydro, cable and phone will be required on-site during construction to monitor their specific utilities. General contractor and consultant will notify utilities regarding pending construction as necessary.
- Service disruptions are not expected as no construction vehicles will be allowed to park along Gamble Street.



- No temporary road closures are required at this time. Transit service disruptions are not expected for this stage of construction.
- No temporary road closures are required at this time. Emergency service disruptions are not expected.

C.0. Site Conditions

All parties employed to work at the project site will use their best efforts to minimize disruption to local traffic caused by the site access and routing. Site staff will ensure that surrounding roadways and driveways are not blocked by parties working at the site or any parties delivering materials to, or removing materials from, the site. All loading and unloading shall take place within the site's boundary.

Due to the limited access route to the subject site, the construction truck route to and from the site is restricted exclusively to Gamble Street via Meadowglen Boulevard from Mountainview Road North (excluding the Credit Street storm sewer). Since Gamble Street and Meadowglen Boulevard are surrounded by residential homes, a retirement home and Meadowglen Park, all construction traffic must strictly follow the speed limit. To ensure the speed limit is followed, signage will be placed at the exit points of the site indicating turning movements and the strict enforcement of speed limit. There are no bus stops along Gamble Street and Meadowglen Boulevard.

D.0. Truck Loading Points and Trailer Parking

- The location of truck loading points will be completely within the boundary of the site. furthermore, to promote efficiency and reduce idling time, loading points will be located near the work for which they are employed to complete. Drawing 17021-23 to 26 provide locations for the Construction Staging Area and Personnel Area (Construction Trailers, Workers Parking Area)



- All material delivered to the project will be stored within the property limits. No material will be stored on existing public right of ways.
- Trailer parking will remain within the boundaries of the site to limit disturbance to the surrounding homes and be located in an area where it is not in conflict with proposed works. During earthworks, a site trailer is not required and will not be brought out to the site. Once servicing works commence, a trailer will be brought to the site. The location will be determined closer to the start time of this component of the work. The location will be within the boundaries of the site and will be placed as to avoid any conflicts with the proposed work prior to the start of house construction; a separate trailer will be brought out to the site to replace the trailer used during servicing. Again, this trailer location will be determined closer to the start date of house construction.
- Gamble Street is a narrow residential road and there will be no parking allowed for the construction trades or construction supervisors/inspectors on the adjacent residential Streets or along Gamble Street. Furthermore, employee/construction vehicle parking will remain within the boundaries of the site as much as possible to limit disturbance to the surrounding community. All vehicles parked illegally will be subject to either ticketing or towing, as mandated by the appropriate municipal by-laws. Ann Street is a narrow residential road and in order to limit disturbance to the surrounding community, construction trades, employee or construction vehicles are required to park within site limits. Please note that there are overhead electrical wires along Ann Street that the contractor must be aware of during the construction activities at all times.
- Throughout the site preparation and bulk earthworks stage, as well as underground servicing and road building, parking will be provided on-site, near the construction entrance. Therefore the developer will be responsible to construct a parking lot inside the property to the satisfaction of the Town. The developer or its agents will be responsible for all design, approvals and construction costs associated with the creation of this parking lot.



- All construction trades and construction and construction supervisors/external consultants/inspectors will be required to park their personal vehicles/company vehicles in the parking lot located inside the property. The developer or its agents will be responsible for summer and winter maintenance requirements for the parking lot during the time period associated with the construction project.
- No construction traffic shall be permitted to queue on Gamble Street beyond the demarcated delivery zone. If at any time during the construction process there are multiple deliveries/removal of materials or equipment occurring simultaneously, the Town will require that the queued construction traffic be directed to the end of Gamble Street cul-de-sac.

E.0. Contractor Office

The contractor will provide a construction office or a portable trailer that can be used for the purposes of a construction office and/or the temporary placement of a secure and enclosed roll off container for the purposes of storing construction trades tools and hand equipment.

F.0. Site Containment

The site will be monitored by the developer through its agents or employee's and shall only terminate once the site has been stabilized to the Town's satisfaction. All deficiencies noted during any inspection shall be recorded and rectified within two calendar days. Details of site containment are found on Drawings 17021-23 to 26 Erosion and Control Sediment plans

Heavy duty silt fences will be installed to enclose the entire site perimeter in accordance with the Town and region's requirements. the perimeter properties are to be protected via siltation control fence. Regular maintenance and all necessary repairs shall be performed including the safe disposal of all sediment material. Maintenance, which in most cases will require the removal of sediment and the installation of a new device, shall be conducted when the level of performance of



the implemented control device is reduced to less than 40% of its initial capacity based on the engineer's observation.

Various techniques have been included in the project's design to control the quality of runoff and localize the areas of intense erosion and sedimentation, such as:

- temporary cut-off swales - cut-off swales with reduced slope gradients, in order to minimize erosion effects and resulting sediment will be installed and maintained throughout earthworks and servicing works
- Rock check dam - rock check dam is a barrier constructed of well-graded stone consisting of a mixture of rock sizes. Rock check dams can reduce the effective slope of the channel, thereby reducing the velocity of flowing water, allowing sediment to settle and reducing erosion.
- Silt fencing, which is used to control the release of any sediment-laden water from the site has been installed. Silt fence is comprised of wire fence fastened to steel posts installed at a maximum spacing of 3.0m centre-to-centre, with Terrafix 270r, or equivalent, filter fabric folded over and securely stapled to the fence. Its installation is completed by anchoring/securing of the filter fabric base into the ground at a minimum depth of 300mm. This silt fencing has been installed and will remain in place until sediment migration is no longer a concern, typically when landscape services are vegetated with proven growth. These silt fences are inspected throughout the project, generally after a rain event to ensure that they remain intact and that their functionality is maintained as intended. Any damaged portions will be repaired back to its originally installed condition.
- Siltsoxx is a sediment-trapping device which uses filter media materials, such as straw and wood-fibre cores, wrapped with synthetic netting. They will be installed along the existing road, such as Credit Street, where erecting silt fence is not suitable. Siltsoxx can be used for successfully trapping and settling suspended solids with minimal disruption to the existing drainage pattern, hence preventing unnecessary ponding.



An Erosion and Sediment control plans have been prepared for the works and found within the detailed Engineering Plans.

Dust will be controlled using a variety of techniques as required based on both conditions of the site and the weather. During earthworks, the site supervisor will assess the dust being generated by site activity. If deemed necessary, a water truck will be deployed to the site to apply water. In some cases, where water trucks cannot be used, we will place calcium chloride as required. If the forecast calls for windy conditions and work is scheduled to occur, a water truck will be deployed to the site.

In situations where mud is tracked onto Gamble Street, Meadowglen Boulevard or Credit Street, a flusher truck or Street sweeper will be dispatched to the site, depending on weather conditions.

When material is being exported or imported into the site, the sweeper/flusher will be deployed towards the end of each working day. At a minimum, the road will be cleaned once a week, and, as otherwise required to ensure a clean road surface that is free of dust, mud and debris. This schedule can be increased if deemed necessary and as earthworks and servicing progresses.

The road shall be maintained in a condition that is deemed acceptable to the Town. The general contractor or site servicing contractor shall be responsible to mobilize the appropriate equipment to ensure the continued cleanliness of the road and all expenses associated with this responsibility will be borne exclusively by the site servicing contractor.

Littering is strictly prohibited throughout the site. Throughout the duration of the project, the contractor and home builders will be diligent in an effort to keep both the site clean and the surrounding areas as well. Throughout the earthworks and servicing portion of the works, labourers on site will be responsible for cleaning up fugitive litter from the site. During house construction, the home builders will be responsible for maintaining site cleanliness, which extends to the adjacent roads (Gamble Street). The site and surrounding areas will be inspected on a weekly basis, and any clean-up required, will be completed at that time.



G.0. Deliveries / Removal of Materials

Removal and disposal of excess topsoil and fill will be required for this project. It should be noted that this material is clean and is not contaminated. All fill movement offsite will follow the traffic requirements as explained in the Section C of this plan. The cleanliness of the surrounding area during this operation is also referenced in the Section F of this plan.

In order to properly co-ordinate the delivery/removal of materials to and from the construction site, the general contractor or earthwork contractor will be responsible to have a personnel member act as a flag person to assist in construction vehicles accessing/exiting the construction site. The completion of these tasks will be consistent with directions issued by the Town.

H.0. Noise By-Law and Working Hours

Consistent with the applicable provision of Town of Halton Hills By-law 2010-0030, no construction activity, which includes the delivery/removal of materials or equipment, is permitted on-site on Sundays or Statutory Holidays. Construction activity is only allowed during the period extending from Monday to Friday, between the hours of 7:00 hours and 19:00 hours (7 am to 7 pm).
8:00 am to 6:00 pm Saturdays.

I.0. Emissions

Emissions during construction will consist of light, dust and fumes. The site will be generally unlit at night. In poor light conditions during normal working hours and when 24 hour operations (if approved) are being undertaken, temporary lighting units powered by portable generators will be used where necessary to ensure safe working and/or site security. They will be positioned in such a way as to minimize glare to residents, motorists and wildlife.



Most machinery used on site will be powered by diesel engines. In order to control the emission of excessive exhaust fumes and smoke, contractors will ensure that all vehicles and items of plant and equipment are correctly adjusted and maintained.

Inevitably a certain amount of dust will be produced during dry weather conditions. However, every effort will be made to keep this to a minimum. Vehicle speeds will be restricted on site to minimize dust generation. Where appropriate, water will be sprayed onto the surface to dampen the surface and thereby reduce dust generation. Water may be extracted from site settlement lagoons for this use, but not from watercourses. Precautions will be taken to minimize the deposit of mud and dust on the roads, but this cannot be avoided completely. Any such deposits will be removed regularly using road brushes and vacuum road sweepers.

J.0. Site Security

Public safety will be a paramount concern at all times throughout the development of this site.

During earthworks, sewer, and road construction, the site will remain fenced off and hoarded to ensure no trespassing into the site. The hoarding/fencing will be inspected daily to ensure that there are no breaches and that the site remains secure and safe. During this component of the work, a supervisor from the trade partners will be onsite throughout the duration of the work.

Regular inspection by the General Contractor and Civil consultant will be maintained throughout this portion of the work. at the end of each business day, the gates will be locked and the site fully secured.



K.0. Communication and Notification

Condeland engineering ltd. will circulate construction notices in advance prior to the start of construction. For all foreseen and unforeseen events where working outside the subdivision boundary is required, Condeland Engineering Ltd.'s will prepare and circulate a notice a minimum of five (5) days prior to any external construction activities.

Online access and updates please go to (www.thechase.ca/construction-schedules-plans/) for construction schedules, contact information, road closure notices and etc.

Prior to the commencement of any temporary road closures, the General Contractor will install appropriate traffic control signs, construction signs and barricades as per the Ontario Traffic Manual Book 7 in the vicinity of the Development site. The General Contractor will notify Condeland Engineering Ltd. and the Town of Halton Hills of any changes to the schedule and plan of construction, if required. All such signs are subject to change during the duration of construction as necessary.

A Pre-Construction meeting will be required prior to the commencement of the construction. Part of the purpose of the meeting will be to confirm the Construction Management Plan details and any further community notification that is required, as well as to review the appropriate measures to help minimize the effects of the construction on the public.

Information in order to maintain communication with Condeland, Contractor on site, Town contact are noted below.

Condeland Engineering Ltd.'s project manager shall be responsible to prepare and circulate a notice a minimum of five (5) days in advance of the commencement of any external construction activities with contact information and construction schedule. This notice will be prepared to the satisfaction of the Town before it is released. All residents within the impacted areas will receive the notice. It is the project manager's responsibilities to maintain a log that records the nature of any complaint; who



filed the complaint; the date/time of the complaint; and, how the matter was resolved along with the schedule of when the work was completed to resolve the complaint.

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Eden Oak (CREDITVIEW HEIGHTS) Inc.
Town of Halton Hills (GeorgeTown)

APPENDIX 'A'

Location Map