Markham ePLAN Submission Standards
For all Development Applications

This is document provides guidance on how your submission files should be produced, formatted, named and where they should be uploaded. It does not specify which submission materials are required for any particular application. Please also refer to the Application Specific Quick Reference guide for a list of typical submission material requirements for a particular application type and also to the Pre-Consultation Checklist provided to you at the end of the Pre-Consultation process. The Quick Reference guides can be found on the under the Application Submission tab of the [web page dedicated to each of the application types](#).

PREPARING YOUR ELECTRONIC SUBMISSION

These Standards are applicable to all development applications made to the Planning, Engineering and Urban Design Departments. **All files uploaded must meet our Submission Standards**. Standards allow for easy identification of drawings by naming convention, vector file types in order to facilitate the most efficient review, colour coding of comments for visual identification of departments and so on.

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SUMMARY OF STANDARDS

Below is a high level summary of the Submission Standards. For more information on each requirement, refer to the detailed Sections on the following pages.

BLANK SPACE

The top right corner of all drawings and documents must be reserved for the City of Markham's electronic approval stamps. Please leave the top right corner completely blank on all drawings (with exception of the border) and supporting documents.

	Blank Space Dimensions *(0.5" from top & right sheet edge)*
Drawings	All sheets – 3" wide x 5" high
Supporting Documents	Front Page only – 2" wide x 2" height
Cover Letters / Forms	Not applicable
Modelling Files (for Transportation or Streetlighting review)	Not applicable

FILE FORMAT

File Type	Required Format
Drawings	Vector-based PDF Each drawing uploaded as a separate PDF Layers must be flattened
Supporting Documents	Vector or Raster based PDF
Cover Letters / Forms	Vector or Raster based PDF
Modelling Files (for Transportation or Streetlighting review)	Proprietary program format

All files must be uploaded in an orientation that allows them to be reviewed without having to be rotated. All drawings within each discipline must be on the same size sheet and in the same orientation.

FILE NAMES

File names must be 50 characters or less. Drawing files must be named so that they will sort alphabetically in the order that they are meant to be read within the drawing package. Drawing files must contain the sheet number and title.

UPLOAD LOCATION

Files are categorized as drawings or documents. Further those categories are broken down into the main review discipline that will be review and approve them. Please upload your files to the appropriate folder based on review discipline.

BLANK SPACE

ALL DOCUMENT AND DRAWING FILES

The top right corner of all drawings and documents must be reserved for the City of Markham's electronic approval stamps. Please leave the top right corner completely blank on all drawings (with exception of the border) and supporting documents.

The approval stamps are not transparent and may be applied over the base drawing. It is recommended that a cover page be added to supporting documents to ensure the stamp box does not obstruct required information. Cover pages must include the project address and a description or title of the supporting document.

|	**Blank Space Dimensions** *(0.5" from top & right sheet edge)*
Drawings	All sheets – 3" wide x 5" high
Supporting Documents	Front Page only – 2" wide x 2" height
Cover Letters / Forms	Not applicable
Modelling Files (for Transportation or Streetlighting review)	Not applicable

Below is an example of the required stamp box location for drawings:

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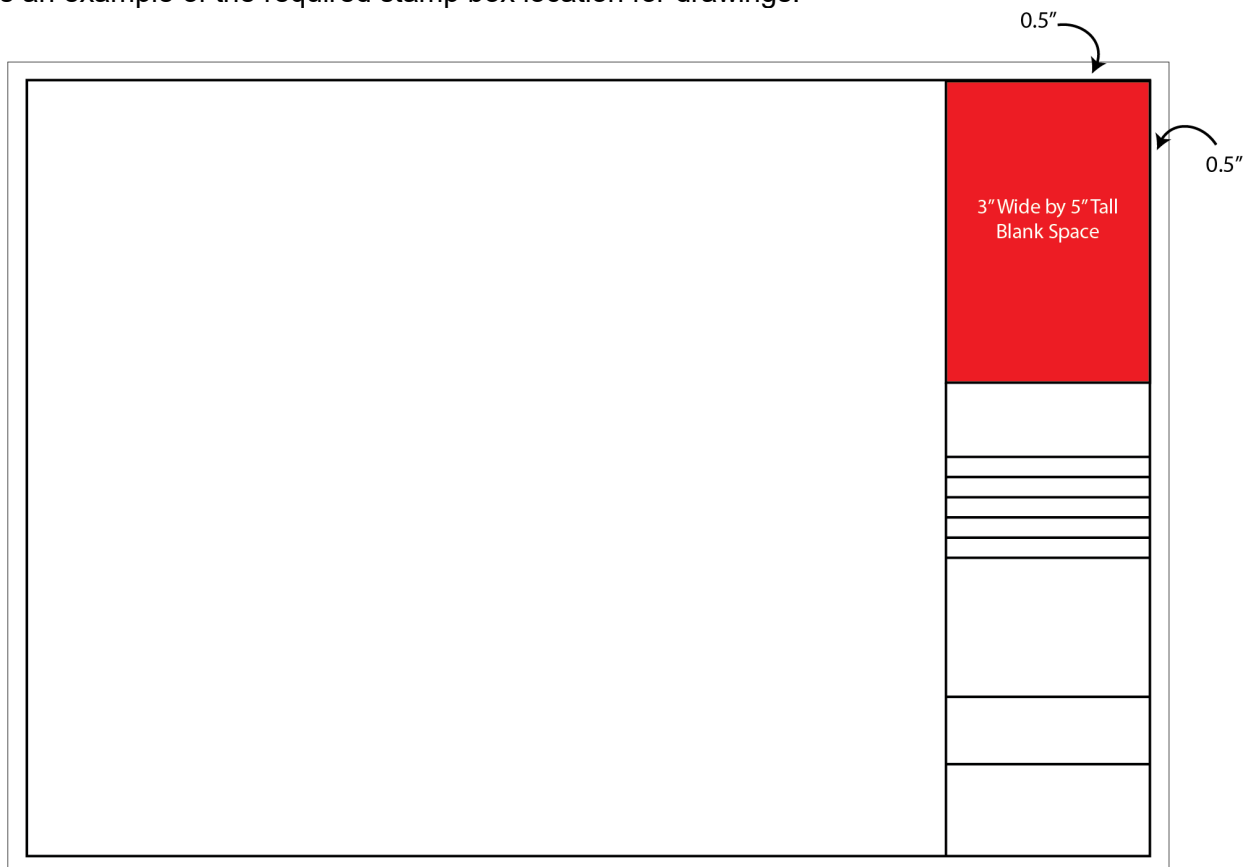
FILE FORMATS

DRAWING FILES

1. Each drawing sheet shall be uploaded as a separate file.

2. Only vector PDF files are accepted for drawings to be reviewed. CAD software is commonly used to create drawing files. As an example, drawings created in AutoCAD are converted to Vector PDF by using the Autodesk Vector Graphic Converter "DWG to PDF.pc3 plotter driver."

3. All drawings must be flattened into a single layer. We do not need to see layers that clutter the drawings.

4. Drawings must be optimized to be compatible with Adobe Acrobat 8.0.

5. All drawings must be oriented such that they can be read without needing to rotate the drawing.

6. When generating files from the source CAD, please ensure that all PDFs are grayscale. No colour should be on the greyscale drawings with the exception of borders, templates or stamps.

7. Site Plans, Elevations or Draft Plan of Subdivision Plans are required for the City's Geomatics group and shall be in CAD, JPEG and GIS formats. CAD files shall contain everything in one drawing with no XREFs. These shall be uploaded to the Geomatics Folder.
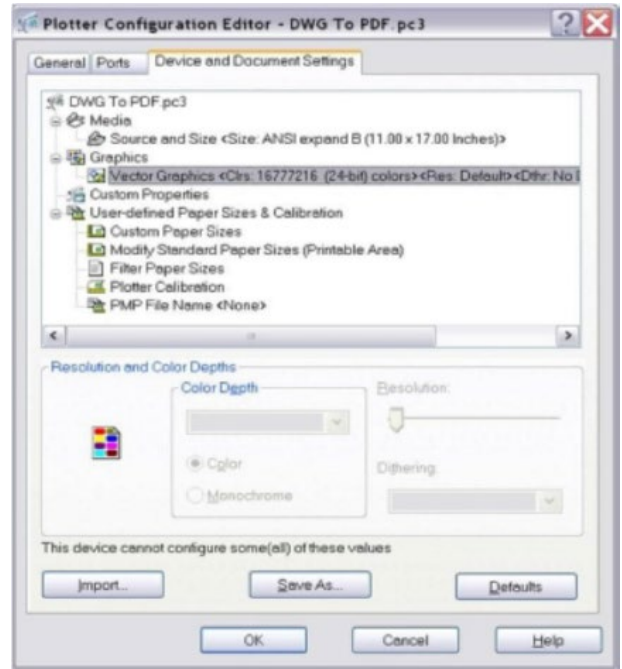
DOCUMENT FILES (REPORTS, MEMOS, ETC.)

1. Documents are all other files that are required as part of the application submission, which are not drawing files are considered "documents" (i.e. studies, reports, memos, cover letters, specifications, correspondence, modelling files, etc.).

2. Each document shall be uploaded as a separate file.

3. Supporting files may be in the following formats:
    PDF, XLS, XLSX, XLSM, PPT, PPS, PPTX, TIF, TIFF, JPG, PNG, IMG, or BMP.

    NOTE: If you need to upload a file format not listed above, please contact dsc@markham.ca so that we may make appropriate accommodations.

4. Supporting files types for CCTV Inspection Videos are:

    AVI, GIF, GP4, ISO, MOV, MP4, MVS, or WMV

5. Documents, particularly those containing calculations, shall be searchable PDF files.

6. Reports and Forms must be oriented such that they can be read without needing to rotate the document.

NOTE: Please ensure that any PDF files you submit are not password protected.

FILE NAMING STANDARDS

GENERAL

File names for both drawings and documents shall remain the same for all submittals. ***DO NOT*** *VERSION OR RENAME FILES WHEN UPLOADING RESUBMITTED FILES*.
Adding a revision number or any other change to the file name will delay the acceptance of your resubmission.

File names must be 50 characters or less. Names must **not** contain long dashes.

DRAWINGS

Files are sorted alphabetically when uploaded to ePLAN. The files in the *Drawings* folder must display in the same order as they would appear if they were printed and bound in a drawing set for a paper submission. For drawings belonging to a set, file names must contain the sheet number and title of the drawing. For single drawings not belonging to a set, sheet number is not necessarily required.

The following table can be used as an <u>example</u> when creating file names for your submission.

Drawing Type	Example File Name
Cover Page	A0.1-Cover-Page.pdf
Site Plan	A1.0-Site-Plan.pdf
Floor Plan	A1.1-Floor1&2.pdf
Elevations	A2.1-North-Elevation.pdf
Details	A3.1-Details.pdf
Landscape Plan	L.1-Landscape-Plan.pdf
Tree Assessment & Preservation Plan	TAPP.pdf
Cost Estimate	Cost-Estimate.pdf
Site Grading Plan	E1.1-GradingPlan.pdf
Site Servicing Plan	E2.1-Servicing-Plan.pdf
Sections	E3.1-Sections.pdf

NOTE: File names for Consent to Sever application submissions must include the Part number at the beginning of the file name (eg. **Part5**-A1.0-SitePlan.pdf)

DOCUMENTS

File names for documents submitted through ePLAN should include the name of the document.

UPLOAD LOCATION

The submission standards in this section apply to all files uploaded to ePLAN. There are two categories of files: drawings and documents. Documents includes forms, supporting documents, studies, memos and approval documents.

Each application type has a unique file folder structure. If the application type you have applied for happens to contain discipline specific subfolders, please use the below table as a guide on which discipline specific subfolder to upload certain drawing and document types to.

File Type	File Format	Examples/Discipline	Upload Folder

Drawings	*All drawings must be in vector-based pdf format, on standardized sized sheets, drawn to scale, with the top right corner left blank as per the Approval Stamp Area specification (see page 4).*
	
	Drawings are also required in CAD, JPEG and GIS for the City's Geomatics Group only for schedules, reports and mapping layers to be prepared.
		• Site plan → Planning, Geomatics
		• Survey → Planning
		• Architectural → Urban Design
		• Landscape → Urban Design
		• Grading → Engineering
		• Site Servicing → Engineering
		• Details → with associated drawing
		• Subdivision Plan → Planning, Geomatics
		• Elevations → Planning, Geomatics
		• Renderings → Urban Design
		• Streetlighting Drawings → Streetlighting
			▼ 📁 Drawings
			  📁 Engineering
			  📁 Planning
			  📁 Urban Design
			  📁 Geomatics
			
			Upload to the appropriate folder based on discipline.

Documents
Anything not falling into the Drawing Category
	Supporting document files include other files that are required as part of the application submission, but are not drawing files. Generally, these consist of studies, letters, calculations, reports, etc.	• Geotechnical Report → Engineering
		• Environmental Impact Study → Planning
		• Pre-Consultation Checklist → Planning
		• Arborist Report → Urban Design
		• Functional Servicing Report → Engineering
		• Noise Study → Engineering
		• Traffic Impact Study → Engineering
		• Woodland Compensation Plan → Urban Design
		• Angular Plane Study → Urban Design
		• Wind Impact Study → Urban Design
		• Heritage Impact Assessment → Planning
		• Functional Traffic Design Study → Engineering
		• Sustainability Metrics Scoring → Planning
			▼ 📁 Documents
			  📁 Engineering
			  📁 Planning
			  📁 Urban Design
			
			Upload to the appropriate folder based on discipline.

Modelling
Files for use in modelling software, external to ePLAN
	Modelling files for Transportation or Streetlighting review may require special staff intervention. Please contact dsc@markham.ca if you have difficulty uploading these file types.		▶ 📁 Drawings
			▶ 📁 Documents
			▼ 📁 Modelling
			  📁 Streetlighting
			  📁 Transportation
			
			Upload to the appropriate folder based on discipline.

MARK-UP AND CHANGEMARK COLOURS / NAMES

When a review cycle have been completed the applicant will receive an email advising that the comments are available. Mark-ups and Changemarks are location-based comments made by reviewers on a transparent layer on top of a drawing. This will be how the majority of the City's formal comments are provided to applicants.

Standard names and colours for mark-ups and changemarks on drawings and documents are assigned for each reviewing discipline for easier identification.

Discipline	Name Prefix	Colour
Planning	PLN	Brown
Urban Design	UD	Green
Engineering	ENG	Red
Traffic and Transportation	TRANS	Gold
Waste Management	WASTE	Dark Green
Zoning Department	ZONE	Blue
Operations Department	OPS	Turquoise
Fire	FIRE	Orange
Environmental Services	ENV	Purple
Waterworks	WATER	Magenta