

	TITLE: Digital Base Mapping Requirements for Electrical Servicing Working Procedure		
	RECOMMENDED: B. Wilson	NO: ECS0031	REV: 2
	APPROVED: C. Malone		
REV. DATE: 2016-03-25			

1. Introduction

Hydro Ottawa works with developers and their consultants to connect their proposed projects in a timely manner. In order to help reduce processing time associated with preparing electrical design site plan drawings for yourself or your client, please ensure the following requirements are met prior to submitting digital drawings to Hydro Ottawa. For all of Hydro Ottawa's servicing information requirements, please consult Hydro Ottawa's Conditions of Service – Section 3.

2. References

Hydro Ottawa – ECS0012 – Conditions of Service

3. Scope

Hydro Ottawa requires specific base mapping information to assist the developer and road authority with timely and accurate designs. This procedure lists the specific vector mapping features to be provided to Hydro Ottawa by the developer and their consultants.

4. Definitions

CAD Software: AutoCAD / AutoCAD LT

Drawing/Insertion Units: Unit of measurement that each unit in the drawing represents

Georeferenced Drawing: Drawing coordinates store real-world values, usually in meters.

External Reference (XREF): An external file (CAD, Image, PDF, etc) that is attached to a drawing file for viewing but is not edited directly.

Mapping Coordinate System: City of Ottawa utility infrastructure standard 3° MTM, Ontario Zone 9, NAD 83.

Proxy Objects: Simplified representations of custom objects that were created using specialized Autodesk products (AutoCAD Civil 3D, Map3D, Architecture).

5. Drawing Requirements

Existing & proposed drawing features to be delivered:

Project Information

a. Project phase areas	b. preliminary electrical design layout information	c. associated design notes
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Cadastral Information

d. Property lines	e. Street names	f. Civic addresses if available
g. Road allowance lines	h. Lot numbers	i.

Topographic Information

a. Driveways and parking lots	b. Sidewalks	c. Building footprints
d. Fences	e. Roadways & Curbs	f. Rail lines
g. Open water	h. Retaining walls	i. Sound barriers
j. Ditches	k. Trees	l.

Utility Information

a. Water lines, valve chambers, valves, hydrants	b. Storm sewer lines, related manholes, catch basins, catch basin leads, storm ponds, and culverts	c. Sanitary sewer lines and related manholes
d. Gas lines and valves	e. Telephone, communication lines	f. Poles
g. Street Lighting	h. Road cross section (profile) for non-standard roads	i.

Please do not include contours or cross-hatching with your submission unless requested by your Hydro Ottawa representative.

Schedule A - Digital Drawing Delivery Requirements for Hydro Ottawa

In order to help reduce processing time associated with preparing electrical design site plan drawings for yourself or your client, please ensure the following requirements are met prior to submitting digital drawings to Hydro Ottawa.

CAD Software: AutoCAD / AutoCAD LT

CAD Formats Accepted: AutoCAD 2013/LT2013 DWG or earlier.

Drawing Units: The appropriate drawing\insertion units must be set to ensure that the information received displays at the correct scale and location when overlaid with Hydro Ottawa's existing topographic/cadastral datasets.

External References: All XREFs should be bound to the main drawing file using the BIND command ('Bind' option) and exploded.

Mapping Coordinate System: Data to be geo-referenced to the City of Ottawa utility infrastructure standard 3° MTM, Ontario Zone 9, NAD 83.

***NOTE:** If a georeferenced site plan cannot be provided to the above standard, accurate property boundaries **must** be included.*

Proxy Objects: Files created using specialized Autodesk products (AutoCAD Civil 3D, AutoCAD Architecture, etc.) may contain custom objects that cannot be manipulated or purged with AutoCAD or AutoCAD LT. Any custom objects must be exploded to basic AutoCAD objects using the AECTOACAD (-EXPORTTOAUTOCAD) command.

Purging: All unused layers and block/style definitions should be purged using the PURGE command

Features to be Delivered:

- Property lines
- Road allowance lines
- Lot numbers
- Civic addresses if available
- Driveways and parking lots
- Project phase areas
- Building footprints
- Curb lines
- Fences
- Retaining walls and sound barriers
- Rail lines
- Street names

- Sidewalks
- Parking lots
- Water lines, valve chambers, valves, hydrants
- Storm sewer lines, related manholes, catch basins, catch basin leads, storm ponds, and culverts
- Sanitary sewer lines and related manholes
- Gas lines and valves
- Telephone, communication lines
- Cable TV lines
- Any preliminary electrical design layout information and associated design notes.

To help reduce file sizes and processing times, include only information that falls within the scope of the current project phase. Do not include contours or cross-hatching with your submission unless requested by your Hydro Ottawa representative.