

# Worksheet #2 - Before and During Construction on Land

---

Use this worksheet to assess potential opportunities and constraints regarding construction.

## ***Why should you be concerned?***

- Your property is part of a larger landscape, so any project you undertake may not only affect your immediate neighbours, but also have important consequences for land and water farther away.
- There may be existing legislation, regulations, and zoning that affect your project plans. Check with your municipal office and MNR office to ensure that your project is permissible.
- You should ensure that your project is completely contained within your property. Often, property lines are not readily apparent or often contain covenants with the Crown, easements and/or rights of way. Check or have a lawyer check with the Land Registry Office for your area to see if your property has any of these constraints that may affect where you may build.
- Many lots on Georgian Bay have, or had, an Original Shore Road Allowance which means you may not own the waterfront.
- Shorelines and lake bottoms along the shore are protected under Federal legislation such as the Fisheries Act. Under this legislation, the onus falls upon shoreline property owners to ensure that they do not “harmfully alter, disrupt, or destroy” fish habitat.

## ***What you can do.***

1. Make a plan including an inventory of existing plants, features, and structures. Include a photo log of your property from different angles. This may help your planning in the off season. Strive to minimize your impact on existing trees and other natural features.
2. Start early and be organized. The permitting process may take more than several months.
3. Protect yourself: keep records, including permit applications. These can be useful if disputes should arise with agencies or neighbours in the future.
4. Ensure that all construction wastes are properly managed.
5. Be a land steward: contact your local MNR office if you witness or observe shoreline alteration or potential environmental damage. You can call the MNR toll-free reporting line (24 hours, 7 days a week) or for anonymity, contact Crime Stoppers. See Resources list for information.

# Before and During Construction on Land: How do you rate?

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>PERMITS AND REGULATIONS</b>					
1. <b>Knowledge and understanding of application process</b>	<p>Planning begins the year before work is to begin.</p> <p>Check with local municipality to determine if a permit is required.</p>	<p> <b>Tip</b> Make sure you review an updated, legal survey of your property before you begin construction. Property boundaries are often difficult to find.</p>		<p>No planning involved. Expect immediate start.</p> <p><b>*Necessary permits are not obtained.</b></p>	<input type="checkbox"/>
<b>PREPARING A SITE PLAN</b>					
2a) <b>Knowledge of existing natural features of the property</b>	<p>Thorough understanding of natural features, including long-term history of water levels.</p>	<p>Identification of existing and/or sensitive natural features or areas.</p>	<p>General idea of existing natural features.</p>	<p>No knowledge of existing natural features or sensitive areas.</p>	<input type="checkbox"/>
2b) <b>Knowledge of the impact of construction on existing natural features of the property</b>	<p>Proposed construction will not harm sensitive natural features.</p>	<p>Awareness of the potential for construction impact and precautions taken.</p>	<p>Awareness of the potential for construction impact.</p>	<p><b>*Disregard of potential for construction impact. No precautions taken.</b></p>	<input type="checkbox"/>

*\*These conditions may violate provincial legislation or municipal by-laws.*

**FYI**

The Ontario Endangered Species Act, Section **9-1** states that “No person shall, kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species; Section **10-1** states that “No person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario List as an endangered or threatened species”

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>PREPARING A SITE PLAN</b> <i>continued</i>					
<b>3. Size and location of various activity areas</b>	<p>Intensively used areas and paths are concentrated and located away from water's edge, away from steep slopes, and behind vegetation (if available). Paths follow natural contours.</p> <p><b>AND</b> proposed construction areas are cognizant and respectful of where neighbours have located their existing structures/activity areas.</p>		<p>Intensively-used areas are not near surface water but in locations that might cause erosion, affect natural water courses, and/or affect areas of vegetation.</p>	<p>Intensively-used areas are near surface water, in locations which will result in erosion, and will significantly diminish natural standing vegetation.</p> <p><b>AND</b> no thought is given to the impact of structure and/or activity area on neighbours.</p>	<input type="checkbox"/>
<b>4. Wind and Sun</b>	<p>Where possible, habitable structures are sheltered by existing vegetation so as to provide a sun shelter and resultant cooling. Permanent residences are situated to benefit from passive solar gain in winter.</p>	<p>Where possible, habitable structures are located in areas with minimal shelter but where native tree species for wind and sun protection are planned.</p>		<p>No consideration given to location of structures relative to wind and sun protection.</p>	<input type="checkbox"/>

 **Tip**

Hire qualified contractors who will respect your land and your plans; use written contracts to clearly outline responsibilities and expectations.

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>DURING CONSTRUCTION</b>					
<b>5. Minimize erosion and/or compaction</b>	Project area is divided into smaller projects and done sequentially.	Only the area necessary for the project is cleared.	Large areas are cleared but vegetation is restored.	Entire property is cleared at once.	<input type="checkbox"/>
 <b>Tip</b> Protect all soil/sand piles from erosion and avoid construction during heavy rains.	Where it exists, a buffer strip of natural vegetation as wide as possible (greater than 30 metres) is retained along shoreline.	Project site requires minimal removal of trees and shrubs in buffer strip.	Most vegetation in buffer strip is maintained but undercutting of limbs and clearing of underbrush occurs in large areas.	Buffer strip is bulldozed and vegetation is completely removed.	<input type="checkbox"/>
	Project does not interfere with existing surface runoff patterns.		Project interferes minimally with existing surface runoff patterns.	Project interferes with existing surface runoff patterns.	<input type="checkbox"/>
 <b>Tip</b> Place straw bales around vulnerable features such as wetlands and between sand/dirt piles and shorelines. Heavy duty silt fencing can trap and kill snakes. It should only be used if maintained in an upright position.	Disturbed areas are replanted as quickly as possible with native species.	Disturbed areas are replanted as quickly as possible with non-invasive species.	Bare soil is covered immediately with burlap and/or mulch.	Bare soil is left exposed.	<input type="checkbox"/>
	Use of machinery is minimal.  <b>AND</b> machinery used is appropriate to job size.	Machinery is used but some measures are taken to utilize existing cleared corridors.	Machinery is used and new corridors through vegetation are cut for convenience.	Heavy machinery is used excessively with significant clearing of vegetation.	<input type="checkbox"/>

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>DURING CONSTRUCTION</b> <i>continued</i>					
<b>6. Location of construction facilities and access</b>	All construction materials are stored away from downspout openings,  <b>AND</b> well back from the shoreline or watercourse (preferably 30 metres or 100 feet).	All construction materials are stored away from downspout openings.	Only hazardous construction materials are stored away from downspout openings, open water or any watercourse.	Construction materials are stored without regard to runoff patterns.	<input type="checkbox"/>
	Concentrate and restrict vehicle access to minimize site disturbance and soil compaction.	Vehicle access is kept away from steep edges, shorelines, slopes, or other sensitive areas.	Concern about compaction is limited to septic leaching bed.	Vehicles are parked or driven throughout site.	<input type="checkbox"/>
	Toilet facilities are available.			Toilet facilities are not available.	<input type="checkbox"/>
	Shoreline and watercourse features are not interfered with by the location of facilities and access.			<b>*Location of facilities and access interfere with shoreline and watercourse features.</b>	<input type="checkbox"/>

\*These conditions may violate provincial legislation or municipal by-laws.

### Tip

A "Working in Massasauga Habitat" DVD is available from [www.gbbr.ca](http://www.gbbr.ca). Please ensure that construction companies working on your property are aware of this resource.



Massasauga (Threatened) Credit Toronto Zoo

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>DURING CONSTRUCTION</b> <i>continued</i>					
<b>7. Protecting existing features</b>	Check if there is a municipal by-law that protects the trees on your property. Design or plan accordingly.	Develop a plan or design first and then check if there is a municipal bylaw that protects the trees on your property. Proceed accordingly.		*Cut trees down on your property without checking if a municipal tree-cutting bylaw exists.	<input type="checkbox"/>
 <b>Tip</b> Plan to be on site any time trees are to be removed.	Protect trees from damage caused by digging and heavy machinery. <b>AND</b> remove no trees for construction	Protect trees from damage caused by digging and heavy machinery, <b>AND</b> clearly mark those trees that need to be felled to avoid unnecessary tree removal.	Trees are not protected during construction but any damage incurred is immediately and appropriately handled.	Damage to tree trunks, limbs and roots is left unattended.	<input type="checkbox"/>
	Soil grade is not altered <b>AND</b> soil around trees is not compacted.	Soil grade is not altered within 3 metres (10 feet) of dripline of any trees to be preserved <b>AND</b> there is minimal soil compaction near dripline.	Soil grade is partially altered in sections within dripline <b>AND/OR</b> materials are stored within the dripline for limited periods.	Soil grade level with the dripline is permanently altered from pre-construction level. <b>AND/OR</b> soil is compacted around trees.	<input type="checkbox"/>
	Septic bed, well(s) and environmentally sensitive features such as wetlands are protected, <b>AND</b> distance requirements are respected.	Septic bed, well(s) and environmentally sensitive features such as wetlands are protected from construction activity.	Septic bed and well are protected from construction activity.	<b>*Distance requirements are not considered in protected septic bed, wells or environmentally sensitive features.</b>	<input type="checkbox"/>

\*These conditions may violate provincial legislation or municipal by-laws.

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>DURING CONSTRUCTION</b> <i>continued</i>					
<b>8. Purchasing and location of soil or fill</b>	No use of off-site soil or fill.	Limited use of off-site soil and/or fill,  <b>AND</b> awareness of the source of soil or fill,  <b>AND</b> no excess or unnecessary fill is used,  <b>AND</b> approval is obtained.	Limited use of off-site soil and/or fill,  <b>AND</b> no awareness of the source of soil or fill,  <b>AND</b> approval is obtained.	Excessive use of off-site soil or fill,  <b>*OR fill is dumped in any fill-regulated area such as a shoreline.</b>	<input type="checkbox"/>
<b>9. Blasting</b>	No blasting of rock.		Limited blasting is completed.  <b>AND</b> blasting mats are used.  <b>AND</b> blasted rock is not placed in wetlands or in the near shore area.	Multiple blasts are completed.  <b>OR blast rock is dumped in any fill-regulated area such as a shoreline.</b>	<input type="checkbox"/>
<b>10. Construction Materials</b>	Local non-hazardous materials used where possible,  <b>AND</b> obtained in a responsible and appropriate manner.	Non-hazardous materials used where possible,  <b>AND</b> no use of oil-based paints or varnishes.	Minimal use of hazardous materials where necessary.	Hazardous materials are used,  <b>AND/OR</b> materials sourced unnecessarily from far away or from environmentally damaging production practices.	<input type="checkbox"/>

**Tip**  
Know where your topsoil or fill is coming from – it may bring contaminants and invasive species onto your property.

**FYI**  
The volume of rock displaced by blasting is 2-3 times greater than in its original state.

\*These conditions may violate provincial legislation or municipal by-laws.

Topic	Best <b>4</b>	Good <b>3</b>	Fair <b>2</b>	Poor <b>1</b>	Your Rating
<b>DURING CONSTRUCTION</b> <i>continued</i>					
<b>10. Construction Waste</b>	Your local municipality is contacted before construction to learn how to properly sort and dispose of construction waste.  AND it is ensured that contractors dispose of waste appropriately.	Reputable waste removal/disposal company is hired to remove and appropriately dispose of all hazardous waste.	Care is taken prevent paint or solvents from getting into waste water or septic system or open surface water.	<b>*Waste material or excess fill is dumped into open surface water</b>  <b>*OR waste material is burned (including in burn barrels).</b>	<input type="checkbox"/>
	Waste containers are clearly labelled and waste materials are recycled where possible.	Waste containers are clearly labelled.		Waste is not sorted and recycling of material is not a priority.	<input type="checkbox"/>
	Absolutely no concrete or construction wash water flows into open surface water, towards trees or into septic system.			<b>* Concrete or construction wash water flows into open surface water or is drained into septic systems.</b>	<input type="checkbox"/>

 **Tip**

Paint (any kind) is a hazardous substance. Take unwanted paint to your local hazardous waste depot or return to the place of purchase. It is illegal to pour paints or thinners into runoff channels or surface water. Inform your painting contractor of your need for compliance.

*\*These conditions may violate provincial legislation or municipal by-laws.*

# Resources List

---

## Before and During Construction on Land

### *For more information....*

#### **Building Permits**

- Local municipality's Chief Building Official (CBO)  
*See Blue Pages*
- Ministry of Municipal Affairs and Housing  
Building and Development Branch  
777 Bay St. 2nd floor  
Toronto, ON M5G 2E5  
(T): 416.585.6666 (F): 416.585.7531
- Ontario Building Code (OBC)
  - regulates design, construction, operation, & maintenance of on-site septic systems and new building/structure construction  
[www.obc.mah.gov.on.ca](http://www.obc.mah.gov.on.ca)  
email: [codeinfo@mah.gov.on.ca](mailto:codeinfo@mah.gov.on.ca)

#### **Burning**

- *Before you burn grass and debris...* Brochure. Ministry of Natural Resources. 5 pp. ISBN 0-7729-5716-9.
- *Open Burning*. Information Sheet. Ministry of Environment (MOE). PIBS 631b.

#### **Landscape Design**

- Stevens, J. (ed.) 1994. *Living Near the Water: Environment Design for Shoreline Properties*. Burnstown, Ontario: General Shore Publishing House.
- Henderson, C.L. *et al.* 2000. *Landscaping for Wildlife and Water Quality*. St. Paul, Minnesota: Department of Natural Resources.
- The Living by Water Project [www.livingbywater.ca](http://www.livingbywater.ca)

#### **Resource Violations Reporting**

- CRIME STOPPERS at 1-800-222-8477. (1-800-222-TIPS)
- MNR toll-free reporting line: 1-877-847-7667

#### **Environmentally Safe Building**

- Ontario Centre for Green Building Design and Development  
[www.greenbuildingontario.ca](http://www.greenbuildingontario.ca)

#### **Construction Wastes**

- Local municipality  
*See Blue Pages*

# Action Plan Worksheet #2 - Before and During Construction on Land

---

Any ratings of 1 or 2 indicate areas where your construction project may need to be changed to reduce the potential for environmental damage and water contamination. Use the information from the worksheet and the resource section to help analyze your potential problems and decide what you can do to solve or control them. Remember, this is YOUR Action Plan. It must suit you and your property.

Topic Number	Workshop Theme	My Rating	Short-term Action	Long-term Action
4	Wind and Sun	1	Identify where and which native tree species you will plant to gain protection from wind/sun and allow for winter solar gain.	Purchase, plant and care for trees, particularly their watering needs.