12100 Creditview Road Construction and Demolition Waste Management Plan

12100 CREDITVIEW ROAD CALEDON, ONTARIO OCTOBER 2024

1. INTRODUCTION

This plan provides a summary of the waste management procedures required to be implemented during the construction activities for the development located at 12100 Creditview Road in Caledon, Ontario. The purpose of this plan is to outline strategies and procedures for minimizing waste generation and maximizing the diversion of construction and demolition (C&D) materials in compliance with the Town of Caledon Green Development Standard (GDS), Metric 3.6: Construction Waste¹, and the Ontario Environmental Protection Act, O. Reg. 103/94: Industrial, Commercial, and Institutional Source Separation Programs².

The provincial regulation requires source separation of wastes for construction projects for buildings with a total floor area of 2,000 m² or greater. The Caledon Green Development Standard requires that all institutional, commercial, and industrial projects divert at least 50% of the total construction and demolition material from landfill from at least four material streams.

2. WASTE REDUCTION STRATEGIES

The following strategies are recommended to reduce the quantity of waste generated on site:

- Give preference to supply companies that can provide material in the dimensions specifically needed for the project or in quantities closer to the exact amount needed, to minimize material wastage.
- Give preference to supply companies that provide minimal packaging beyond that required for product protection, or those that ship materials in reusable or returnable packaging such as pallets or containers.
- Give preference to supply companies that accept returns of unused construction material.
- Protect construction materials from damage by storing them away from equipment traffic
 patterns, elevating them off the ground, storing them under cover, and keeping them level
 to prevent warping or twisting.
- Use products efficiently by keeping them organized and emptying one pallet or shipment before opening the next.

3. WASTE DIVERSION GOALS

- 1. Divert at least 50% by weight of the total construction and demolition (C&D) waste materials generated onsite.
- 2. Divert materials from at least *five* of the following major materials / waste streams:
 - Cardboard
 - Metals
 - Wood
 - Glass
 - Plastic
 - Gypsum

- Insulation Materials
- Concrete
- Masonry

¹ Town of Caledon: https://www.caledon.ca/en/town-services/resources/Energy-Environment/Caledon-GDS-Guidebook.pdf

² O. Reg. 103/94: INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL SOURCE SEPARATION PROGRAMS (ontario.ca)

4. TARGETED MATERIALS

The following major waste streams expected to constitute 5%+ of total waste by weight are targeted for diversion from the landfill. Refer to **Table 3: Expected Waste Streams & Disposal Procedures** for materials that are targeted for diversion from landfill. The percentage shown is the approximate percentage by weight that each material is expected to account for out of the total waste material generated.

Values shall be updated by the general contractor or its designated construction manager as necessary to reflect the waste composition.

MaterialPercentage Estimated Total WasteConcrete and Brick40%Wood Products15%Scrap Metal10%Cardboard5%

5%

Table 1: Material Categories Targeted for Waste Diversion

5. TARGETED WASTE MATERIALS

- Materials are to be separated and deposited into separate containers at the site.
- The separate containers shall be clearly labeled for each type of waste material targeted for diversion.
- Refer to Table 3: Expected Waste Streams & Disposal Procedures for additional diversion and handling information specific to each anticipated material stream.

6. RESPONSIBLE PARTIES

Drywall

Table 2 defines the responsibilities required to implement this Construction and Demolition Waste Management Plan. The table is to be completed by the general contractor or its designated construction manager to identify the personnel that will take on the role to fulfill the responsibilities described.

Table 2: Parties Responsible for Implementation of Construction and Demolition Waste Management Plan

ROLE	RESPONSIBILITY	
CDWM Plan Supervisor: NAME, TITLE Company Name Address City, ON Postal Code (t) 111-1111-1111 ext. 111 (e) email address	 Implement Plan on-site throughout demolition and construction timeline Communicate requirements of the Plan to the project team, including subtrades Manage coordination with waste hauler (requesting documentation, QA/QC waste audit reports, etc.) Circulate a copy of this Plan to subtrades 	

ROLE	RESPONSIBILITY	
Construction Site Supervisor:		
NAME, TITLE Company Name Address City, ON Postal Code (t) 111-1111-1111 ext. 111 (e) email address	 Manage waste diversion practices on-site Identify areas of noncompliance and take corrective action 	

7. COMMUNICATIONS PLAN

- An on-site, preconstruction meeting shall be conducted including representatives from all
 subcontractors to review the project's waste diversion goals and management processes.
 Attendance is <u>mandatory</u> for the subcontractor's key field personnel. The purpose of the
 meeting is to reinforce participants' understanding of and commitment to the project's
 waste reduction and diversion goals and requirements.
- Waste minimization and recycling activities shall be discussed during each job meeting.
 Strategies for course correction shall be discussed and implemented as needed if the project is not meeting the targeted waste diversion goals.
- Each contractor and subcontractor shall be provided a copy of this Plan and instructed in appropriate waste separation and handling procedures. A tour of the designated on-site recycling and waste management areas shall be conducted. Each subcontractor is expected to ensure that its crews understand and comply with the requirements of this Plan.
- Regular updates must be provided to the project developer reporting the progress to-date for achieving the project's waste recycling goals as mandated in the Town of Caledon Green Development Standard.

8. CONTAMINATION PREVENTION MEASURES

- A specific area shall be designated on-site to facilitate separation of materials for potential recycling, salvage, reuse, and return.
- Small roll-off sorting containers shall be conveniently located in various work areas. The containers shall be well-marked and kept clean to prevent contamination.
- Recycling and waste containers shall be labeled in English and French, with acceptable/unacceptable materials posted. Signage may show a representative image of the materials to be recycled.
- The contents of the small sorting bins shall be periodically consolidated in the appropriate dumpsters.
- Sufficient containers for non-recyclable materials shall be provided and located next to recycling containers, with clear signage.
- Containers shall be securely covered when not supervised. Precautions are to be taken to deter any contamination by the public.
- Hazardous wastes shall be separated and stored in a designated area on-site and shall be
 disposed of in accordance with all relevant local regulations. These wastes shall be tracked
 separately and excluded from the quantification of the project's total waste.

9. EXPECTED WASTE STREAMS & DISPOSAL PROCEDURES

The following waste materials are expected for this project and shall be included in the waste diversion rate calculation. **Table 3** below indicates the recommended disposal method, and the appropriate waste handling procedure.

The general contractor or its designated construction manager are required to review and update (if necessary):

- The jobsite disposal method to confirm whether wastes will be source-separated or disposed of in a commingled container.
- The estimated quantities of waste per each material waste stream.

Table 3: Expected Waste Streams & Disposal Procedures

Waste Stream	Jobsite Disposal Method	Handling Procedure	Estimated Quantity
Concrete: Including CMU	Recycle Source-separated container / commingled recycling container	Place excess concrete, free of waste, in appropriate dumpster	X tonnes
Asphalt	Recycle Source-separated container / commingled recycling container	Remove asphalt via loader and place in truck to be hauled from site	X tonnes
Scrap metal: Including rebar, steel studs, metal flashing, scrap hardware, embeds, hollow metal and aluminum frames, piping	Recycle Source-separated container / commingled recycling container	Place acceptable scrap metal in appropriate dumpster	X tonnes
Wood products: Untreated wood, plywood, OSB, particle board, clean dimensional wood, wood pallets	Recycle Source-separated container / commingled recycling container	Place wood, free of waste materials, that is unusable for construction in appropriate dumpster Place painted/treated wood in "Landfill Only" dumpster	X tonnes
Masonry products: Including face bricks, hollow bricks	Recycle Source-separated container / commingled recycling container	Stockpile bricks that are unusable for construction for return to the manufacturer	X tonnes

Cardboard	Recycle Source-separated container / commingled recycling container	Clean cardboard will be broken down and placed in appropriate dumpster Unless a diversion method or outlet is identified, all packing materials must be removed and disposed of properly in the "Landfill Only" container	X tonnes
Ceramic tiles	Recycle Commingled recycling container	Place ceramic tile scraps in appropriate dumpster	X tonnes
Drywali	Recycle Source-separated container / commingled recycling container	ommingled appropriate dumpster	
Aluminum and plastic containers, mixed paper	Recycle "Recycling" tote	Place in general recycling tote	X tonnes
All other non-recyclable C&D waste	Landfill "Landfill Only" container	Place all other waste that cannot be recycled in "Landfill Only" dumpsters	X tonnes

10. ADDITIONAL WASTE MATERIALS

The following waste materials are <u>excluded</u> from the diversion rate calculation but must be tracked and reported separately in the project's construction waste report.

Table 4: Guidance for Additional Waste Streams

Waste Stream	Description/Information	
Land-clearing debris	Land-clearing debris materials are natural (e.g., rock, soil, vegetation) and should be diverted from the landfill to the greatest extent possible.	
Hazardous materials Hazardous materials shall be separated and stored in a specific area and shall be disposed of in accordance with all relevant local regula		

11. RECYCLING FACILITIES AND PROCESSING METHOD

The general contractor or its construction manager are directed to identify and report the recycling facility and processing method for each anticipated diverted waste stream that is included in the diversion rate calculation in **Table 5**: **End Destinations for Waste Streams** below. This information is to be obtained from receiving letters obtained from the relevant waste hauler(s).

Table 5: End Destinations for Waste Streams

Waste Stream	Destination	Processing Information	Expected Diversion Rate
Concrete	Facility Name and Address	TBD	TBD
Asphalt	Facility Name and Address	TBD	<u>TBD</u>
Scrap metal	Facility Name and Address	TBD	TBD
Wood products	Facility Name and Address	TBD	TBD
Cardboard	Facility Name and Address	TBD	TBD
Drywall	Facility Name and Address	TBD	TBD
Glass	Facility Name and Address	TBD	TBD
Plastic	Facility Name and Address	TBD	TBD

12. TRACKING PROCEDURES & RECORDS

- All construction and demolition waste materials that leave the construction site are to be recorded and tracked by the general contractor.
- The general contractor or its construction manager shall communicate expectations for waste tracking and reporting and request confirmation of the waste hauler's participation.
- Waste hauler reports shall be used for documentation, and waybills shall be requested from contracted waste haulers in addition to monthly diversion reports.
- The general contractor or its construction manager shall request that the waste receiving facility (or facilities) provide documentation outlining facility's average recycling/diversion rate during period of project's demolition and construction phase. The waste disposal site must be operating under the authority of an environmental compliance approval per O. Reg. 103/94.
- Estimated weight of materials that are reused on site or salvaged for reuse on other projects by subcontractors or vendors shall be recorded.

- Receipts shall be retained, and weight shall be estimated for any materials donated to charities, reuse retailers, or other third-parties that can verify and track incoming and outgoing materials.
- The general contractor shall calculate the total waste generation by tracking all materials generated from construction to completion, including all waste and diverted materials.
 - Any commingled materials must be sent to a recycling facility for processing that posts and tracks an average recycling rate (minus alternative daily cover, or ADC). Include materials destined for ADC in the calculations as waste. Any materials sent to a commingled recycling facility for processing must take the facility average recycling rate and must include any ADC as waste (not diversion).
 - The following waste types are excluded from the total waste generation calculation: hazardous materials and land-clearing debris.

13. CONSTRUCTION WASTE REPORTING

A final report on all the waste for the project shall be produced that includes the following information:

- Total construction and demolition waste produced by the project.
- Types of waste material and quantity of each material.
- Total waste diverted and diversion rate
 - Diversion rate = (Total construction and demolition waste diverted from the landfill
 / Total construction and demolition waste produced by the project) x100
- Land-clearing debris or hazardous waste are to be <u>excluded</u> from the diversion rate calculation, but the disposition of these materials shall be separately tracked and reported.
- Construction materials to be processed into ADC will be included in the total construction and demolition waste produced by the project in the diversion rate calculation.