Appendix F RU-Gas Menu Guide



October 2012

RURAL GAS BARMENU For MICROSTATION AND POWERDRAFT V8

Prepared by:

Government of Alberta

Agriculture and Rural Development Rural Utilities Division

To Start RU-GAS program within Bentley MicroStation V8 or PowerDraft V8:

Key in: mdl l ru-gas

The program menu bar will show up:

RU-GAS Rural Utilitie, Alberta Agriculture And Rural Development

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1. RU-Tools

1.1 Config

| 😤 RU-GAS Rur | al Ut | ilities, Alb | erta Agric | ulture And Rural | Developm | ent | |
|-------------------|-------|--------------|------------|-------------------|-----------|-----------|---------------|
| RU-Tools Pipes | Text | Equipment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| <u>C</u> onfig | | | | | | | |
| <u>R</u> ef20 | | | | | | | |
| Measure | | | | | | | |
| Report | | | | | | | |
| GPS Input by File | | | | | | | |
| GPS Single Cell | | | | | | | |

Accelerator Key: c or C

This will open a COOP Config list window for all gas coops to let the user config to any of them:

| COOP | Config | | |
|--|------------|--------|--------|
| AFL ANK BCO BHI BLK BMN | | | ۲ ۲ |
| | <u>0</u> K | Cancel | |

The search path in Microstation workspace for the gas coop will be set as the following:

Specified coop path + coop name + utl Specified coop path + coop name + 300utl Specified coop path + coop name + 300lnd Specified coop path + coop name + lnd Specified coop path + coop name + infill Specified coop path + coop name + franchise Specified coop path + coop name + sheet Specified coop path + coop name + subdivision Specified coop path + coop name + cadastral

For Rural Utilities, the specified coop path is default to r:\coops_v8\. The cadastral path is default to m:\sdw_land_bases\w4\..., m:\sdw_land_bases\w5\... and m:\sdw_land_bases\w6\.... The orthophotos path is default to r:\orthophotos\10tm\10tm_sid\w4, w5 and w6.

For all other gas coops, the specified coop path is default to $c:coops_v8$

1.2 Ref20 (Run Config first)



Accelerator Key: r or R

Press "Ref20" to open "Reference Files" window:

| 8 Reference Files | |
|-------------------------|----------------------|
| 🗖 Cadastral 🗖 Franchise | Subdivision |
| E Utility E | bco27184 |
| Sheet | bco28174 bco28184 |
| 🗖 Sub-300 | bco28194 |
| Standard levels | bco29184 bco29194 |
| Attach Detach | bco29204 |
| Reset Unload | bco29214 💌 |

For every config-ed gas coop, the user will be able to reference the following files: Cadastral files;

Franchise file (one for each gas coop); Subdivision file (one for each gas coop); Utility files; Land files and Sheet files (one sheet file for each gas coop but can be referenced for every township)

Simply put a check mark in the box and pick up files from the right side file list and press Attach, the Ref20 will attach all selected files automatically.

If and only if the opened active dgn file is in the gas coop township list and opened in the specified path, say bco28194.utl or bco28194.i10 or bco28194.lnd, then the user will be able to use the 5 central boxes: north, west, south, east and centre of the active dgn file.

Check on "Sub-300" will change the "Reference Files" window to 300utl:

| 8 Reference Files | |
|----------------------------|------------------------------|
| 🗖 Cadastral 🔲 Franchise | 🗌 Subdivision |
| 🗖 Utility 🗖 Land | bco300 bco301 bco302 bco302 |
| Sub-300 Standard levels | bco303 bco304 |
| Attach Detach | bco305 bco306 bco307 |
| Heset Unload | |

Again, simply put a check mark in the box and pick up files from the right side file list and press Attach, the Ref20 will attach all selected files automatically.

Press Detach will detach all selected files automatically.

Press Reset will blank all check marks.

1.3 Measure



Accelerator Key: m or M

Report parameters of a measured element.

Follow the message after pressing the "Measure" tool:

Please select the element to measure:

A linear element is selected and its length parameters are reported:



A shape element is selected and its area parameters are first reported:



Then perimeter parameters are reported for the shape:

| | | - |
|--|--|---|
| Information | | |
| Perimeter = Perimeter = Perimeter = Perimeter = | 787.694744560242 (meter) 2584.26891795324 (feet) .787694744560242 (kilometer) .489464204660562 (mile) | |
| | <u>0</u> K | |

1.4 Report(to be updated to statistics report)



Accelerator Key: e or E

Report the active dgn file information or dgn files information from a folder to an ASCII text file:

| Alert | | |
|-------|---|--|
| | Yes to process current file only!! No to process a folder!! | |
| | | |
| | <u>Y</u> es <u>N</u> o | |

After pressing "Yes", the user will be asked to key in the total level number of the active dgn file: 63 (in this example)

| Input the Level Total Number | | |
|-------------------------------|--|--|
| Input the level total number: | | |
| | | |
| | | |
| | | |
| <u>D</u> K Cancel | | |
| | | |

Press "OK" to start. When the processing is done, a message will show up for the report file name and its location:

| Information |
|--|
| Please check the report file: R:\coops_v8\afl\utl\afl45065_report.txt |
| <u>Ω</u> K |

If No is pressed above, then the user will be able to pick up a folder and all dgn files in that folder will be reported to the same ASCII file.

A sample report file:

| 📕 afl45065_report.txt - Notepad | | | | |
|--|---------------------------------|----------------------------------|--|-----------------------------|
| File Edit Format | View Help | þ | | |
| <pre></pre> | style -9, 0, -9, 0, | weight -9, 0, -9, 0, | type CellHeader, Line, CellHeader, Text, | cell_name 200101 |
| CellHeader Line Text | | Total: Total: Total: | 11 11 2 | |
| Element_Total: 24 | | | | |
| ALL CELLS HAVE | -9 FOR C | OLOR,ST | YLE AND WEIGHT!!!!! | |
| Cell Name Tota 200101 9 RDX 2 Other_cell: 0 | 1 | | | |

1.5 GPS Input by File



Accelerator Key: g or G

Import an ASCII file created by "GPS Pathfinder Office". The ASCII file should be exported through "GPS Pathfinder Office" using a GPS catalogue file which is provided by Alberta Rural Utilities. The purpose to use this GPS catalogue file is to make the GPS tracking features be correctly imported to the active dgn file with the specified symbologies.

First the user will be asked to select the ASCII file for input:

| Informatio | n |
|------------|---|
| Ple | ease pick up the GPS input text file!!! |
| | |
| | |
| | |
| | |

When the import is done, a message box will show up:

| Information | |
|------------------|------------|
| Processing Done! | |
| | |
| | |
| | <u>D</u> K |

The features are specified in the Alberta Rural Utilities digital mapping standard. If a feature is specified in the ASCII file and not followed the standard, then it is an unknown feature and will be put on level 63 and reported as following:

| Information |
|--------------------------------------|
| Unknown features input on lv63/wt12! |
| |
| |

A sample ASCII gps_input.txt file is listed here:

| | gps_ | inp | ut.tx | t - No | otepad | |
|--|---|--|--|--|--|---|
| File | Edi | t F | ormat | View | Help | |
| cel cel cel cel cel cel cel cel cel cel | 1_b 1_g 1_g 1_g 1_g 1_g 1_g 1_g 1_g 1_g 1_g | Ival aswe aswe aswe aswe aswe aswe aswe aswe | ,750 ,749 1,80 1,69 1,80 1,48 1,48 1,48 1,53 3184 4022 4422 4803 5434 6542 | 4.139 3.779 81.30 63.30 48.01 62.35 96.73 55.22 95.61 32.42 .112, .553, .241, .473, .993, .634, | 5,5826395. 9,5825654. 62,5826339 85,5829684 17,5829471 59,5829471 59,5829581 27,5829581 27,5829581 27,58295847 ,5828522.0 ,5828188.1 ,58281885.1 58281835.7 ,5827541.4 ,5827233.9 ,5827218.5 | 878 240 .650 .689 .015 .901 .344 .871 .468 50 94 .468 50 94 .468 50 94 .468 50 94 .468 50 94 .21 |
| cel cel cel cel | 1_b 1_b 1_b 1_b 1_b | lval lval lval lval | ,569 ,567 ,593 ,714 | 0.278 8.981 3.874 0.200 | 8,5829648. 1,5828839. 4,5827776. 0,5827239. | 440 381 132 077 |
| p_p p_p p_p p_p p_p p_p p_p p_p p_p p_p | ipe ipe ipe ipe ipe ipe ipe ipe ipe | 2 On 2 On 2 On 2 On 2 On 2 On 2 On 2 On | m_od m_od m_od m_od m_od m_od m_od m_od | ,5123 ,4983 ,4911 ,4839 ,4783 ,4783 ,4783 ,4783 ,4658 ,4658 ,4658 ,4658 ,4658 ,4658 ,4658 ,4624 | 3.449,5825 6.640,5826 1.265,5826 3.908,5826 3.908,5826 1.925,5827 9.945,5827 8.976,5828 8.976,5828 8.006,5828 7.036,5828 4.527,5828 2.017,5829 4.423,5829 | 619.903 170.925 474.510 778.096 987.465 196.834 716.294 056.913 397.533 738.152 951.836 165.520 483.823 |
| р_р р_р р_р р_р | ipe ipe ipe ipe ipe | _25n _25n _25n _25n _25n _25n | m_od m_od m_od m_od m_od | ,4267 ,4272 ,4274 ,4383 ,4492 | 7.173,5825 2.196,5826 4.839,5826 3.477,5826 2.115,5826 | 699.294 058.987 248.298 439.452 630.606 |

A blank line between each tracking pipeline is required for the ascii file, but not required for the single cell features.

1.6 GPS Single Cell



Accelerator Key: p or P

Import a single GPS cell feature.

First select a GPS cell feature: aluminum pipe cap (in this example)

| Select Single Cell | |
|----------------------------------|---|
| Select a cell as the GPS point | |
| abdoned_pipeline ablogo | - |
| aluminum_pipe_cap | |
| aluminum_pipe_tee_reducer_symbol | |
| aluminum_pipe_text_2 | - |
| <u>D</u> K Cancel | |

Then key in the GPS coordinates manually (follow the given format):

| GPS Coordinates Keyin | | | | | | |
|-----------------------------------|---|--|--|--|--|--|
| GPS keyin format (x,y,z) or (x,y) | | | | | | |
| -7474 8 5838128 6 | _ | | | | | |
| <u> </u> | | | | | | |
| | | | | | | |

A message will show up:

| Information | |
|-------------------------------------|-------------|
| The cell ALCAP is placed at the GPS | i location! |
| | |
| <u></u> K | |

The GPS cell feature will be zoomed to the centre for the user to see after the "OK" button is pressed.

2. Pipes

| 2.1 | PE | | | | | | | |
|---------|---------------|---------|--------|-------------|----------------------|------------|-----------|---------------|
| 😤 RU-C | GAS RU | ıral Ut | | Alberta Agr | iculture And Rura | l Developm | | |
| RU-Tool | s Pipes | Text | Equipm | ent Consume | rs Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | PE | | ×. | 20 (26.7) | | | | |
| | Stee | 1 | • | 22 (22.2) | | | | |
| | Alum | ninum | • | 25 (33.4) | | | | |
| | P <u>V</u> C | | • | 29 (28.6) | | | | |
| | HDP | e/FPLP | • | 32 (42.2) | | | | |
| | <u>F</u> ore | ign | • | 38 (48.3) | | | | |
| | A <u>b</u> ar | ndoned | • | 50 (60.3) | | | | |
| | | | | 65 (73.0) | | | | |
| | | | | 75 (88.9) | | | | |
| | | | | 100 (114.3) | | | | |
| | | | | 150 (168.3) | | | | |

Manually draw PE (polyethylene) pipelines into the active dgn file. Different settings are specified for different PE pipelines.

All PE pipeline settings are listed here:

| Level | Color | Weight | Line Style | Nominal Size |
|-------|-------|--------|------------|--------------|
| 26 | 26 | 3 | 0 | 20mm |
| 26 | 22 | 3 | 0 | 22mm |
| 26 | 33 | 3 | 0 | 25mm |
| 26 | 28 | 3 | 0 | 29mm |
| 26 | 42 | 3 | 0 | 32mm |
| 26 | 48 | 3 | 0 | 38mm |
| 26 | 60 | 3 | 0 | 50mm |
| 26 | 73 | 3 | 0 | 65mm |
| 26 | 88 | 3 | 0 | 75mm |
| 26 | 114 | 3 | 0 | 100mm |
| 26 | 168 | 3 | 0 | 150mm |

Follow the message and use the data button to place the PE pipeline: Place PE pipe (20mm):

2.2 Steel

| 😤 RU-GA | | | lities | | oerta Agrio | culture And Rura | | | |
|----------|------------------|-----|--------|------|-------------|-------------------|-----------|-----------|---------------|
| RU-Tools | Pipes Tex | d I | Equip | ment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | PE | | - • J | | | | | | |
| | <u>S</u> teel | | × | 16 | (15.9) | | | | |
| | <u>Al</u> uminum | 1 | • | 20 | (26.7) | | | | |
| | P <u>V</u> C | | • | 25 | (33.4) | | | | |
| | HDPE/FPL | LP | • | 32 | (42.2) | | | | |
| | <u>Foreign</u> | | • | 38 | (48.3) | | | | |
| | Abandone | ed | • | 50 | (60.3) | | | | |
| | | | | 65 | (73.0) | | | | |
| | | | | 75 | (88.9) | | | | |
| | | | | 100 | (114.3) | | | | |
| | | | | 150 | (168.3) | | | | |

Manually draw steel pipelines into the active dgn file. Different settings are specified for different steel pipelines.

All Steel pipeline settings are listed here:

| Level | Color | Weight | Line Style | Nominal Size |
|-------|-------|--------|------------|--------------|
| 20 | 15 | 3 | 0 | 16mm |
| 20 | 26 | 3 | 0 | 20mm |
| 20 | 33 | 3 | 0 | 25mm |
| 20 | 42 | 3 | 0 | 32mm |
| 20 | 48 | 3 | 0 | 38mm |
| 20 | 60 | 3 | 0 | 50mm |
| 20 | 73 | 3 | 0 | 65mm |
| 20 | 88 | 3 | 0 | 75mm |
| 20 | 114 | 3 | 0 | 100mm |
| 20 | 168 | 3 | 0 | 150mm |
| | | | | |

Follow the message and use the data button to place the ST pipeline: Place ST 16(mm) pipeline:

2.3 Aluminum

| 😤 RU-GA | | ıral Ut | | | oerta A | | ulture And Rura | l Developm | | |
|----------|----------------------------------|---------|-------|--------|---------|------|-------------------|------------|-----------|---------------|
| RU-Tools | Pipes | Text | Equip | ment | Consun | ners | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | PE + | | _ | | | | | | | |
| | <u>S</u> teel | | • | | | | | | | |
| | <u>Al</u> uminum P <u>V</u> C | | × | 25 | (33.4) | | | | | |
| | | | • | 38 | (48.3) | | | | | |
| | HDPE/FPLP | | 50 | (60.3) | | | | | | |
| | Fore | ign | • | 75 | (88.9) | | | | | |
| | A <u>b</u> ar | ndoned | • | | | | | | | |

Manually draw aluminum pipelines into the active dgn file. Different settings are specified for different aluminum pipelines.

All Aluminum pipeline settings are listed here:

| Level | Color | Weight | Line Style | Nominal Size |
|-------|-------|--------|------------|--------------|
| 23 | 33 | 3 | 0 | 25mm |
| 23 | 48 | 3 | 0 | 38mm |
| 23 | 60 | 3 | 0 | 50mm |
| 23 | 88 | 3 | 0 | 75mm |

Follow the message and use the data button to place the AL pipeline: Place AL pipe (25mm):

| 2.4] | PVC | | | | | | | |
|----------|----------------------------------|----------|------|-----------|-------------------|------------|-----------|---------------|
| 😤 RU-GA | | | | | ulture And Rura | l Developm | | |
| RU-Tools | Pipes Tex | kt Equip | ment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | PE | • | | | | | | |
| | <u>S</u> teel ▶ | | | | | | | |
| | <u>Al</u> uminum | | | | | | | |
| | <u>Al</u> uminum P <u>V</u> C | | 20 | (26.7) | | | | |
| | HDPE/FPI | LP 🕨 | 25 | (33.4) | | | | |
| | <u>Foreign</u> | + | 32 | (42.2) | | | | |
| | A <u>b</u> andon | ed 🕨 🕨 | 38 | (48.3) | | | | |
| | | | 50 | (60.3) | | | | |

Manually draw PVC pipelines into the active dgn file. Different settings are specified for different PVC pipelines.

All PVC pipeline settings are listed here:

| Level | Color | Weight | Line Style | Nominal Size |
|-------|-------|--------|------------|--------------|
| 29 | 26 | 3 | 0 | 20mm |
| 29 | 33 | 3 | 0 | 25mm |
| 29 | 42 | 3 | 0 | 32mm |
| 29 | 48 | 3 | 0 | 38mm |
| 29 | 60 | 3 | 0 | 50mm |

Follow the message and use the data button to place the PVC pipeline: Place PVC pipe (20mm):



2.5 HDPE/FPLP – HIGH PRESSURE (LICENSED WITH ERCB)

Manually draw HDPE (high density polyethylene) pipelines into the active dgn file. Different settings are specified for different HDPE pipelines.

All HDPE/FPLP pipeline settings are listed here:

| Level | Color | Weight | Line Style | Nominal Size |
|-------|-------|--------|------------|--------------|
| 34 | 26 | 3 | 0 | 20mm |
| 34 | 33 | 3 | 0 | 25mm |
| 34 | 48 | 3 | 0 | 38mm |
| 34 | 60 | 3 | 0 | 50mm |
| 34 | 73 | 3 | 0 | 65mm |
| 34 | 88 | 3 | 0 | 75mm |
| 34 | 114 | 3 | 0 | 100mm |

Follow the message and use the data button to place the HDPE pipeline: Place HDPE pipe (20mm): 2.6 Foreign



Accelerator Key: 1 or L Accelerator Key: f or F

Manually draw foreign pipelines into the active dgn file. Different settings are specified for different foreign pipelines.

All foreign pipeline settings are listed here:

| Level | Color | Weight | Line Style | Туре |
|-------|-------|--------|------------|---------------|
| 36 | 62 | 1 | 1 | high pressure |
| 35 | 60 | 1 | 1 | low pressure |
| 36 | 21 | 1 | 1 | fiber optics |

Follow the message and use the data button to place the pipelines: Place foreign low pressure:

2.7 Abandoned

| 2.7.1 | Ab | and | lonec | I_Pipe | | | | |
|----------|---------------|--------|---------|------------------------|-------------------|------------|-----------|---------------|
| 😤 RU-GA | | ral Ut | | Alberta Agric | ulture And Rura | l Developm | | |
| RU-Tools | Pipes | Text | Equipme | nt Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | PE | | → ⊨ | | | | | |
| | <u>S</u> teel | | • | | | | | |
| | <u>Al</u> umi | inum | • | | | | | |
| | P <u>V</u> C | | • | | | | | |
| | HDPE | FPLP | • | | | | | |
| | Forei | gn | • | | | | | |
| | A <u>b</u> an | doned | • | <u>A</u> bandoned_Pipe | | | | |
| | | | | <u>S</u> ymbol | | | | |
| | | | | <u>C</u> hange | | | | |
| | | | | Сору | | | | |

Accelerator Key: a or A

Manually draw abandoned pipelines into the active dgn file.

All abandoned pipeline settings are listed here:

| Level | Color | Weight | Line Style | Туре |
|-------|-------|--------|------------|-----------|
| 38 | 64 | 0 | 3 | abandoned |

Follow the message and use the data button to place the abandoned pipeline: Place abandoned pipe:

2.7.2 Symbol

| | · · - | ~ | ino | | | | | | | |
|---|--------------|---------------|--------------|-------|------|--------------|-------------------|-------------|-----------|---------------|
| 8 | RU-GA | | ral Ut | | | oerta Agric | ulture And Rura | al Developm | | |
| 1 | RU-Tools | Pipes | Text | Equip | ment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | PE | | - + | | | | | | |
| | | <u>S</u> teel | | • | | | | | | |
| | | <u>Al</u> umi | inum | • | | | | | | |
| | | P <u>V</u> C | P <u>V</u> C | | | | | | | |
| | | HDPE | FPLP | • | | | | | | |
| | | <u>F</u> orei | gn | • | | | | | | |
| | | A <u>b</u> an | doned | • | Ab | andoned_Pipe | | | | |
| | | | | | Sy | nbol | | | | |
| | | | | | Ch | ange | | | | |
| | | | | | Co | ру | | | | |

Accelerator Key: s or S

Place abandoned pipeline symbol cell "ABANPS" and its witness line

Follow the message after pressing the "Symbol" menu:

Place cell ABANPS & witness line

Draw the witness line to the specified location right after placing the cell "ABANPS":



2.7.3 Change

| | | | C | ,- | | | | | | |
|---|---------|----------------|--------|-------------|-------------|--------------|-------------------|-----------|-----------|---------------|
| 8 | RU-GA | | ral Ut | | | oerta Agricu | Iture And Rural | | | |
| R | U-Tools | Pipes | Text | Equip | nent | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | PE | | • | _ | | | | | |
| | | <u>S</u> teel | | > | | | | | | |
| | | <u>Al</u> umir | num | > | | | | | | |
| | | P <u>V</u> C | | > | | | | | | |
| | | HDPE, | /FPLP | → | | | | | | |
| | | Foreig | gn | →] | | | | | | |
| | | A <u>b</u> and | doned | ×. | <u>A</u> ba | andoned_Pipe | 1 | | | |
| | | | | | Syr | nbol | | | | |
| | | | | | <u>C</u> ha | ange | | | | |
| | | | | | Cor | ру | | | | |
| | | | | | | | - | | | |

Accelerator Key: c or C

Change and only change the selected feature line style to type 3. Nothing else will be changed.

Follow the message after pressing this menu: Change to abandoned, please select pipe 2.7.4 Copy

| | | rj | | | | | | |
|----------|---|-------------------------------------|---------|------------------|-------------------|------------|-----------|---------------|
| 😤 RU-GA | | al Ut | | Alberta Agric | ulture And Rura | l Developm | | |
| RU-Tools | Pipes PE Steel Alumir PVC HDPE, Eoreig Abanc | Text hum /FPLP gn doned | Equipme | Abandoned_Pipe | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | | | Symbol Change | | | | |
| | | | | Сору | | | | |

Accelerator Key: o or O

Parallel copy a linear feature at a distance (default 3m, pre-settings may be required to have this function) and then change the copied linear feature line style to type 3.

Follow the message after pressing this menu:

Copy parallel 3m and style to abandoned, please select pipe

| 5.7 | 8. <u>Te</u> | <u>ext</u> | | | | | | | |
|-----|--------------|------------|----------------------------|---|------------|---------------------|-----------|-----------|---------------|
| 3 | .1 | Pipo | e Te | ext | | | | | |
| | 😤 RU-GI | AS R | ural U | tilitie , Alb | erta Agric | ulture And Rural | Developme | | |
| | RU-Tools | Pipes | Text Pipe Gas For | Equipment Text Plant Text eign | Consumer: | ; Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | | _ ha | ange Pipe | • | | | | |

Accelerator Key: p or P

Automatically place texts for the selected pipeline. Different texts are specified based on the pipeline type. The user only needs to select the pipeline.

Follow the message after pressing this menu:

Please select pipe to place text/symbol

The placed sample texts along a selected pipeline (20 PE and 26.7 PE):



3.2 Gas Plant Text

| 8 | RU-GA | nt | | × | | | | | | | |
|---|---------|-------|------------------|------------------------|---|----------|-------------------|-----------|-----------|---------------|--|
| R | U-Tools | Pipes | Text Equipment C | | | onsumers | Subdivisions_Land | Townships | Utilities | Miscellaneous | |
| | | | Pipe | e Text | | | | | | | |
| | | | Gas | <u>G</u> as Plant Text | | | | | | | |
| | | | <u>F</u> oreign | | • | | | | | | |
| | | | ⊆ha | inge Pipe | × | | | | | | |

Accelerator Key: g or G

Place gas plant cell "GASPLT" and extra text for the cell.

Place the cell first:

Then key in extra text: No. 8 (in this example):



Place the extra text under the Gas Plant cell:



3.3 Foreign

| 3 | .3.1 | Hig | gh I | Pressu | re | | | | | | | | | |
|---|----------|-------|-------------|------------------------|----|---------------|-------|--|--|--|--|--|--|--|
| 名 RU-GAS Rural Utilities, Alberta Agriculture And Rural Development 📃 | | | | | | | | | | | | | | |
| | RU-Tools | Pipes | Text | Miscellaneous | | | | | | | | | | |
| | | | Pipe | Text | | | | | | | | | | |
| | | | Gas | <u>G</u> as Plant Text | | as Plant Text | | | | | | | | |
| | | | <u>F</u> or | eign | × | High Pre | ssure | | | | | | | |
| | | | <u>C</u> ha | nge Pipe | × | Low Pre | ssure | | | | | | | |
| | | | | | | Fiber Op | otics | | | | | | | |

Accelerator Key: h or H

Place text and ERCB number for selected high pressure pipeline.

First key in the high pressure text: High P1122 (in this example)

| Key in High pressure pipe text | | | | | | | | |
|---------------------------------|--|--|--|--|--|--|--|--|
| Key in High pressure pipe text: | | | | | | | | |
| High P1123 | | | | | | | | |
| <u>D</u> K Cancel | | | | | | | | |
| | | | | | | | | |

Then key in the ERCB number: ERCB N8 (in this example)

| Key in ercb_number | | | | | | | | |
|---------------------|--------|--|--|--|--|--|--|--|
| Key in ercb_number: | | | | | | | | |
| FBCB N8 | | | | | | | | |
| TENED NO | | | | | | | | |
| <u><u>D</u>K</u> | Cancel | | | | | | | |

Follow the message to select the pipeline after pressing the "OK" button: Please select pipe to place text/ERCB #:

The text and ERCB number are placed along the selected pipeline:



3.3.2 Low Pressure



Accelerator Key: 1 or L

Place text and U license number for selected low pressure pipeline.

First key in the low pressure text: Low P-123 (in this example)

| Key in low pressure pipe text | | | | | | | | |
|---------------------------------|--|--|--|--|--|--|--|--|
| Key in Low pressure pipe text: | | | | | | | | |
| itey in tow pressure pipe texts | | | | | | | | |
| | | | | | | | | |
| Low P-123 | | | | | | | | |
| | | | | | | | | |
| <u>D</u> K Cancel | | | | | | | | |
| | | | | | | | | |

Then key in the U license number: U3133 (in this example)

| Key in U_number | | | | | | | | |
|------------------|--------|--|--|--|--|--|--|--|
| Key in U_number: | | | | | | | | |
| [U3133 | | | | | | | | |
| <u> </u> | Cancel | | | | | | | |

Follow the message to select the pipeline after pressing the "OK" button: Please select pipe to place text/U #:

The low pressure text and the U license number are placed for the selected pipeline:



3.3.3 Fiber Optics

| _ | | - | - | - I · · · · | | | | | | | | | | | |
|-----|---|-------|----------------|------------------|-------|----------------|--------|-------------|-----------|-----------|---------------|--|--|--|--|
| 8 | 🔀 RU-GAS 🛛 Rural Utilities, Alberta Agriculture And Rural Development 📃 🗖 🔀 | | | | | | | | | | | | | | |
| - 1 | RU-Tools | Pipes | Text | Equipment | C | onsumers | Subdiv | isions_Land | Townships | Utilities | Miscellaneous | | | | |
| | | Pipe | Text | | | | | | | | | | | | |
| | | | Gas Plant Text | | | Gas Plant Text | | | | | | | | | |
| | <u>F</u> oreign | | Þ | <u>Hig</u> h Pre | ssure | | | | | | | | | | |
| | | | Cha | nge Pipe | ۲ | Low Pre | ssure | | | | | | | | |
| | | | | | | Eiber Op | otics | | | | | | | | |

Accelerator Key: f or F

Place text for Fiber Optics pipeline.

First key in the text for the Fiber Optics pipeline: AGT Fiber Text (in this example)

| Key in AGT fiber pipe text | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|
| Key in AGT fiber nine text: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| AGT Fiber Text | | | | | | | |
| from the strong | | | | | | | |
| <u>O</u> K Cancel | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Follow the message to select the Fiber Optics pipeline: Please select the fiber optics pipe:

The text is placed along the selected pipeline:



| 3. | .4 | Cha | nge | Pipe | | | | | | | |
|----|----------|-------|-------------|--------------|-----|--------------|-------------------|-----------|-----------|---------------|---|
| 3. | .4.1 | Ty | pe | | | | | | | | |
| Z | 🖁 RU-G | AS RI | ıral U | tilitie, Alb | ert | a Agricu | lture And Rural I | Developme | | | × |
| | RU-Tools | Pipes | Text | Equipment | С | onsumers | Subdivisions_Land | Townships | Utilities | Miscellaneous | |
| | | | Pipe | e lext | | | | | | | |
| | | | <u>G</u> as | Plant Text | | | | | | | |
| | | | Eor | eign | × | | _ | | | | |
| | | | ⊆ha | inge Pipe | • | Type | | | | | |
| | | | | | | Pressure | | | | | |
| | | | | | | <u>S</u> ize | | | | | |
| | | | | | | | | | | | |

Accelerator Key: t or T

Change pipeline material in cell "chgpm".

Key in first pipe material: PE (in this example)

| Pipe material input | | | | | | | | |
|---|--------|--|--|--|--|--|--|--|
| Keyin first pipe material (upper left): Press Cancel to skip this input! | | | | | | | | |
| PE | | | | | | | | |
| <u> </u> | Cancel | | | | | | | |

Key in second pipe material: ST (in this example)

| Pipe material input | |
|---|--------------------------------|
| Keyin 2nd pipe materia Press Cancel to skip th | al(upper right): nis input! |
| [ST] | |
| <u> </u> | Cancel |

Key in third pipe material: AL (in this example)

| Pipe material input | | | | | | | |
|---|--------------------------------|--|--|--|--|--|--|
| Keyin 3rd pipe materia Press Cancel to skip tl | al(bottom left): his input! | | | | | | |
| ГАЦ | | | | | | | |
| <u> </u> | Cancel | | | | | | |

Key in the 4th pipe material: PVC (in this example)

| K | ey in the 4 th pipe material: | PV |
|---|--|----|
| Ŗ | Pipe material input | |
| | Keyin 4th pipe material(bottom right): Press Cancel to skip this input! | |
| | PVC | |
| | <u>D</u> K Cancel | |

The placed cell "chgpm":



| 3.4.2 | Pres | sur | e | | | | | | |
|------------|---------|---------------|-------------|---|--------------|-------------------|-----------|-----------|---------------|
| 😤 RU-GAS | | al Uti | litie, Albe | | a Agricul | ture And Rural | Developme | | |
| RU-Tools P | Pipes T | ſext | Equipment | C | onsumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | <u>Pipe</u> | Text | | | | | | |
| | | <u>G</u> as P | Plant Text | | | | | | |
| | | <u>F</u> orei | gn | × | | | | | |
| | | <u>C</u> han | ige Pipe | Þ | <u>T</u> ype | | | | |
| | | | | | Pressure | | | | |
| | | | | | <u>Si</u> ze | | | | |

Accelerator Key: p or P

Change pipe pressure values in cell "chgpr".

Key in first pipe pressure value: 3103 (in this example), Cancel to skip.

×

| Pipe pressure input | | | |
|--------------------------------------|--------|--|--|
| Keyin 1st pipe pressure(upper left): | | | |
| | | | |
| 3103 | | | |
| <u>Q</u> K | Cancel | | |

Key in second pipe pressure value: 2500 (in this example), Cancel to skip.

| Pipe pressure input | | |
|---------------------------------------|---|--|
| Keyin 2nd pipe pressure(upper right): | | |
| [2500] | 1 | |
| <u>QK</u> Cancel | | |
| | | |

Key in third pipe pressure value: 1008 (in this example), Cancel to skip.

| Pipe pressure input | | |
|------------------------|------------------|--|
| Keyin 3rd pipe pressur | re(bottom left): | |
| 1008 | | |
| <u>o</u> k | Cancel | |

Key in the 4th pipe pressure value: 88 (in this example), Cancel to skip.

| Pipe pressure input | |
|-----------------------|-------------------|
| Kevin 4th pipe pressu | re(bottom right): |
| , | |
| | |
| 88 | |
| | |
| | Lancel |
| <u>K</u> | Cancel |

The placed cell "chgpr":

| 3103 | 2500 |
|------|------|
| 1008 | 88 |

| 3 | .4.3 | Siz | ze | | | | | | | |
|---|----------|-------|--------|--------------|---|--------------|-------------------|-----------|-----------|---------------|
| 8 | 🔒 RU-GA | | ıral U | tilitie, Alb | | a Agricu | lture And Rural | Developme | | |
| | RU-Tools | Pipes | Text | Equipment | C | onsumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | | Pipe | e Text | | | | | | |
| | | | Gas | Plant Text | | | | | | |
| | | | Eor | eign | F | | | | | |
| | | | ⊆ha | inge Pipe | ► | Type | | | | |
| | | | | | | Pressure | | | | |
| | | | | | | <u>S</u> ize | | | | |

Accelerator Key: s or S

Set pipe sizes in both cell "chgps1" and "chgps2".

Key in first pipe size (nominal size): 20 (in this example), Cancel to skip.

| Pipe size | |
|--------------------------|--------|
| Keyin 1st size(upper lef | it): |
| [20 | |
| <u>D</u> K | Cancel |

Key in second pipe size (nominal size): 38 (in this example), Cancel to skip.

| Pipe size | |
|------------------------------|---|
| Keyin 2nd size(upper right): | |
| [38 | _ |
| <u>D</u> K Cancel | |

Key in third size (nominal size): 65 (in this example), Cancel to skip.

| Pipe size | |
|-----------------------|--------|
| Keyin 3rd size(bottom | left): |
| | |
| 65 | |
| <u>0</u> K | Cancel |
Key in the 4th pipe size (nominal size): 50 (in this example), Cancel to skip.

| Pipe size | | | | | | |
|-------------------------------|--------|--|--|--|--|--|
| Keyin 4th size(bottom right): | | | | | | |
| | | | | | | |
| 50 | | | | | | |
| <u>0</u> K | Cancel | | | | | |

The placed cells "chgps1" and "chgps2":



If a nominal size input is not same as specified in the standard, then the real size value will not be in cell "chgps2".



Accelerator Key: p or P

Place tee cell "petred".

Follow the message after pressing this menu:

Place cell petred:

The placed tee cell "petred":



4.1.2 Steel



Accelerator Key: s or S

Place tee cell "sttee".

Follow the message after pressing this menu: Place cell sttee:

The placed tee cell "sttee":



4.1.3 Aluminum



Accelerator Key: a or A

Place tee cell "altee".

Follow the message after pressing this menu: Place cell altee:

The placed tee cell "altee":





Accelerator Key: v or V

Place tee cell "pvctee".

Follow the message after pressing this menu: Place cell pyctee:

The placed tee cell "pvctee":



4.2 Crossings



Accelerator Key: r or R

Place road crossing cell "rdx" and its witness line.

Follow the message after pressing this menu: Place cell rdx & the witness line:

Place the cell first:



Then follow the message to place the witness line: Please Specify the End Point of the witness line

The placed road crossing cell "rdx" and its witness line:



4.2.2 Railroad



Accelerator Key: a or A

Place railway crossing cell "rrx".

Follow the message after pressing this menu: Place cell rrx & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the End Point of the witness line

The placed railway crossing cell "rrx" and its witness line:



4.2.3 Water



Accelerator Key: w or W

Place water crossing cell "wcx".

Follow the message after pressing this menu: Place cell wcx & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the End Point of the witness line

The placed water crossing cell "wcx" and its witness line:



4.2.4 Pipe



Accelerator Key: p or P

Place pipe crossing cell "pipex" and its witness line.

Follow the message after pressing this menu: Place cell pipex & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the End Point of the witness line

The placed pipe crossing cell "pipex" and its witness line:



4.3 Valves



Accelerator Key: p or P

Place PE valve cell "peval".

Follow the message after pressing this menu: Place cell peval:

The placed PE valve cell "peval":

0

4.3.2 Steel



Accelerator Key: s or S

Place steel valve cell "stval".

Follow the message after pressing this menu: Place cell stval:

The placed steel valve cell "stval":



4.3.3 Aluminum



Accelerator Key: a or A

Place aluminum valve cell "alval".

Follow the message after pressing this menu:

The placed aluminum valve cell "alval":

 \odot

4.3.4 PVC



Accelerator Key: v or V

Place PVC valve cell "pcval".

Follow the message after pressing this menu: Place cell pcval:

The placed PVC valve cell "pcval":



4.3.5 Gas valves4.3.5.1 Above Ground



Accelerator Key: a or A

Place above ground gas valve cell "gval" and its witness line.

Follow the message after pressing this menu: Place cell gval & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the End Point of the witness line:

The placed above ground gas valve cell "gval" and its witness line:



4.3.5.2 Below Ground



Accelerator Key: b or B

Place below ground gas valve cell "blval" and its witness line.

Follow the message after pressing this menu: Place cell blval & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the End Point of the witness line:

The placed below ground gas valve cell "blval" and its witness line:



4.4 Caps 4.4.1 PE



Accelerator Key: p or P

Place PE cap cell "pecap" and its witness line.

Follow the message after pressing this menu: Place cell pecap & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point:

The placed PE cap cell "pecap" and its witness line:



4.4.2 Steel



Accelerator Key: s or S

Place steel cap cell "stcap" and its witness line.

Follow the message after pressing this menu: Place cell stcap & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point

The placed steel cap cell "stcap" and its witness line:



4.4.3 Aluminum



Accelerator Key: a or A

Place aluminum cap cell "alcap" and its witness line:

Follow the message after pressing this menu: Place cell alcap & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point

The placed aluminum cap cell "alcap" and its witness line:



4.4.4 PVC



Accelerator Key: v or V

Place PVC cap cell "pvccap" and its witness line.

Follow the message after pressing this menu: Place cell pvccap & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point

The placed PVC cap cell "pvccap" and its witness line:



4.5 Wells



Accelerator Key: g or G

Place gas well cell "gaswel".

Follow the message after pressing this menu: Place cell gaswel:

The placed gas well cell "gaswel":



4.5.2 Oil



Accelerator Key: o or O

Place oil well cell "oilwel".

Follow the message after pressing this menu: Place cell oilwel:

The placed oil well cell "oilwel":



4.5.3 Non Status



Accelerator Key: n or N

Place non-status well cell "nswell".

Follow the message after pressing this menu: Place cell nswell:

The placed non-status well cell "nswell":



4.6 Meter



Accelerator Key: s or S

Place meter station cell "tapnod".

Follow the message after pressing this menu: Place cell tapnod:

The placed meter station cell "tapnod":



4.6.2 Symbol



Accelerator Key: y or Y

Place meter station symbol cell "mst" and its witness line:

Follow the message after pressing this menu:

Place cell mst & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point

The placed meter station symbol cell "mst" and its witness line:



4.7 Regulator



Accelerator Key: s or S

Place regulator cell "regnod".

Follow the message after pressing this menu: Place cell regnod:

The placed regulator cell "regnod":



4.7.2 Symbol



Accelerator Key: y or Y

Place regulator symbol cell "rst" and its witness line.

Follow the message after pressing this menu: Place cell rst & the witness line:

Place the cell first:



Then follow the message and place the witness line: Please Specify the witness line End Point

The placed regulator symbol cell "rst" and its witness line:



4.7.3 Number



Accelerator Key: n or N

Place regulator number cell "regsan" and its text.

First key in the regulation station number: 1234 (in this example)

| Keyin the regulation station number: | | | | | |
|--------------------------------------|--------|--|--|--|--|
| Keyin the regulation station number: | | | | | |
| [1234 | | | | | |
| <u>D</u> K | Cancel | | | | |

Then follow the message and place the cell:

Place cell regsan:

The placed regulator number cell "regsan" and its text:



4.8 Tap



Accelerator Key: n or N

Place tap number cell "tapnm2" and its text.

First key in the tap number: 1234 (in this example)

| Keyin the tap number: | | | | | | | |
|-----------------------|--------|--|--|--|--|--|--|
| Keyin the tap number: | | | | | | | |
| | | | | | | | |
| 1234 | | | | | | | |
| <u>o</u> k | Cancel | | | | | | |

Then follow the message and place the cell: Place cell tapnm2:

The placed tap number cell "tapnm2" and its text:



Accelerator Key: o or O

Place tap note cell "frtap" and its text.

First key in the tap number: 12345 (in this example)

| Keyin the tap number: | | | | | | | |
|-----------------------|--------|--|--|--|--|--|--|
| Keyin the tap number: | | | | | | | |
| | | | | | | | |
| 12345 | | | | | | | |
| <u>QK</u> | Cancel | | | | | | |

Then follow the message and place the cell: Place cell frtap:

The placed tap note cell "frtap" and its text: From Tapl2345

4.9 Anode



Accelerator Key: n or N

Place cell "anode".

Follow the message after pressing this menu: Place cell anode only:

The placed cell anode:



4.10 Line Number

| B RU-GAS Rural Utilitie, Alberta Agriculture and Rural Development | | | | | | | | |
|---|-------|------|---------------------|-----------|-------------------|-----------|-----------|---------------|
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | | <u>T</u> ees | · · | | | | |
| | | | Crossings | → | | | | |
| | | | <u>V</u> alves | → | | | | |
| | | | Caps | • | | | | |
| | | | <u>W</u> ells | • | | | | |
| | | | <u>M</u> eter | • | | | | |
| | | | <u>R</u> egulator | • | | | | |
| | | | Tap | • | | | | |
| | | | A <u>n</u> ode | | | | | |
| | | | Line Numb | er | | | | |
| | | | Te <u>s</u> t Stati | on | | | | |
| | | | N <u>o</u> de Num | iber | | | | |
| | | | Str <u>u</u> cture | | | | | |

Accelerator Key: 1 or L

Place line number cell "linnum" and its number.

Follow the message after pressing this menu:

Place location of line number:

Then key in number of lines and place the cell: 123 (in this example)

| Keyin number of lines | | | | | | | |
|------------------------|--------|--|--|--|--|--|--|
| Keyin number of lines: | | | | | | | |
| | | | | | | | |
| 123 | | | | | | | |
| <u>Q</u> K | Cancel | | | | | | |

The placed line number cell "linnum" and its number:



4.11 Test Station



Accelerator Key: s or S

Place test station cell "tsta2".

Follow the message after pressing this menu: Place cell tsta2 only:

The placed test station cell "tsta2":



4.12 Node Number

| 😤 RU-GAS 🛛 Rural Utilitie , Alberta Agriculture And Rural Development 📃 🛽 | | | | | | | | |
|---|-------|------|---------------------|-----------|-------------------|-----------|-----------|---------------|
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneous |
| | | | <u>T</u> ees | · · · - | | | | |
| | | | Crossings | → | | | | |
| | | | <u>V</u> alves | • | | | | |
| | | | Caps | • | | | | |
| | | | <u>W</u> ells | • | | | | |
| | | | <u>M</u> eter | → | | | | |
| | | | <u>R</u> egulator | → | | | | |
| | | | Tap | → | | | | |
| | | | Anode | | | | | |
| | | | Line Numb | er | | | | |
| | | | Te <u>s</u> t Stati | on | | | | |
| | | | Node Num | iber | | | | |
| | | | Str <u>u</u> cture | | | | | |

Accelerator Key: o or O

Place node number text.

First follow the message and key in text in the keyin window: Place node number:

| 名 afl45075.1 | | | | |
|--------------|--------------|----|--|--|
| <u> </u> | <u>E</u> dit | ₽r | | |
| TEX | T:22 | | | |

Then use the data button to place the node number text.

4.13 Structure



Accelerator Key: u or U

Place foreign structure line.

Follow the message after pressing this menu:

Then use the data button to place the line string.
5. Consumers

5.1 Burning

| 4 | 5.1.1 Domestic Consumer(Graphics Group) | | | | | | | | | | |
|---|---|-------|--------|-----------|------------|----------|-------------------|-------------------|-----------|---------------|---|
| | 😤 RU-GA | | ıral U | | erta Agric | ulture A | nd Rural | | | | × |
| | RU-Tools | Pipes | Text | Equipment | Consumers | Subdivis | ions_Land | Townships | Utilities | Miscellaneous | |
| 1 | | | | | Burning | • | <u>D</u> omestic | Consumer | | | |
| | | | | | Non Burnir | ng ▶ | <u>M</u> ulti-Met | ter Consumer | | | |
| | | | | | | | Grain Dry | /er | | | |
| | | | | | | | Irrigation | 1 | | | |
| | | | | | | | Irrigation | (Secondary) | | | |
| | | | | | | | Communa | al Farm | | | |
| | | | | | | | Domestic | <u>S</u> econdary | | | |
| | | | | | | | | | | | |

Accelerator Key: d or D

Place customer cell "cm", customer name and the customer's load.

First key in the customer name: Eugene (in this example)

| Input the customer name | | | | | | |
|-------------------------|--------|--|--|--|--|--|
| Keyin customer name: | | | | | | |
| | | | | | | |
| Eugene | | | | | | |
| <u>O</u> K | Cancel | | | | | |

Follow the message to select the pipeline to place the cell "cm": Please Select Pipe

Ignore this keyin: **B** af145065. Elle Edit Pr TEXT :]

Place the customer name by the cell "cm":



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| | |
| 12345 | |
| <u>о</u> к | Cancel |
| | |

The placed cell "cm", customer name and the load: (Graphics Group)



| | 1110 | *111 | 1110101 | COllou | 11101 | (Orup | | roup | / |
|----------|-------|--------|-----------|-----------------|----------|-----------------|-------------|-----------|---------------|
| 😤 RU-GA | | ıral U | | erta Agrico | | And Rural | | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivis | sions_Land | Townships | Utilities | Miscellaneous |
| | | | | <u>B</u> urning | • | Domestic | Consumer | | |
| | | | | Non Burnin | ig ▶ | Multi-Met | er Consumer | | |
| | | | | | | Grain Dry | /er | | |
| | | | | | | Irrigation | | | |
| | | | | | | Irrigation | (Secondary) | | |
| | | | | | | <u>C</u> ommuna | al Farm | | |
| | | | | | | Domestic | Secondary | | |

5.1.2 Multi-Meter Consumer(Graphics Group)

Accelerator Key: m or M

Place set number cell "dsmm1", customer name and the customer's load:

First key in the set number: 123 (in this example)

| Keyin | the set number: | |
|-------|----------------------|--------|
| Ke | eyin the set number: | |
| | | |
| | | |
| 123 | | |
| | <u>o</u> k | Cancel |
| | | |
| 122 | <u>D</u> K | Cancel |

Then key in the customer name: Dexter (in this example)

| Keyin customer name: | | | | | |
|----------------------|--------|--|--|--|--|
| Keyin customer name: | | | | | |
| | | | | | |
| Devter | | | | | |
| | | | | | |
| <u>0</u> K | Cancel | | | | |
| | | | | | |

Follow the message to select the pipeline to place the cell "dsmm1" Please Select Pipe

Ignore this keyin:



Place the customer's name by the cell "dsmm1":



Finally key in the customer's load and place it: 46 (in this example)

| Input the load | | | | |
|----------------|--------|--|--|--|
| Keyin load: | | | | |
| | | | | |
| | | | | |
| 46 | | | | |
| <u>0</u> K | Cancel | | | |

The placed set number cell "dsmm1", customer name and the load: (Graphics Group)



5.1.3 Grain Dryer(Graphics Group)



Accelerator Key: g or G

Place grain dryer cell "gdbur2", customer name and the customer's load:

First key in the customer's name: Eugene (in this example)

| Input the customer name | | | | | |
|-------------------------|--------|--|--|--|--|
| Keyin customer name: | | | | | |
| Eugene | | | | | |
| <u> </u> | Cancel | | | | |

Follow the message to place the cell "gdbur2" Place grain dryer

Ignore this keyin:



Place the customer's name by the cell "gdbur2":



Finally key in the load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| 12345 | |
| <u>D</u> K | Cancel |

The placed grain dryer cell "gdbur2", customer name and the load: (Graphics Group)



5.1.4 Irrigation(Graphics Group)



Accelerator Key: i or I

Place irrigation cell "irbur1", customer name the customer's load:

First key in the customer's name: Eugene (in this example)

| Input the customer name | | | | | |
|-------------------------|--------|--|--|--|--|
| Keyin customer name: | | | | | |
| Eugene | | | | | |
| | Cancel | | | | |

Follow the message to place the cell "irbur1": Place irrigation unit (burning)

Ignore this keyin:



Place the customer's name by the cell "irbur1":



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| 12345 | |
| | Const |
| | Lancel |

The placed irrigation cell "irbur1", customer name and the load: (Graphics Group)





5.1.5 Irrigation (Secondary: Graphics Group)

Accelerator Key: r or R

Place secondary irrigation cell "irrsec", customer name and the customers' load.

First key in the customer's name: Eugene (in this example)

| Input the customer name | | | | | |
|-------------------------|------------|--|--|--|--|
| Keyin customer name: | | | | | |
| Firene | | | | | |
| | a 1 | | | | |
| | | | | | |

Follow the message to place the cell "irrsec": Place irrigation unit (secondary)

Ignore this keyin:



Place the customer's name by the cell "irrsec":



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|-----------------|--------|
| Keyin load: | |
| | |
| | |
| 12345 | |
| <u><u> </u></u> | Cancel |
| | |

The placed secondary irrigation cell "irrsec", customer name and the load: (Graphics Group)



5.1.6 Communal Farm(Graphics Group) Communal Farm(Graphics Group) RU-GAS Rural Utilities, Alberta Agriculture And Rural Development RU-Tools Pipes Text Equipment Consumers Subdivisions_Land Townships Utilities Miscellaneous Domestic Consumer Multi-Meter Consumer Grain Dryer grain Dryer grainon Irrigation (Secondary) Communal Farm Domestic Secondary

Accelerator Key: c or C

Place communal farm cell "cfarm", customer name and the load:

First key in the customer's name: Eugene (in this example)

| Input the customer name | | |
|-------------------------|--------|--|
| Keyin customer name: | | |
| Eugene | | |
| <u>O</u> K | Cancel | |

Follow the message to place the cell "cfarm:

Place communal farm

Ignore this keyin:



Place the customer's name by the cell "cfarm":



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| 12345 | |
| , | |
| <u>D</u> K | Cancel |

The placed communal farm cell "cfarm", customer name and the load: (Graphics Group)



| tor. | | | | | • · · | - | | 1 / | |
|----------|-------|--------|-----------|-----------------|---------|------------|---------------------|-----------|---------------|
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| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivi | sions_Land | Townships | Utilities | Miscellaneous |
| | | | | <u>B</u> urning | Þ | Domestic | Consumer | | |
| | | | | Non Burnir | ng 🕨 🕨 | Multi-Me | ter Consumer | | |
| | | | | | | Grain Dry | /er | | |
| | | | | | | Irrigation | n | | |
| | | | | | | Irrigation | (Secondary) | | |
| | | | | | | Commun | al Farm | | |
| | | | | | | Domestic | : <u>S</u> econdary | | |
| | | | | | | | | | |

5.1.7 Domestic Secondary(Graphics Group)

Accelerator Key: s or S

Place cell "cmbur2", customer name and the load

First key in the consumer name: Dexter (in this example)

| Keyin customer name: | |
|----------------------|--------|
| Keyin customer name: | |
| Dexter | |
| | Cancel |
| | |

Follow the message to place the cell "cmbur2" and the customer name:



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| 12345 | |
| <u>0</u> K | Cancel |

The placed cell "cmbur2", customer name, number of customer, and the load: (Graphics Group)



5.2 Non Burning



Accelerator Key: c or C

Place non-burning consumer cell "cmnb1", customer name and the load:

First key in customer name: Eugene (in this example)

| Input the customer name | | | | |
|-------------------------|--------|--|--|--|
| Keyin customer name: | | | | |
| | | | | |
| Eugene | | | | |
| | Cancel | | | |

Follow the message to place the cell "cmnb1": Place Non-burning consumer





Place the customer name by the cell "cmnb1":



Then key in the load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| 12345 | |
| <u>K</u> | Cancel |

The placed non-burning consumer cell "cmnb1", customer name and the load: (Graphics Group)



5.2.2 Grain Dryer(Graphics Group)



Accelerator Key: g or G

Place non-burning grain dryer cell "gndb2", number of consumer, consumer name and the load.

First key in the number of consumer: 12 (in this example)

| Keyin no. of consumer | | | | |
|------------------------|--------|--|--|--|
| Keyin no. of consumer: | | | | |
| | | | | |
| [12] | | | | |
| <u>OK</u> | Cancel | | | |

Then the consumer name: Dexter (in this example)

| Keyin customer name: | |
|----------------------|--------|
| Keyin customer name: | |
| Dexter | |
| <u>OK</u> | Cancel |

Follow the message to place the cell "gndb2": Place non-burning grain dryer

Ignore this keyin:



Place the customer name by the cell "gndb2":



Finally key in the customer's load and place it: 12345 (in this example)

| Input the load | |
|----------------|--------|
| Keyin load: | |
| | |
| | |
| 12345 | |
| <u> </u> | Cancel |
| | |

The placed non-burning grain dryer cell "gndb2", customer name, number of <u>customer</u>, and the load: (Graphics Group)



5.2.3 Irrigation(Graphics Group)



Accelerator Key: i or I

Place non-burning irrigation cell "irnb1", number of consumer, consumer name and the load:

First key in the number of consumer: 12 (in this example)

| Keyin no. of consumer | | | |
|-------------------------|--------|--|--|
| Kevin poli of consumer: | | | |
| | | | |
| | | | |
| [12] | | | |
| | , | | |
| <u>0</u> K | Cancel | | |
| | | | |

Then the consumer name: Dexter (in this example)

| Keyin customer name: | | | | | | | |
|----------------------|--------|--|--|--|--|--|--|
| Keyin customer name: | | | | | | | |
| | | | | | | | |
| Devter | | | | | | | |
|) Clenter | | | | | | | |
| <u>0</u> K | Cancel | | | | | | |
| | | | | | | | |

Follow the message to place the cell "irnb1": Place non-burning irrigation unit

Ignore this keyin:



Place the customer name by the cell "irnb1":



Finally key in the customer's load and place it: 12345 (in this example)

| Cancel |
|--------|
| |
| |

The placed non-burning irrigation cell "irnb1", number of consumer, consumer name and the load: (Graphics Group)



6. Subdivision Land

6.1 Block

| 6.1.1 | Ou | tlin | es | | | | | | |
|----------|-------|--------|---------------|-------------|-------------------------|------|----------------|-----------|---------------|
| 😤 RU-G | AS RI | ıral U | tilitie, Albe | erta Agricu | lture And Rural I | Deve | elopme | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | <u>Bl</u> ock | ► | <u>O</u> utlin | es | |
| | | | | | Lot | ≁ | <u>N</u> umb | ers | |
| | | | | | <u>Pl</u> an |)] | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | → | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | S <u>u</u> bdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | ⊴ear | • | | | |

Accelerator Key: o or O

Place block outlines.

Follow the message and use the data button to place the outlines: Place block outline:

6.1.2 Numbers



Accelerator Key: n or N

Place block numbers.

Follow the message and key in the first block number: place block numbers:

Key in the first block number in the keyin window:

| 诺 afl45065.1 | | | | | | | |
|--------------|--------------|----|--|--|--|--|--|
| Eile | <u>E</u> dit | ₽r | | | | | |
| TEX | T : 33 | | | | | | |

And use the data button to place the first block number inside a block. Next the number will be automatically added by 1. If the first block number are 33, then the next block number will be 34, 35, etc. and no further key in is required. The user only needs to move the cursor to the corresponding block and give a data button.

If the user wants to change the active angle for the block numbers, then key in "aa" and follow the message:

| Information | |
|---|--|
| After the new angle set, Rerun the routine to place new keyins: | |
| ŪK | |

Give data buttons for two locations to set the active angle: set new active angle by 2 points:

Rerun the program to use the new active angle setting.

6.2 Lot

| 6.2.1 | Lır | les | | | | | | | |
|----------|-------|-------|---------------|-------------|-------------------------|------|--------------|-----------|---------------|
| 😤 RU-GA | S Ru | ral U | tilitie, Albe | erta Agricu | lture And Rural [|)eve | elopme | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | <u>Bl</u> ock | ⇒J | | | |
| | | | | | Lot | ► | Lines | | |
| | | | | | <u>Pl</u> an | ► | <u>N</u> umb | ers | |
| | | | | | Right of Way | 1 | | | |
| | | | | | R <u>e</u> ference Cell | • | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | Subdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | <u>C</u> lear | • | | | |

Accelerator Key: 1 or L

Place lot lines.

Follow the message and use the data button to place the lot lines: Place lot line:

6.2.2 Numbers



Accelerator Key: n or N

Place lot numbers.

Follow the message: place lot numbers:

And key in the first lot number in the keyin window:

| ł | <mark>3</mark> afl | 4506 | 5. |
|---|--------------------|--------------|----|
| | <u>F</u> ile | <u>E</u> dit | ₽r |
|] | TEX | T : 33 | |

And place the first lot number inside a lot, next the number will be automatically added by 1. If the first lot number is 33, then the next lot number will be 34, 35, etc. and no further key in is required. The user only needs to move the cursor to the corresponding lot and give a data button.

If the user wants to change the active angle for the lot numbers, then key in "aa" and follow the message:

| Informa | tion |
|---------|--|
| | After the new angle set, Rerun the routine to place new keyins: |
| | <u>D</u> K |

Give data buttons for two locations to set the active angle: set new active angle by 2 points:

Rerun the program to use the new active angle setting.

6.3 Plan

| 6.3.1 | Ext | tent | | | | | | | |
|----------|-------|--------|----------------|-------------|--|------|----------------------|----------------|---------------|
| 😤 RU-GA | S Ru | ral Ui | tilitie , Albe | erta Agricu | lture And Rural I | Deve | lopme | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land Block Lot Plan Right of Way Reference Cell Street Name Boundary Subdivision Reference File Clip Behind Cell Qlear | Tow | <mark>E</mark> xteni | Utilities t | Miscellaneous |

Accelerator Key: e or E

Set default 5m for parallel copy:

Other distances for parallel copy can be set using keyin:

 Bile
 Edit
 Project
 Datable

 DISTANCE : (5.0000)66
 (5.0000)66
 (5.0000)66
 (5.0000)66

Follow the message to copy parallel: Copy Parallel by Key-in > Identify element

6.3.2 Numbers

| ~ | | | | | | | | | | |
|---|----------|-------|------|-----------|-----------|-------------------------|-----|---------|-----------|---------------|
| 8 | | | | | | | | | | |
| | RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | | <u>B</u> lock | • | | | |
| | | | | | | Lot | • | | | |
| | | | | | | <u>Pl</u> an | • | Exten | t | |
| | | | | | | <u>Rig</u> ht of Way | | Numb | ers | |
| | | | | | | R <u>e</u> ference Cell | ⇒ľ | | | |
| | | | | | | Street Name | | | | |
| | | | | | | B <u>o</u> undary | | | | |
| | | | | | | S <u>u</u> bdivision | | | | |
| | | | | | | Reference File | | | | |
| | | | | | | Clip Behind Cell | | | | |
| | | | | | | ⊆lear | • | | | |
| | | | | | | | | | | |

Accelerator Key: n or N

Place plan numbers.

Follow the message place plan numbers:

And key in the plan number in the keyin window:

| ŧ | 궁 afl4506 | | | | | | | | |
|---|--------------|--------------|--|--|--|--|--|--|--|
|] | <u>Fi</u> le | <u>E</u> dit | | | | | | | |
| | TEX | T: | | | | | | | |

Then use the data button to place the plan number.

6.4 Right of Way

| | 0 | | | | | | | | |
|----------|-------|------|-----------|-----------|-------------------------|-----|---------|-----------|---------------|
| 😤 RU-GA | | | | | | | | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | <u>B</u> lock | -> | | | |
| | | | | | <u>L</u> ot | → | | | |
| | | | | | <u>Pl</u> an | → | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | • | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | Subdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | <u>C</u> lear | -> | | | |

Accelerator Key: r or R

Place right of way line strings, copy parallel the right of way and place text at the user's specified angle.

Follow the message after pressing this menu:

Place right of way line string

Place the right of way line string in the dgn file:



And a reset button (usually the right button of the mouse) click, the copy parallel key in distance window will show up: 20 (in this example)

| Keyin copy parallel distance(m): | | | | | | | |
|----------------------------------|--------|--|--|--|--|--|--|
| default 20m: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 20 | | | | | | | |
| | Cancel | | | | | | |
| | | | | | | | |

Then another window will let the user specify the copy parallel direction (on which side to copy):

| Information |
|---|
| Specify a data point for copy parallel direction: |
| |
| |
| <u>D</u> K |

A data point was given below the right of way line string to parallel copy the right of way downwards:



Then key in the right of way width text (parallel copy distance): 20m (in this example)

| Keyin right of way text: | |
|--------------------------|--------|
| Keyin right of way text: | |
| 20m | |
| <u> </u> | Cancel |

Then set two points for the text placement (alignment): set angle for text placement(two points)

The placed right of way text (see the suffixed P/L R/W):



Note: a presetting for parallel copy may be required to have this process work properly.

6.5 Reference Cell

| 0.3.1 | De | tan | Drawi | ng | | | |
|----------|-------|--------|---------------|-------------|---|-----|----------------------------------|
| 😤 RU-G | AS RI | iral U | tilitie, Albe | erta Agricu | lture And Rural I |)ev | velopment 📃 🗖 🔀 |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land Block Lot Plan Right of Way Reference Cell Street Name Boundary Subdivision Reference File | Tor | Winships Utilities Miscellaneous |
| | | | | | Clip Behind Cell <u>Cl</u> ear | • | |

Accelerator Key: d or D

Place detail drawing cell "see500".

First key in the reference number for cell "see500": 123 (in this example)

| Keyin reference number | | | | | | | |
|-------------------------|--------|--|--|--|--|--|--|
| Keyin reference number: | | | | | | | |
| | | | | | | | |
| 1028 | | | | | | | |
| <u> </u> | Cancel | | | | | | |

Then key in the detail drawing letter and place the cell: A (in this example)



The placed detail drawing cell "see500":



6.5.2 Urban Reference



Accelerator Key: u or U

Place urban reference cell "see300".

First key in the reference number for cell "see300": 123 (in this example)

| Keyin reference number | | | | | | |
|-------------------------|--------|--|--|--|--|--|
| Keyin reference number: | | | | | | |
| 123 | | | | | | |
| | Cancel | | | | | |

Then place the cell:

6.6 Street Name



Accelerator Key: t or T

Place text (default: GOVERNMENT ROAD ALLOWANCE).

Follow the message after pressing this menu:

Keyin Street Name or Enter for default: Government Road Allowance:

Key in new text if wanted:



Place the text along the road element:



6.7 Boundary

| | | | - | | | | | | | |
|----------|-------|--------|---------------|-------------|---------------------|------|---------|-----------|---------------|---|
| 😤 RU-GA | | ıral U | tilitie, Albe | erta Agricu | lture And Rural I | Deve | elopme | | | × |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous | |
| | | | | | <u>Bl</u> ock | • | | | | _ |
| | | | | | Lot | → | | | | |
| | | | | | Plan | • | | | | |
| | | | | | Right of Way | | | | | |
| | | | | | Reference Cell | • | | | | |
| | | | | | | | | | | |
| | | | | | Boundary | | | | | |
| | | | | | Subdivision | | | | | |
| | | | | | – Reference File | | | | | |
| | | | | | Clip Behind Cell | | | | | |
| | | | | | Clear | • | | | | |
| | | | | | | | | | | |

Accelerator Key: o or O

Place detailed 300 drawing boundary lines. These lines can be placed as polygons, line strings or curves.

Chose different button for polygon (shape), line string or curve:

| Alert | | | |
|-------|-------------------|----------------------------|-----------------|
| | Yes for placing s | nape, No for linestring, C | ancel for curve |
| | Yes | No | Cancel |

The placed detail drawing boundary (in this case, a closed shape):



6.8 Subdivision



Accelerator Key: u or U

Place a hatched closed polygon feature for a new subdivision.

Follow the message after pressing this menu: Place subdivision, Reset to hatch

Use the data button to place the polygon, the last data point must close the polygon! Then use the reset button to hatch the polygon:

The placed and hatched subdivision polygon:



6.9 Reference File

| 😤 RU-GA | S Ri | ıral U | tilitie, Albe | erta Agricu | lture And Rural I | Develo | pme | nt | |
|----------|-------|--------|---------------|-------------|-------------------------|--------------|-------|-----------|---------------|
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Towns | ships | Utilities | Miscellaneous |
| | | | | | <u>Bl</u> ock | - - - | _ | | |
| | | | | | Lot | > | | | |
| | | | | | <u>Pl</u> an | | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | Subdivision | | | | |
| | | | | | Re <u>f</u> erence File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | ⊆lear | | | | |

Accelerator Key: f or F

Reference 300lnd file to the active 300utl file. "Config" needs to be run first and the active dgn has to be a 300utl file.

6.10 Clip Behind Cell

| 8 RU-GAS Rural U | tilitie , Albo | erta Agricu | lture And Rural I | Developme | ent | |
|------------------|-----------------|--------------------------|--|------------------------|-----------|---------------|
| RU-GAS Rural U | Itilitie , Albo | erta Agricu Consumers | Iture And Rural I Subdivisions_Land Block Lot Plan Right of Way Reference Cell Street Name Boundary Subdivision Reference File Clip Bebiod Cell | Developme Townships | utilities | Miscellaneous |
| | | | <u>Cl</u> ear | • | | |

Accelerator Key: i or I

Clip all other elements overlapped with the selected cell. The clipped size is determined by the cell range. So use this tool with caution.

Two points are required to select the cell: either the upper left/bottom right or the upper right/bottom left points.

Follow the message after pressing this menu: Place the first upper left point to select the cell:

After the first point is specified in the view: Place the the second lower right point to select the cell:

A clipped line string by selecting the cell "dsmm1":



6.11 Clear 6.11.1 Shape Single

| 0.11.1 | on | upe | Single | / | | | | | |
|---|-------|------|-----------|-----------|-------------------------|-----|-----------------|-----------|---------------|
| 🖀 RU-GAS 🛛 Rural Utilitie , Alberta Agriculture And Rural Development 📃 🗌 | | | | | | | | | |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | <u>Bl</u> ock | ► | | | |
| | | | | | Lot | ► | | | |
| | | | | | <u>Pl</u> an | ► | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | ► | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | S <u>u</u> bdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | <u>Cl</u> ear | ► | Shape | : Single | |
| | | | | | | | S <u>h</u> ape | Level | |
| | | | | | | | <u>T</u> ext S | Single | |
| | | | | | | | T <u>e</u> xt L | .evel | |

Accelerator Key: s or S

Clip elements using a single selected shape feature.

Follow the message after pressing this menu: Place select the shape:

The lines before being clipped (selected single red shape):



The lines after being clipped (selected single red shape):


6.11.2 Shape Level

| | | r - | | | | | | | |
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| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Tov | vnships | Utilities | Miscellaneous |
| | | | | | <u>Bl</u> ock | ► | | | |
| | | | | | Lot | • | | | |
| | | | | | <u>Pl</u> an | • | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | • | | | |
| | | | | | Street Name | | | | |
| | | | | | Boundary | | | | |
| | | | | | Subdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | <u>Cl</u> ear | • | <u>S</u> hape | Single | |
| | | | | | | | S <u>h</u> ape | e Level | |
| | | | | | | | <u>T</u> ext 9 | Single | |
| | | | | | | | T <u>e</u> xt l | .evel | |

Accelerator Key: h or H

If more shapes are on the same selected shape level, then all shapes on that level will be used to clip the overlapped elements.

Follow the message to select the shape feature: Place select the shape:

Features before being clipped (3 red shapes on the same level and one being selected):



Features after being clipped:



Some overlapped features may not be clipped, depends on their locations. Use this tool with caution (Because this tool works on all shapes in the same level, it is better to make sure that to clip all shapes on the same level is exactly what you want).

6.11.3 Text Single



Accelerator Key: t or T

Clip overlapped elements with a single text.

Follow the message and select the single text: Place select the text:

A line string overlapped with a text before being clipped:



The line string after being clipped:



6.11.4 Text Level

| 😤 RU-GAS 🛛 Rural Utilitie , Alberta Agriculture And Rural Development 💦 🔳 🔲 🗙 | | | | | | | | | |
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| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | To | vnships | Utilities | Miscellaneous |
| | | | | | <u>B</u> lock | ► | | | |
| | | | | | Lot | ► | | | |
| | | | | | <u>Pl</u> an | ► | | | |
| | | | | | <u>Rig</u> ht of Way | | | | |
| | | | | | R <u>e</u> ference Cell | ► | | | |
| | | | | | Street Name | | | | |
| | | | | | B <u>o</u> undary | | | | |
| | | | | | S <u>u</u> bdivision | | | | |
| | | | | | Reference File | | | | |
| | | | | | Clip Behind Cell | | | | |
| | | | | | <u>C</u> lear | ► | <u>S</u> hape | Single | |
| | | | | | | | Shape | Level | |
| | | | | | | | Text 9 | Single | |
| | | | | | | | T <u>e</u> xt L | .evel | |

Accelerator Key: e or E

Clip overlapped elements on all same level texts.

Follow the message and select a single text: Place select the text:

Two text features (on same level, but different colors) overlapped with two line strings before clipping:



Texts and line strings after being clipped:



Use this tool with caution.

7. Townships

7.1 ATS Points



Accelerator Key: t or T

Place ats point cell "ats".

Follow the message after pressing this menu: Place cell ats:

The placed ats point cell "ats":



7.2 Map Error



Accelerator Key: m or M

Settings for map error.

7.3 Section Numbers



Accelerator Key: c or C

Place section numbers.

Key in the section number in the keyin window:



Follow the message if a new active angle is wanted for the section number:

place section numbers, aa for new angle:

If "aa" is the input, then another window will show up:

| Information |
|---|
| After the new angle set, Rerun the routine to place new keyins: |
| <u>D</u> K |

Use two points to set the new active angle: set new active angle by 2 points:

The placed section number 12 (active angle = 0):



The placed same section number 12 (after aa's new set)



and she section number 12 (and as new set)

The section numbers will be automatically added by 1 each time after a keyin.

7.4 Keyplan Shape



Accelerator Key: k or K

Place a hatched shape for key plan polygon.

Follow the message to place the key plan polygon. The last data point must close the polygon:

Place keyplan, Reset to hatch

The placed and hatched key plan polygon:



8. Utilities

8.1 Display Fix

| 🖀 RU-GAS 🛛 Rural Utilitie , Alberta Agriculture And Rural Development 📃 🗖 🛛 | | | | | | | | X | |
|---|-------|------|-----------|-----------|-------------------|-----------|-----------------|--------------|---|
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneou | s |
| | | | | | | | <u>D</u> isplay | y Fix | |
| | | | | | | | <u>M</u> atch, | _Symbology | |

Accelerator Key: d or D

For view attribute settings, active dgn and reference files levels on/off.

8.2 Match Symbology

| _ | | | • | 0, | | | | | |
|----------|-------|---------|---------------|-------------|-------------------|-----------|----------------|--------------|---|
| 😤 RU-GA | IS RI | ıral Ui | tilitie, Albe | erta Agricu | lture And Rural I | Developme | | | X |
| RU-Tools | Pipes | Text | Equipment | Consumers | Subdivisions_Land | Townships | Utilities | Miscellaneou | s |
| | | | | | | | <u>D</u> ispla | y Fix | |
| | | | | | | | <u>M</u> atch | _Symbology | |

Accelerator Key: m or M

Set active symbologies based on the selected element.

Follow the message: Please select the element:

A window will show up to let the user know that the settings are done:

| ed on this element |
|--------------------|
| |
| <u>0</u> K |
| |

9. Miscellaneous

9.1 Create Infill File



Accelerator Key: c or C

Fence out infill features to a new dgn file.

First a fence needs to be placed:

| Alert | |
|-------|--|
| | Fence to an infill file, Press Yes If a fence has been placed! |
| | Yes <u>N</u> o |

Then key in the infill year: 09 (in this example)

| key in the infill year | |
|---------------------------|--------|
| Keyin infill year (2009): | |
| | |
| 09 | |
| <u>ū</u> K | Cancel |

A message showing that the infill file is created:

| Information |
|---|
| infill file is created: R/(coops, v8)afl/utl)afl45065 i09 |
| Infinitions of calcular Karcoops_volumentarian robositos |
| |
| |
| ОК |
| |

If the same file name is found, then a message will show up to confirm to overwrite:



9.2 Pipe Dimension



Accelerator Key: i or I

Place dimensions for pipeline features:

Follow the message: Dimension Size (Custom) > Select start of dimension

Select the start point of the dimension:



And then define length of extension line: Dimension Size (Custom) > Define length of extension line

Define the length:



Finally select dimension endpoint: Dimension Size (Custom) > Select dimension endpoint

The placed pipe dimension:



9.3 Attach Cell Library



Accelerator Key: a or A

Attach a selected cell library file.

First select a cell library file to attach:

| Information |
|---|
| Please pick up the cell library file to attach!!! |
| |
| <u>OK</u> |

Chose the coop_v8.cel cell library file:

| Choose the cell library file to attac | h, default: coop_v8.cel | |
|---|---|--------------------------------------|
| Files Coop_v8.cel coldcoop_v8.cel pccop_v8.cel pccop_cel stdsheet_v8.cel | Directories: c:\coop_config\cells\ C:\ coop_config coop_config cells | |
| List Files of Type: | | <u>O</u> K Cancel <u>H</u> elp |

The attached cell library file window:

| 8 Cell Library | : [c:\coop_confi | g\cells\coop_v8.cel] | | | |
|-------------------------|---------------------|-----------------------|------------|------------------|----------------------|
| <u>Fi</u> le | | | | | |
| □ <u>U</u> se Shared Ce | ells 🗖 <u>D</u> isp | lay All Cells In Path | [| <u>)</u> isplay: | Wireframe 🔻 |
| Name | Description | Type Where | | | |
| 200100 | | Grph Lbry | | | |
| 200101 | | Grph Lbry | | | |
| 200102 | | Grph Lbry | - 7 | | $\times Z = \Lambda$ |
| 200103 | | Grph Lbry | | | \rightarrow |
| 200104 | | Grph Lbry | | | \wedge l |
| 200105 | | Grph Lbry | | | · · / |
| 200106 | | Grph Lbry | | | |
| 200107 | | Grph Lbry | T | | |
| 1200108 | | limh I hru | - – | | |
| Active Cells | | | | | |
| <u>P</u> lacement | NONE | P <u>oint</u> Element | | <u>E</u> dit | Delete |
| <u>T</u> erminator | NONE | Pattern NONE | | <u>C</u> reate | . S <u>h</u> are |
| L | | | | | |

9.4 Ortho Photos



Accelerator Key: o or O

If the active dgn file is in the config-ed coop twp list, then the ortho photo for the file will be automatically attached. Otherwise, the user will be prompted to key in for ortho photo location: township, range and meridian(format: TxxxRxxWx):

| Specify the twp/rge/meridian for orth | |
|---|--------|
| input format: TxxxRxxWx example: T040R10W4 | |
| [T001R01W4 | Cancel |
| | |

9.4.2 Ortho Photo Detach



Accelerator Key: f or F Detach all attached ortho photos