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Digital Drawing Submission Guidelines for Utility Line Assignments

The following are guidelines to ensure that utility line assignment (ULA) applications will be accepted in the ULA application process. Please refer to the link below:

<https://crowm.calgary.ca>

- All drawings submitted must be to United States National CAD Standard – V8. In particular, it is critical that all elements are on their proper layers. No layers are to be frozen or turned off. If the information on the drawing doesn't fall under a category then it is placed on layer G-ANNO-N.
- All drawings must be geo-referenced in NAD83 3TM format.
- All drawings (line work) must be scaled to GRID.
- The scale factor must be included in the title block.
- All dimensions and offsets must match the proposed line work and all required dimensions and offsets must be included on the drawing.
- Only one ULA application may be submitted per drawing.

Contact for Digital Submission Information:

Email:

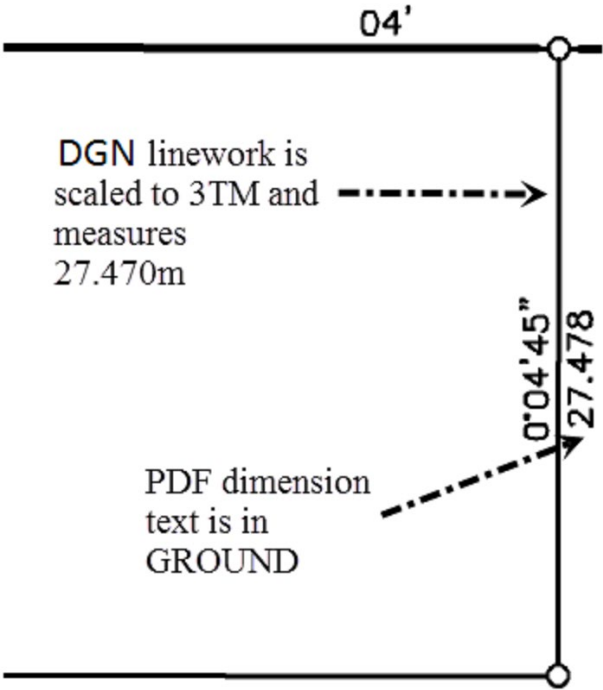
CROWM@calgary.ca

Mail:

Utility Line Assignments
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Deputy City Manager's Office
The City of Calgary
P.O. Box 2100, Station M, Mail Code 8026
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T2P 2M5

3TM Format

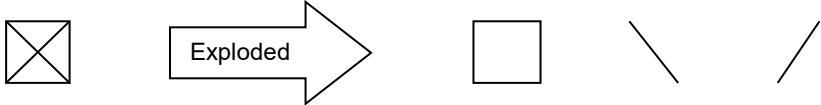
Drawings (line work) must be scaled to GRID, with plan dimension text in GROUND. This will allow us to map your drawings into the Legal Survey Fabric (LSF). The following illustration should reduce confusion.



Use of Cells on the Structure Layer (C-UTIL-STRC-N) for the Drawing Checker

When using a cell to define a structure, it is strongly recommended to keep the shape simple in order to keep the structure count accurate. For example, a cell composed of a square with an X struck through the square may count as two or three structures, depending on how the line and shape elements of the cell were constructed.

Example:



In the above example, the cell was exploded into a shape plus two lines, which would result in a structure count of three (3) when a count of only one (1) was intended. In order to prevent this type of error from occurring, please submit your proposed structure elements in the simplest



form to prevent structure count errors. Inaccurate drawing submissions may delay processing of your ULA application.

The following table outlines layer specifications for proposed line work:

Table 1.0a – Proposed Line Work Specification

ULA LAYER SPECIFICATION DESCRIPTION	Layer Name
Proposed Line Work – this layer should display all underground conduits that you are applying for.	C-UTIL-LINE-N
Proposed Elevation Work – this layer should specify all z-coordinate information at regular intervals for all conduit segments.	C-UTIL-ELEV-N
Proposed Structures – this layer should display all above and below ground pedestals, transformers, pullboxes, poles, vaults, etc.	C-UTIL-STRC-N
Offsets – this layer should display all proposed offsets. Note that all offsets must tie to legal survey points.*	C-UTIL-OFFS-N
Dimensions – this layer must include information about the proposed dimensions, if structures are proposed.	C-UTIL-DIMS-N
Material List – this layer should display or note all proposed structures, conduits, valves, etc., including dimensions.	C-UTIL-MATL-N
Details – this layer should display in-depth details about the proposed structures and cross-sections. When structures are proposed, details must be included on either this layer or the ‘Dimensions’ layer.	C-UTIL-DTLS-N
Existing Line Work – this layer should display all existing line work and underground conduits.	C-UTIL-LINE-E
Existing Elevation Work – this layer should display all existing z-coordinate information at regular intervals for all conduit segments.	C-UTIL-ELEV-E
Existing Structures – this layer should display all existing structures.	C-UTIL-STRC-E
Title Block – this layer should include the following information: designer, company name, scale, other general information, etc.*	G-ANNO-TBLK-N
Text – this layer should include any notes and/or explanations that will help describe the proposed work. *	G-ANNO-N

*Absolute mandatory layers required. However, other layers may be required depending on complexity of ULA application.

Guidelines for Multi-Party ULA Applications

For Multi-Party ULA applications, a single design file will be submitted per application with contributing layer sets for Primary Utility provider and each Additional Utility Provider. A layer set is defined as all required layers for proposed line work for a particular utility provider.



Given only one design file will be submitted for a Multi-Party ULA application. It is necessary to distinguish the between the layer sets of each contributing party, please refer to Table 1.0b which outlines the naming convention to be used by all parties in a Multi-Party ULA Application. It is the responsibility of the Primary Utility Provider to ensure all layer sets in the submitted design file are complete for both the primary utility provider and each additional utility provider.

Table 1.0b – Proposed Line Work Specification (Multi-Party Design Files)

ULA LAYER SPECIFICATION DESCRIPTION	Layer Name Example
External Clients – all submitted layers for each “Additional Utility Provider”, as selected in the Multi-Party ULA Application Tab 1 screen, must be suffixed with a single word participant name (ex. Telus, Shaw, Rogers).	C-UTIL-LINE-N-Telus
Internal Clients – all submitted layers for each “Additional Utility Provider”, as selected in the Multi-Party ULA Application Tab 1 screen, must be suffixed with the following for applicable groups: COCIT – Information Technology group COCTS – Traffic Signals group COCSL – Street Lighting group	C-UTIL-LINE-N-COCIT
Primary Utility Providers must use the regular layer name specification as per Table 1.0a for submitted design files to pass basic drawing checker validations.	C-UTIL-LINE-N

Important: Only the Primary Utility Provider may use the normal layer specifications as outlined in Table 1.0a. This will ensure the submitted design file will pass the initial Drawing Checker process. All submitted layers for additional utility providers will be validated manually by a ULA Specialist for determination of an approved multi-party ULA Application. Please note, a drawing checker “pass” on submitted multi-party ULA design files does not guarantee approval of your ULA application. Please verify quality on ALL submitted layers to ensure timely processing and approval of your multi-party ULA application.

The following table outlines layer specifications for As-Built line work:



Table 2.0 – As-Built Line Work Specification

ULA LAYER SPECIFICATION DESCRIPTION	Layer Name
As-Built Line Work – this layer should display all installed underground conduits.	V-UTIL-LINE-N
As-Built Elevation Work – this layer should specify all z-coordinate information at regular intervals for all conduit segments.	V-UTIL-ELEV-N
As-Built Structures – this layer should display all installed above and below ground pedestals, transformers, pullboxes, poles, vaults, etc.	V-UTIL-STRC-N
As-Built Offsets – this layer should display all offsets. Note that all offsets must tie to legal survey points.*	V-UTIL-OFFS-N
As-Built Dimensions – this layer must include information about the dimensions, if structures are installed.	V-UTIL-DIMS-N
As-Built Material List – this layer should display or note all installed structures, conduits, valves, etc., including dimensions.	V-UTIL-MATL-N
As-Built Details – this layer should display in-depth details about the installed structures and cross-sections. When structures are installed, details must be included on either this layer or the ‘Dimensions’ layer.	V-UTIL-DTLS-N
Title Block – this layer should include the following information: ULA number, “As-Built”, designer, company name, scale, other general information, etc.*	G-ANNO-TBLK-N
Text – this layer should include any notes and/or explanations that will help describe the as-built work. *	G-ANNO-N

*Absolute mandatory layers required. However, other layers may be required depending on conditions of the approved ULA application.

Please direct all inquiries / questions about submissions or rejections of ULAs to CROWM@calgary.ca.