

Worksheet #3 – Before and During Construction

Use this worksheet to assess potential opportunities and constraints about 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, local Conservation Authority, or MNR office to ensure that your project is permissible.
- Shorelines of lakes, rivers, and streams 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. Offenders may be substantially fined or face criminal charges, and face restoring the shoreline to its previous state. This includes on-line ponds.
- Investigate who owns any shoreline areas of your property – it may not be you. If it is owned by the Crown, the Public Lands Act will apply, and a permit may be required for any development – even a restoration project. Only activities permissible under this legislation will be allowed.

What can you do?

1. Make a plan including an inventory of existing plants, features, and structures. *See Worksheet #3.*
2. Start early and be organized – the permit 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. Be a land steward: contact your local MNR office if you witness or observe shoreline or stream alteration, or potential environmental damage.

You can call the MNR toll-free reporting line (24 hours, 7-days a week):
1-877-TIPS-MNR
Or for anonymity, contact Crime Stoppers:
1-800-222-TIPS

Before Construction: How do you rate?

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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PERMITS & REGULATIONS

1 Knowledge and Understanding of Application Process

Planning begins the summer before work is to begin.

Check with your local municipality and Conservation Authority to determine if a permit is required.

tip

It is important to start early since some permits may have specific timing windows for project implementation. Remember permits are an opportunity to get expert technical advice and information on possible financial incentives for your project.

Make sure you review an updated, legal survey of your property before you begin construction. Erosion or deposition processes may have occurred over time and may be misleading as to where your property ends.

No planning involved. Expect immediate start.

Necessary permits are not obtained.*

PREPARING A SITE PLAN

2a Knowledge of Existing Natural Features of the Property

Thorough understanding of natural features, including long-term history of water levels.

Identification of existing and/or sensitive natural features or areas.

General idea of existing natural features.

No knowledge of existing natural features or sensitive areas.

2b Knowledge of Effect of Construction on Existing Natural Features of the Property

Construction does not impact existing features.

Awareness of the potential for construction impact and precautions taken.

Awareness of the potential for construction impact.

Disregard of potential for construction impact. No precautions taken.

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

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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PREPARING A SITE PLAN *continued*

3	Size and Location of Various Activity Areas	Intensively used areas and paths are concentrated and located at least 30 m (100 ft) from surface water and away from steep shoreline slopes.	Intensively-used areas are not near surface water but in locations contributing to increased erosion, such as at the top edge of steep slopes.	Intensively-used areas are near surface water and in locations contributing to increased erosion, such as at the top edge of steep slopes.	<input type="checkbox"/>		
		4	Wind and Sun	All outdoor living areas are sheltered from the prevailing wind.	Where possible, outdoor living areas are sheltered from the prevailing wind.	No consideration given to the prevailing winds and sheltering outdoor living areas.	<input type="checkbox"/>
		Window locations are placed to allow for maximum winter sunlight.	Where possible, window locations are placed to allow for maximum winter sunlight.	No consideration given to the sun exposure in winter.	<input type="checkbox"/>		
		Evergreen trees are kept/planted on the northwest face for wind protection, AND deciduous trees are kept/planted on the southwestern face for summer shading.	Evergreen trees are kept/planted on the northwest face for wind protection, OR deciduous trees are kept/planted on the southwestern face for summer shading.	Landscaping design attempts to use trees strategically to improve energy conservation to a small degree.	Tree placement does not consider climatic factors.	<input type="checkbox"/>	

tip

Consider adding a natural wind break or snow fence to your design.

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
DURING CONSTRUCTION					
5 Minimizing Erosion and/or Compaction	Project area is subdivided 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"/>
	Buffer strip of natural vegetation wider than 30 m (100 ft) retained along shoreline or surface water.	Project site requires minimal removal of trees and shrubs in buffer strip.		Buffer strip is bulldozed clear of all existing vegetation.*	<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"/>
	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 or mulch.	Bare soil is left exposed.	<input type="checkbox"/>
	Use of machinery is minimal, AND machinery used is appropriate to job size.			Heavy machinery is used excessively.	<input type="checkbox"/>

tip
 Protect all soil/sand piles from erosion and avoid construction during heavy rains.
 Straw bales or silt fences placed around vulnerable existing features, such as wetlands, will help protect them from sedimentation.

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

Rating	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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DURING CONSTRUCTION *continued*

6 Location of Construction Facilities and Access	All construction materials are stored away from downspout openings, AND at least 30m (100 ft) from the shoreline or watercourse.	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 soil compaction.	Vehicle access is kept away from shorelines, slopes, or other sensitive areas.	Concern about compaction is limited to septic leaching bed.	Vehicles are parked or driven throughout site, contributing to soil compaction.	<input type="checkbox"/>
	Toilet facilities are available.			Toilet facilities are not available.	<input type="checkbox"/>
	The location of buildings and access do not interfere with shorelines or waterways.			Location of buildings and access interfere with shorelines, waterways, or runoff patterns.*	<input type="checkbox"/>

tip

Fence or rope off all areas that are not to be disturbed.

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

Rating	Best 4	Good 3	Fair 2	Poor 1	Your Rating
DURING CONSTRUCTION <i>continued</i>					
7	Protecting Existing Features	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"/>
		Protect trees from damage caused by digging and heavy machinery, AND remove no trees for construction.	Protect trees from damage caused by digging and heavy machinery, AND 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. AND soil around trees is not compacted.	Soil grade is not altered within 3 metres (10 feet) of dripline of any tree to be preserved, AND there is minimal soil compaction near dripline.	Soil grade is partially altered in sections within dripline, OR materials are stored within dripline for limited periods.	Soil grade level within the dripline is permanently altered from pre-construction level, OR soil is compacted around trees. <input type="checkbox"/>
		Septic bed, well(s), and environmentally sensitive features (e.g. wetlands and rare trees) are protected, AND distance requirements are respected.	Septic bed, well(s), and environmentally sensitive features (e.g. wetlands and rare trees) are protected from construction activity.	Septic bed and well are protected from construction activity.	Distance requirements are not considered in protecting septic bed, wells, or environmentally sensitive features.* <input type="checkbox"/>

tip
Check with your local municipality if there is a tree by-law that protects the trees on your property.

tip
Plan to be on site any time trees are to be removed.

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

Rating	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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DURING CONSTRUCTION *continued*

<p>8 Purchasing and Location of Soil or Fill</p>	<p>No use of off-site soil or fill.</p>	<p>Limited use of off-site soil and/or fill,</p> <p>AND awareness of the source of soil or fill,</p> <p>AND no excess or unnecessary fill is used,</p> <p>AND approval is obtained.</p>	<p>Limited use of off-site soil and/or fill,</p> <p>AND no awareness of the source of soil or fill,</p> <p>AND approval is obtained.</p>	<p>No consideration for the non-renewable nature of soil,</p> <p>OR excessive use of off-site soil or fill,</p> <p>OR fill is dumped in any fill-regulated area, such as a shoreline.*</p>	<input type="checkbox"/>
	<p>tip It is dangerous and illegal to deposit fill in flood-prone or regulated shoreline areas.*</p>	<p>tip Be aware that fill and machinery brought on-site may be carrying invasive weeds seeds and take precautions.*</p>			

<p>9 Construction Materials</p>	<p>Local non-hazardous materials used where possible,</p> <p>AND obtained in a responsible and appropriate manner.</p>	<p>Non-hazardous materials used where possible,</p> <p>AND no use of oil-based paints or varnishes.</p>	<p>Minimal use of hazardous materials where necessary.</p>	<p>Hazardous materials are used,</p> <p>OR materials sourced unnecessarily from far away or from environmentally - damaging production practices.</p>	<input type="checkbox"/>
	<p>tip Know where your topsoil or fill is coming from – it may bring contaminants and invasive species onto your property.</p>				

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

Rating	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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DURING CONSTRUCTION *continued*

10 Construction Waste

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 to at least prevent paint or solvents from getting into waste water or septic system, or open surface water.

Waste material or excess fill is dumped into open surface water,

OR waste material is burned (including burn barrels).*

Waste containers are clearly and appropriately labeled,
AND waste materials are recycled when possible.

Waste containers are clearly and appropriately labeled.

Waste is not sorted,

AND recycling of material is not a priority.

Absolutely no concrete or construction wash water flows into open surface water, towards trees, or into septic system.

Concrete or construction wash water flows into open surface water, or is drained into septic system.*

tip

Paint (any kind) is a hazardous substance. Take it to your local hazardous waste depot. 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

For more information...

Municipalities

Consult the Blue Pages in your phone book

- Local municipality's Chief Building Official (CBO)
- Construction Wastes

Ontario Ministry of Municipal Affairs and Housing

Ontario Building Code (OBC) regulates design, construction, operation, and maintenance of on-site septic systems and new building/structure construction.

mah.gov.on.ca/Page7393.aspx

Ontario Ministry of Natural Resources

Burning Grass and Woody Debris Safely

mnr.gov.on.ca/en/Business/AFFM/2ColumnSubPage/STEL02_165724.html

Ontario Ministry of the Environment

Information Sheet on Open Burning

ene.gov.on.ca

Conservation Authorities

conservation-ontario.ca

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.

Resource Violations Reporting

CRIME STOPPERS: 1-800-222-8477. (1-800-222-TIPS)

canadiancrimestoppers.org

MNR toll-free reporting line: 1-877-847-7667 (1-877-TIPS-MNR)

Fisheries and Oceans Canada

Factsheets:

'Working Around Water' Fact Sheet Series

dfo-mpo.gc.ca/regions/central/water-eau-eng.htm

Spills

Call the Ministry of Environment (MOE)

Spills Action Centre 1-800-268-6060