



MUNICIPAL PROPERTY ASSESSMENT CORPORATION

Industrial Wind Turbines – Inspection Project

Work Instructions

2013-05-01

Provided by: Assessment Standards & Mass Appraisal

Work Instructions

Objective

MPAC is undertaking a study to determine whether properties within 2km of an industrial wind turbine (IWT) are valued equitably compared to properties further away. That is not to say that IWTs do not affect value; but rather that any affect on value is accounted for in the 2012 current value assessments, or that the 2012 current value assessments are within standards.

A preliminary study has already been completed by looking at the centre of properties with IWTs and reviewing the sales on properties whose centre is within 1km, 2km, and 5km.

MPAC is now looking to expand the study by using the exact geographic co-ordinates of the IWTs and the co-ordinates of the surrounding houses.

MPAC has purchased the geographic co-ordinates of most IWTs across the province. However, upon reviewing the data, it has come to light that: (1) there are roll numbers on IPS with IWTs where the data provider did not deliver co-ordinates; and (2) the data provider delivered co-ordinates for IWTs and MPAC has no structure keyed on IPS on those roll numbers.

Before continuing with the study, both of these situations need to be addressed with the assistance of staff in Valuation and Customer Relations.

Once this data is collected and analyzed by Assessment Standards and Mass Appraisal (ASMA), additional data collection will be required for sold properties in proximity to properties with IWTs.

Instructions

Two files are being distributed with these instructions – one file contains roll numbers requiring staff to collect the geographic co-ordinates of the IWT(s) on a property (MPAC already has the IWT assessed); and the other file contains roll numbers requiring staff to assess the IWT(s) on a property (MPAC already has the geographic co-ordinates).

1. Roll Numbers Requiring Staff to Collect the Geographic Co-ordinates of the IWT(s) on a Property

To collect this data will require the use of a GPS device. For this project, we will use the “Garmin GPSMAP 76Cx color map navigator”, which will provide the latitude and longitude that is required. These units were used during the Provincial Land Tax (PLT) project in Northern Ontario in 2007. Instructions on using the device are found in Appendix 1.

The inventory file contains a list of roll numbers where MPAC data contains a structure code 567 (Wind Turbine) on IPS. However, the data provider did not supply geographic co-ordinates. Note that there is one line in the inventory per IWT, not per roll number. The inventory contains the IPS structure number of the IWT, it’s year of construction, and the generating capacity of the IWT in Megawatts (MW). The final column, “Estimated”, indicates whether the generating capacity has been estimated based on the value attributed to the structure. If possible, confirm the capacity while obtaining the co-ordinates – there should be a plate/stamp on the IWT with the generating capacity.

When recording the co-ordinates for the IWTs, take the measurement from as close to the IWT as possible. Hold the device as steady as possible for two minutes or until the co-ordinates stabilize, whichever comes first.

If you are unable to obtain close co-ordinates due to fences or other obstructions, take the measurement from as close as you possibly can; preferably such that there is a straight line between you and IWT, perpendicular to the road, and estimate what you think the distance is between where you take the measurement and where the IWT sits. Make sure that this is all recorded in the Comments. If possible, take a picture as well, and include it when you return the inventory files. Upon returning to the office, use iLOOKABOUT™ in an attempt to obtain more accurate co-ordinates. However, since these properties are generally in rural areas, you may not be able to obtain co-ordinates accurately using digital imagery. In either case, make note in the inventory that you have had to approximate the co-ordinates and the reason.

2. Roll Numbers Requiring Staff to Assess the IWT(s) on a Property

This inventory file contains a list of roll numbers where MPAC does not have an IWT on the Structure tab of IPS, but according to the data source purchased, there is an IWT on the property. **Note that for properties valued outside of IPS, we may in fact have the IWT assessed.** In some situations, it may be that there is an IT portion on the property with the correct value, representing the IWT and corresponding land, but no structure has been keyed

and no industrial land component created and valued. If this is the case, update IPS with the correct data.

For the roll numbers in this inventory, you are required to collect the data on the IWTs, key the structure and appropriate value into IPS, create an industrial land component with an appropriate value in IPS, and issue a supplementary or omitted assessment if required. **Note that for properties valued outside of IPS, these steps may be somewhat different; however, regardless of where a property is valued, IPS should contain a structure line for every IWT.** Of course, if there are any outstanding permits on DTS for the IWTs, ensure that they are marked as complete.

Some roll numbers in the inventory have (potentially) multiple IWTs to be assessed. If you find more IWTs on a property as compared to the inventory, make a note in the Comments field and include the co-ordinates. If you find less IWTs on a property as compared to the inventory, attempt to ascertain whether the IWTs you do find match anything on the inventory. If in doubt, please add as much detail to the Comments field on the inventory to help us understand the situation.

If the IWT is still in the process of being erected, please make a note in the comments field of the inventory file.

If there is no indication of any IWT on the property, or going to be added to the property in the near future, indicate this in the comments field of the inventory file.

What to do if the Owner isn't Home or Entry is Refused (from the Residential Valuation Theory and Data Collection Manual)

If a property owner or any other adult person with authority does not appear to be present at the time of the visit, or it appears no one is at home at the time of the visit, you will make every reasonable effort to confirm no one is at home and verbal contact is not possible. Immediately upon confirmation that no one is at home, you must attach a proper notice to the main or common entrance door or in the alternative the mailbox, if available, explaining the reason for your visit. The notice will provide the owner/adult with authority with a method to contact MPAC subsequent to the visit to discuss the reason for the visit and/or provide information that may be requested concerning the property. After you place the notice, you will then continue to complete an exterior inspection of the property while respecting areas with restricted access. (But only if it is believed no one is at home.)

Reminder: typical inspection procedures are to be followed; and IPS should be updated as required.

Workload Counts by Region (by Roll Number)

Region	Inventory 1	Inventory 2	Total
05	2	3	5
20	29	0	29
21	0	1	1
22	45	20	65
23	37	0	37
24	22	0	22
25	41	14	55
26	93	94	187
27	20	67	87
31	0	4	4

Questions

If you have any questions, please contact one of the following:

Jamie Stata
Region 25 – Owen Sound
519-371-9432 ext 262
Jamie.Stata@mpac.ca

OR
Scott Bradfield
Region 20 – Brantford
519-758-9591 ext 251
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OR
Jason Moore
Region 18 – St. Catharines
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Appendix 1 – Using the “Garmin GPSMAP 76Cx color map navigator”


Using these devices indoors may cause interference for the satellites which it uses to obtain coordinates. If you’re “getting to know” the device before taking it in the field to use, you may not get the results/steps below unless you’re outside.


For example, you may see that it’s “Acquiring Satellites” indefinitely, or for a very long time.

You may get the following message – if you do, chose “New Location”.

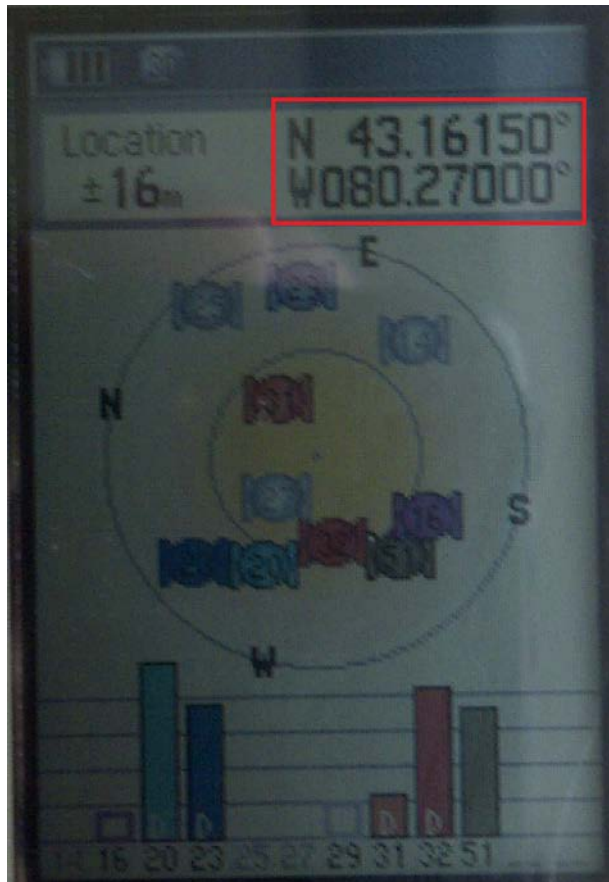


Insert two AA batteries into the device.

Turn the device on, by pressing and holding the  button for a few seconds.

Press the  button until you come to a screen showing satellites orbiting the earth. The screen may say “Acquiring Satellite” at the top until it has locked onto enough satellites.

Once numbers appear in the upper right hand of the screen, you are ready to obtain the geographic co-ordinates.



In the above example, you would record Co-ordinate 1 as 43.16150; and Co-ordinate 2 as 080.27000. Please record all numeric digits, including zeros. Do not include the N (for North) or W (for West) as all of Ontario is North of the Equator; and West of the Prime Meridian

With the exception of putting the batteries in the device, these steps may need to be repeated each time the device is turned off/on. However, there is a car charger that you can plug in which will allow you to keep the device turned on between properties.

Appendix 2 – Using AIM to Find Co-ordinates

AIM has the capability to plot the co-ordinates provided in the inventory file.

Log into AIM.

Near the top, beside “Locate”, select **ddd.ddddd** from the drop down. Enter the number under Coordinate_1 in the “Lat:” field. In the “Long:” field, enter the number under Coordinate_2, **with a negative sign in front of it.**

For example, to see exactly where on a property the IWT may be for the following line:

Reg	Roll_Num	Prop code	Hnbhd	Enbhd	Mktarea	CVA2012	Coordinate_1	Coordinate_2	Comments
22	220400000212850	200	A07	0342	RR050	\$288,000	N 44.007465	W 80.355460	

Search in AIM as follows:



This will show the location of the expected IWT on the property:

