# Placing/Using MicroSation V8i Standards in CONNECT Files

Listed below are the locations of the Iowa DOT Bridge Bureau V8i CADD Standards in ProjectWise (PW).

PWMain\Documents\Highway\Bridge\<u>V8i</u>Standards\Bridges\

PWMain\Documents\Highway\Bridge\<u>V8i</u>Standards\Culverts\LRFD\

PWMain\Documents\Highway\Bridge\<u>V8i</u>Standards\Pedestrian Tunnels\

PWMain\Documents\Highway\Bridge\<u>V8i</u>Standards\SignTrusses\

#### **Connect Version Bridge Cell Libraries**

PWMain\Documents\IowaDOTStandardsConnect\Configuration\Organization-Civil\IowaDOT\_Standards\Cell\BridgeGeneralUseCells.cel

PWMain\Documents\IowaDOTStandardsConnect\Configuration\Organization-Civil\IowaDOT\_Standards\Cell\BridgeDesManualCaddNotes.cel

#### V8i Version Bridge Cell Libraries

If necessary, some of the V8i cells may be used and modified as needed if a CONNECT version is not available. It may be necessary to update the cell to use the current levels if the cell is used on a CONNECT format sheet. If the cell is used on a V8i format sheet, then it may be used as-is.

PWMain\Documents\IowaDOTStandards\BridgeDesign\Cells\brgFinal.cel



When working in a MicroStation CONNECT Edition file, there will be a need to use existing Iowa DOT Bridge Bureau standards that were developed in MicroStation V8i. This document is meant to provide general guidance on the use of the V8i standards in CONNECT plan sheet models. Some of these new levels/colors/line weights will change as these are still being developed and refined while the CONNECT workflow is being established. There may be a need for Professional Detailer judgement to determine an adequate color and line weight to use on some details for current projects, until the official Iowa DOT Bridge Bureau level library is finalized and V8i standards are updated to CONNECT.

It is suggested to use black and white (B&W) pdf print style, "**BW\_pdf\_SheetModel**", since this is a transitional phase of setting levels/colors/line weights from V8 to CONNECT and print output may be visually different than what was used in V8. The important thing to focus on, is that the details and information to construct what is in the plans is accurate, legible, and understood.

The previous font used on Bridge Bureau standards in V8i was Font83 and all text was upper case. The new font used on CONNECT files and <u>updated standards</u> will be Engineering Vert, a TrueType font, using sentence case text. When using <u>existing</u> V8i standards\worksheets in CONNECT, the STANDARD font style or Font83 may be retained, or it may be updated to the Engineering Vert font. (It is not required to change the existing V8i font when using existing V8i standards\worksheets.)

<u>Note:</u> The images used in this document are from a file using Bentley Systems ProStructures CONNECT Edition. The Bridge Bureau Final Design plan sheets may be done in ProStructures. However, if there are no ProStructures generated elements modeled in the file, then the plan sheets may also be developed in OpenRoads Designer (ORD). ProStructures working units are in Feet\Inches. OpenRoads Designer and OpenBridge Designer\Modeler working units are in Survey Feet\Survey Inches.

# Do not use the same file that an actual bridge model is in, OpenBridge Modeler (OBM), for plan sheet development.

If any MicroStation V8i standards (with unmodified levels) are used in a MicroStation CONNECT file, then it is suggested to print in black and white (B&W), using print style "**BW\_pdf\_SheetModel**". Currently it is recommended to not spend time editing V8i standards to change the levels to CONNECT versions when used in plan sheet development. The one recommended conversion to make, is to change all V8i text to CONNECT SheetText level and all V8i dimensions to the CONNECT Dimensions level. If it is requested on a project to update the V8i elements on a worksheet, then see the "Recommended Conversion of V8i to CONNECT Levels" section in this document.

If all of the file is fully CONNECT version, with no V8i standards or elements, then the print output may be done in color with the suggested print style "CLR\_as\_is\_pdf\_SheetModel" or as another option <u>"CLR\_overrides\_ColorRaster\_pdf\_SheetModel" (this style may cause some of the rebar elements to</u> <u>print black)</u>.

The image below is showing the black & white print style "BW\_pdf\_SheetModel".

| 1i 🛐 Print - A | pply Print Style                         | ×  |
|----------------|--|----|
| Print style:   | BW_pdf_SheetModel                        | -  |
|                | PDF                                      |    |
|                | Printer                                  |    |
|                | BW_pdf_SheetModel                        |    |
| CONVADOT       | CLR_as_is_pdf_SheetModel                 | 45 |
|                | CLR_overrides_ColorRaster_pdf_SheetModel |    |
| +++> CTL       | CLR_overrides_pdf_SheetModel             |    |
| "              | CLR_overrides_SmallRaster_pdf_SheetModel |    |
|                | ONI CALL                                 |    |

#### The image below is showing the black & white print style "CLR\_as\_is\_pdf\_SheetModel".

| Print - A      | pply Print Style                         | ×          |
|----------------|--|------------|
| E Print style: | CLR_as_is_pdf_SheetModel                 | •          |
| F              | PDF                                      |            |
|                | Printer                                  | - 1        |
|                | BW_pdf_SheetModel                        | L          |
|                | CLR_as_is_pdf_SheetModel                 |            |
|                | CLR_overrides_ColorRaster_pdf_SheetModel | - <b>⊳</b> |
|                | CLR_overrides_pdf_SheetModel             |            |
|                | CLR_overrides_SmallRaster_pdf_SheetModel | - 1        |
|                |  |            |

The image below is showing the color print style "CLR\_overrides\_ColorRaster\_pdf\_SheetModel" (this style may cause some of the rebar elements to print black).



The V8i standard may be Imported or Referenced <u>and copied or merged</u> into the CONNECT file. Importing the V8i models is preferred because this will allow more ideal editing capabilities by referencing <u>within the same file</u> the imported V8i 2D Design Model in to a CONNECT Sheet Model. This would be similar to the recommended CONNECT workflow of using a Design Model referenced to a Drawing Model that is referenced to a Sheet Model.

Reference the V8i standard in at a 1:12.5 scale into the CONNECT Sheet Model Border.

| :            |                                  |                   |                     |           |                 |              |
|--------------|----------------------------------|-------------------|---------------------|-----------|-----------------|--------------|
| S <u>c</u> a | le 1.00000000 :                  | 12.50000000       | <u>F</u> otatio     | on 0°     | Offset <u>X</u> | -799:1       |
| Ŀ            | ◪◣◪▯▱◪੨▯▦                        | 🔊 🖗 🖳 👳 🕯         | <u>」N</u> ested Att | achments: | Live Nesting    | - <b>-</b> N |
| Ne           | w Level Display: Config Variable | e  Georeferenced: | No                  | *         |                 |              |

The CONNECT Sheet Model is using an ANSI D size sheet and provides a slightly larger detailing area compared to the V8i standard that is referenced in at a 1:12.5 reference scale and moved into the CONNECT sheet border. The ideal location of the V8i standard into the larger CONNECT sheet area is to

place the upper left corner of the <u>V8i drawing border</u> to the upper left corner of the <u>CONNECT sheet</u> <u>border</u>. This will require relocating of the V8i standard border text to the proper location in the CONNECT sheet border (sheet revision data, sheet title and number).

The image below is showing upper left corner of highlighted V8i standard placed into CONNECT sheet border.



The image below is showing highlighted V8i standard in CONNECT sheet model with some of the text that will need to be properly located. If it is a standard worksheet, ensure the information in the lower center of the sheet border is placed in the CONNECT Sheet Model border (Standard Sheet Number and Sheet Description).



The image below is showing highlighted V8i standard in CONNECT sheet model with some of the text that will need to be properly located.



## **Text Styles**

When the V8i version of the standard is placed into a CONNECT file, the Font83 text may come in as STANDARD font style (this is because Font83 is not supported in a CONNECT configured directory). **The STANDARD font style or Font83 may be retained, or it may be updated to the Engineering Vert font.** If keeping the V8i font, then change the V8i text levels from "brgText..." to the CONNECT **SheetText** level and the V8i dimension levels from "brgDim..." to the CONNECT **Dimensions** level <u>(set to Color=0, Weight=1)</u>. When the V8i standard is scaled at a 1:12.5 reference scale, the normal text height will be at 1/8" in a Full Size 1=1 scale CONNECT sheet model.

The image below is showing properties of text elements.

|                |                     |     | , |
|----------------|---------------------|-----|---|
| General        |                     | ^   | ^ |
| Element Descri | Text: NOTE : FOR DE | T   |   |
| Level          | brg Text Normal     |     |   |
| Color          | ByLevel (7)         |     |   |
| Weight         | 3                   |     |   |
| Class          | Primary             |     |   |
| Template       | (None)              |     |   |
| Transparency   | 0                   |     |   |
| Priority       | 0                   |     |   |
| Contents       |                     | ~   |   |
| Text String    | NOTE : FOR DETAILS  | 5 C |   |
| Text Style     | (None)              |     |   |
| Formatting     |                     | ^   |   |
| Text Color     | 😂 ByLevel (7)       |     |   |
| Font Name      | STANDARD            |     |   |
| Vertical       | False               |     |   |
| Height         | 0' 0 1/8"           |     |   |
| Width          | 0' 0 1/8"           |     |   |
| Is Annotation  | False               | _   |   |
| Justification  | Left Baseline       |     |   |
| Italics        | False               |     |   |
| Slant Angle    | 0.000°              |     |   |
|                | 0.0000              |     |   |
| Line Spacing   | 0.0000              |     |   |

The image below is showing drawing scale of Sheet Model.

| 6 | Foot              | •    |   | Full Size 1 = 1 | * |  |  |  |  |  |
|---|-------------------|------|---|-----------------|---|--|--|--|--|--|
| 0 | FOOL              | -    | Â | Custom ACS      | Ŧ |  |  |  |  |  |
| 8 | Inch              | *    | 跱 | Full Size 1 = 1 | Ŧ |  |  |  |  |  |
|   | Drawing Scale     |      |   |                 |   |  |  |  |  |  |
|   | View 2 Untitled S | heet |   |                 |   |  |  |  |  |  |

The previous Font83 symbols that were created using fractions and certain keyboard symbols will no longer be valid. The Font83 symbols will display as the original characters that were used to create the symbols (example:  $\pm$  will display as } and ø will display as 59/64).

The Font83 text elements shown in the image below will have to be changed to the proper symbols supplied in MicroStation Text Editor.

| -                                       | FONT 83 APPENDIX E     |                 |                 |   |   |                         |                               |                   |  |                               |   | E   |   |   |                        |
|---|------------------------|-----------------|-----------------|---|---|-------------------------|-------------------------------|-------------------|--|-------------------------------|---|---|---|---|------------------------|
|   |                        |                 |                 |   |   |                         |                               |                   |  |                               |   |   |   |   | SPACE                  |
|   | n<br>n                 | #<br>#          | \$<br>\$        | "/"<br>"/"                                | &<br>&                                    | ,                       | (                             | )<br>)            | *<br>*                                 | +<br>+                        | 9<br>7                                    | -   |   | /   | Ø<br>O                 |
| 1                                       | 2<br>2                 | 3<br>3          | 4<br>4          | 5   | 6<br>6                                    | 7<br>7                  | 8<br>8                        | 9<br>9            | 0                                      | 9<br>9<br>9                   | <<br><                                    | =<br>=                                    | > >   |   | 0<br>0                 |
| A<br>A                                  | B<br>B                 | C<br>C          | D<br>D          | E<br>E                                    | F   | G<br>G                  | H<br>H                        | I<br>I            | J<br>J                                 | K<br>K                        | L   | M   | N<br>N  | 0<br>0                                    | P                      |
| Q                                       | R<br>R                 | S<br>S          | T<br>T          | U<br>U                                    | V<br>V                                    | W<br>W                  | X<br>X                        | Y<br>Y            | Z<br>Z                                 | [                             | $\langle \rangle$                         | ]<br>]                                    | 0<br>0  | -   | ,<br>HALF<br>SPACE     |
| a<br>a                                  | b<br>b                 | C<br>C          | d<br>d          | e<br>e                                    | f<br>f                                    | gg                      | h<br>h                        | ı<br>i            | j<br>j                                 | k<br>k                        | 1   | m<br>M                                    | n<br>n  | 0   | р<br>Р                 |
| P<br>Q                                  | r<br>r                 | s<br>S          | t<br>†          | u<br>U                                    | V<br>V                                    | W<br>W                  | ×<br>×                        | Ч<br>У            | z<br>Z                                 | · {<br>P_                     | (-)                                       | }<br>±                                    | $\stackrel{\sim}{\scriptscriptstyle{\Delta}}$ | UNDEF                                     | UNDEF                  |
| 1/2                                     | 1/4<br>1<br>4          | 3/4<br>3<br>4   | 1/8<br> <br>8   | 3/8<br>3<br>8                             | 5/8<br>5<br>8                             | 78<br>7<br>8            | 1/16<br> <br> 6               | 3/16<br>3<br>16   | 5<br>5<br>16                           | 7/16<br>7<br>16               | %6<br>9<br>16                             | 11/16<br>11<br>16                         | 13/16<br>13<br>16                             | <sup>15</sup> /16<br>15<br>16             | 1/32<br> <br>32        |
| <sup>3</sup> / <sub>32</sub><br>3<br>32 | 5/32<br>5<br>32        | 7/32<br>7<br>32 | 9/32<br>9<br>32 | <sup>11</sup> / <sub>32</sub><br>11<br>32 | <sup>13</sup> / <sub>32</sub><br>13<br>32 | 15/32<br>15<br>32       | <sup>17</sup> /32<br>17<br>32 | 19/32<br>19<br>32 | 21/32<br>21<br>32                      | <sup>23</sup> ⁄32<br>23<br>32 | <sup>25</sup> / <sub>32</sub><br>25<br>32 | <sup>27</sup> / <sub>32</sub><br>27<br>32 | <sup>2</sup> %32<br>29<br>32                  | <sup>31</sup> / <sub>32</sub><br>31<br>32 | 1⁄64<br>JJ             |
| <sup>3</sup> / <sub>64</sub>            | 5/ <sub>64</sub><br>2  | 7/64<br>3       | 9⁄64<br>4       | <sup>11</sup> ⁄64<br>6                    | <sup>13</sup> / <sub>64</sub><br>-2       | 15/ <sub>64</sub><br>-3 | 17/64<br>-4                   | 19/64<br>-6       | <sup>21</sup> /64<br><sup>21</sup> /64 | 23/64<br>23/64                | <sup>25</sup> ⁄64<br><sup>25</sup> ⁄64    | 27/64<br>27/64                            | <sup>29</sup> ⁄64<br><sup>29</sup> ⁄64        | 31/64<br>31/64                            | <sup>33</sup> ⁄64<br>0 |
| 35/ <sub>64</sub><br>±                  | 37/ <sub>64</sub><br>2 | 39⁄64<br>3      | 41/64<br>41/64  | 43/64<br>JJ                               | 45/64<br>45/64                            | 47/64                   | 4%₄<br>⊈                      | 51/64<br>B        | 53⁄64<br>I                             | 55/ <sub>64</sub><br>I        | <sup>5</sup> 7⁄64<br>Ⅲ                    | <sup>5</sup> %4<br>: φ                    | <sup>61</sup> ⁄64<br>II                       | 63/64<br>E                                | KEY<br>RESULT          |

When editing the V8i standard in CONNECT, the text may be left as STANDARD, Font83, or updated to the Engineering Vert. If converting text and dimensions to the Engineering Vert font, then use the proper template for plan annotation.

Normal Text: Use for any notes except dimension leader notes.

**Dimension Text**: Use for all dimensions, leader notes and dimensional/numerical values and text used in tables or fields. For an example, see the tables used on the Iowa DOT Culvert Barrel Details standard sheets.

Header Text: Use for all headers and title blocks.

**SubHeader Text**: Use when Header and Normal text do not seem appropriate. Such as the word "Notes" used when labeling or title of a group of notes or instructions.

The image below is showing the list of text Annotation Templates.

| <u>í</u>   | Drawing     |           | - 😑 🖶 🛛   | 🗟 🔦 = A  | 📌 🖨 🖡         | Ŧ              |
|------------|-------------|-----------|-----------|----------|---------------|----------------|
| Fil        | e Home      | View      | Annotate  | Attach   | Analyze       | Curves C       |
|            | None        | •         | Dimension |          | *             | Ō              |
| 3          | Search Temp | olates    |           | Show 🔻   | ) • U         | Prim * Explore |
|            | Templates   |           |           |          |               |                |
| Expl       | o 🍜 None    |           |           | <b>^</b> | w 1, Untitled | I Sheet-5      |
| <u>v</u> 8 | 🔺 📁 Annota  | ation     |           |          | 🛓 🔎 🔎         | 9 🔽 📢 💈        |
| 62         | ) 🔺 📁 Pla   | n         |           |          |               |                |
| Se         | a 🥃         | Normal T  | ext       |          |               |                |
|            |             | Dimensio  | on Text   |          |               |                |
|            |             | Header Te | ext       |          |               |                |
|            |             | SubHead   | er Text   |          |               |                |
|            | 👂 📁 Storm   | Water     |           |          |               |                |
|            | 👂 📁 Model   | ing       |           |          |               |                |
|            | D 📁 Comm    | unication | 5         |          |               |                |
|            | 👂 📁 Auxilia | ry        |           |          |               |                |
|            | D 📁 Abutm   | ents      |           |          |               |                |
|            | 👂 📁 Bearing | gs        |           | -        |               |                |
|            | 🍜 Manage.   |           |           |          |               |                |
|            |             |           |           |          |               |                |

# **Text Style Sizes**

Settings for text styles are shown in the images below.

```
Dimension Text: 1/8" (0.125/12=0.0104166)
```

| 🦮 Text Styles - IADOT Dimension Text (Active : IADOT Normal Text) |   |                |         |                |            |            |           |   |
|---|---|----------------|---------|----------------|------------|------------|-----------|---|
| St <u>y</u> le Vi <u>e</u> w                                      |   |                |         |                |            |            |           |   |
|   | × |                |         |                |            |            |           |   |
| Text Styles   | ^ | General Spa    | acing l | Inder/Overline | Background | Advanced   |           |   |
| 🖓 IADOT Dimension Text  |   | _              | 773     |                |            |            | _         | _ |
| 💱 IADOT Header Text   |   | Font:          | Ŧ       | Engineering Ve | rt 🔻       | Color:     |           | * |
| 💱 IADOT Normal Text   |   | Justification: | Left To | р              | -          | Bold       |           |   |
| 💱 IADOT SUBHeader Text  |   | Height         | 0.0104  |                |            | Italics    |           |   |
| Se Label - Center Center  |   | i leight.      | 0.0104  |                | 2          |            | ne        |   |
| Se Label - Center Bottom  |   | Width:         | 0.0104  |                | l          |            |           |   |
| Se Label - CenterCenter   |   | Slant:         | 0°      |                |            | Overline   | 2         |   |
| Se Label - LeftBottom   |   | _              |         |                |            | ✓ Fraction | ns        |   |
| Se Label - LeftCenter   |   |                |         |                |            | Vertical   |           |   |
| 🕞 🛇 Label - LeftTop   |   |                |         |                |            |            | ification |   |
| Se Label - RightBottom  |   |                |         |                |            |            | incution  |   |
| Sol shel - RightCenter  |   |                |         |                |            |            |           |   |

Normal Text: Approx. 5/32" (0.15/12=0.0125)

Slightly larger than Dimension Text for increased legibility on notes.

| ﴾ Text Styles - IADOT Normal Text |              |           |       |      |                |            |                |            |   |  |
|-----------------------------------|--------------|-----------|-------|------|----------------|------------|----------------|------------|---|--|
| St <u>y</u> le Vi <u>e</u> w      |              |           |       |      |                |            |                |            |   |  |
|                                   | ×            | ļ         |       |      |                |            |                |            |   |  |
| Text Styles                       | $\mathbf{h}$ | General   | Spac  | ing  | Under/Overline | Background | Advanced       |            |   |  |
| 🛛 🥪 IADOT Dimension Text          |              |           |       | 781- |                |            |                | -          |   |  |
| 😡 IADOT Header Text               |              | '         | -ont: | Ŧ    | Engineering Ve | ert 🔻      | <u>Color</u> : |            | 0 |  |
| 💱 IADOT Normal Text               | ]            | Justifica | tion: | Left | Тор            | •          | <u> </u>       |            |   |  |
| 💱 IADOT SUBHeader Text            |              | Не        | ight  | 0.01 | 25             | 1          | Italics        |            |   |  |
| Se Label - Center Center          |              |           | ignu  | 0.01 |                |            |                | ine        |   |  |
| Se Label - Center Bottom          |              | W         | idth: | 0.01 | 25             | J          |                | inc        |   |  |
| Se Label - CenterCenter           |              | 5         | lant: | 0°   |                |            | Overlir        | ie         |   |  |
| Se Label - LeftBottom             | _            |           |       |      |                |            | ✓ Fractio      | ns         |   |  |
| Se Label - LeftCenter             |              |           |       |      |                |            | Vertica        | I          |   |  |
| 🛛 🛇 Label - LeftTop               |              |           |       |      |                |            | Eull In        | tification |   |  |
| 😒 Label - RightBottom             |              |           |       |      |                |            |                | Ancation   |   |  |

## Subheader Text: 3/16" (0.1875/12=0.015625)

| ℜ Text Styles - IADOT SUBHeader Text (Active | : IAD(       | OT Normal T | ext)  |      |                |            |                      |
|--|--------------|-------------|-------|------|----------------|------------|----------------------|
| St <u>y</u> le Vi <u>e</u> w                 |              |             |       |      |                |            |                      |
|  | ×            |             |       |      |                |            |                      |
| Text Styles                                  | $\mathbf{h}$ | General     | Spa   | cing | Under/Overline | Background | Advanced             |
| 🛛 🥪 IADOT Dimension Text                     |              |             |       |      |                |            |                      |
| 😡 IADOT Header Text                          |              | F           | ont:  | Ŧ    | Engineering \  | /ert 🔻     | <u>C</u> olor:0      |
| 💱 IADOT Normal Text                          |              | Justificat  | Bold  |      |                |            |                      |
| 💱 IADOT SUBHeader Text                       |              | Hei         | aht   | 0.01 | 5625           | 7          | ☐ Italics            |
| Se Label - Center Center                     |              |             | gint. | 0.01 | 5025           | <b>a</b>   |                      |
| Se Label - Center Bottom                     |              | Wi          | dth:  | 0.01 | 5625           | _          |                      |
| S Label - CenterCenter                       |              | SI          | ant:  | 0°   |                |            | O <u>v</u> erline    |
| Se Label - LeftBottom                        |              |             |       |      |                |            | ✓ F <u>r</u> actions |
| Se Label - LeftCenter                        |              |             |       |      |                |            | Vertical             |
| 🕞 Label - LeftTop                            |              |             |       |      |                |            | Full Justification   |
| Se Label - RightBottom                       |              |             |       |      |                |            |                      |
| Selabel DightConter                          |              |             |       |      |                |            |                      |

Header Text; ¼" (.25/12=.020833)

|   | ℜ Text Styles - IADOT Header Text (Active : IADOT Normal Text) |   |           |       |      |                                       |            |                    |   |           |
|---|--|---|-----------|-------|------|---------------------------------------|------------|--------------------|---|-----------|
|   | St <u>y</u> le Vi <u>e</u> w                                   |   |           |       |      |                                       |            |                    |   |           |
|   | E • 🖳 🔚 🕞 🖨 🍌 👧  | × |           |       |      |                                       |            |                    |   |           |
| ł | Text Styles  | ^ | General   | Spac  | cing | Under/Overline                        | Background | Advanced           |   |           |
| 1 | 💱 IADOT Dimension Text   |   |           |       | 783  |                                       |            |                    |   |           |
| I | 💱 IADOT Header Text  |   | •         | ont:  | Ŧ    | $\Box$ <u>Color</u> : $\Box$ 0 $\neg$ |            |                    |   |           |
| I | 💱 IADOT Normal Text  |   | Justifica | tion: | Left | Bold                                  |            |                    |   |           |
| I | 💱 IADOT SUBHeader Text   |   |           |       | L    | iahti                                 | 0.02       | 0022               | 7 | □ Italics |
| I | S Label - Center Center  |   |           | ignu  | 0.02 | .0033                                 | à          |                    |   |           |
| I | S Label - Center Bottom  |   | W         | idth: | 0.02 | .0833                                 | _          |                    |   |           |
| I | S Label - CenterCenter   |   | s         | lant: | 0°   |                                       |            | O <u>v</u> erline  |   |           |
| I | S Label - LeftBottom   | _ |           |       |      |                                       |            | ✓ Fractions        |   |           |
| I | S Label - LeftCenter   |   |           |       |      |                                       |            | Vertical           |   |           |
| ł | S Label - LeftTop  |   |           |       |      |                                       |            | Eull Justification |   |           |
|   | S Label - RightBottom  |   |           |       |      |                                       |            |                    |   |           |
| 1 | 😡 Label - RightCenter  |   |           |       |      |                                       |            |                    |   |           |

If the IADOT Dimension Styles are not using the proper **Text Style** with the proper **Font**, then the dimension style may need "Reset" or "Update From Library".

| af<br>1. G<br>1. Sa<br>1. Sa<br>1. Sa<br>1. Sa | Souther the second seco | Sca  | le: [ |
|--|--|--|-------|
| la er  | <ul> <li>IADOT Eng. Leader Note</li> <li>IADOT Eng. Linear Dim.</li> </ul>   | <u>A</u> ctivate   | i i i |
| he f i   | 🖗 IADOT Eng. Radial Dim.   | <u>S</u> ave<br>Cop <u>y</u><br>Rena <u>m</u> e            |       |
|  |  | <u>D</u> elete<br><u>R</u> eset<br>Re <u>m</u> ap Elements |       |
|  | General Notes & Quantites<br>The 7 Judday Ka, (ht)<br>##### County<br>Tuge dispertment of peakstantics - indexwa auminus   | Update From Library  |       |

If this does not work, then select the proper IADOT Text Style in the dimension settings.

| Geometry Units Text   | Symbology Advanced                                   |
|---|--|
| Style   | Note   |
| <u>T</u> ext Style: 家   | Bearing Label  |
| Eont: T   | (Calibri) 🔻  |
| Height: 0:0   | 1/8  |
| Width: 0:0  | 1/8  |
| Underline: (Off   | i) 🔻 🔽   |
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| Orientation: Alia   | and 👻  |
| <u>Style view</u>   |  |
|   | <u>,श्री चि</u> 🗙                                    |
| Dimension Styles  | Geometry Units Text Symbology Advanced               |
| Style (none)  | Style Notes  |
| Se I bl Pin Alignment Name                                      | Text Style 😵 Bearing Label 🔻 Leader Type:            |
| Lbl_PIn_Alignment_Name_Alon                                     | Ig Font: Cross Section - Annotation - Right ^ lator: |
| Lbl_PIn_Bearing_Distance_CIVIL     Lbl_PIn_Bearing_Distance_MST | Height:  |
| Lbl_Pin_Coordinates_NE  | Width: Curve Label LT                                |
| Lbl_Pln_Coordinates_XY  | Underline: SCurve Label RT ader:                     |
| Signature Startial Startial Startial                            | Format Strain Small Center-Center                    |
| Se _Lbl_PIn_Terrain Contour Elevation                           | ons Orientation: 🐼 IADOT Header Text                 |
| Section 2 Lot Pln_Terrain Spot Elevations                       | Location: VIADOT Normal Text                         |
| Lbl_Prof_Arc_Length   | Justification:                                       |
| Lbl_Prof_Parabola_Length  | Text Frame: S Label - Center Bottom bout:            |
| S Lbl_Prof_Slope  | Left Margin: Stabel - CenterCenter                   |
| Sector 201 Prof_Sta   | Lower Margin:  |
| Lbl_Prof_Sta_Partial  | Stacked Fractions - Stabel - LeftTop Yvv             |
| Lbl_ROW_PIn_Sta-Off_100   | Enable: On XXXXX Yyy                                 |
| S _Lbl_XS_Elev  | Type: Diagonal 💌 🗮Xx Yy                              |
| Lbl_XS_Elev_Alignment_Name                                      | Alignment: Center 🔻                                  |
| Se LbLXS_Off  | Scale: 0.750000                                      |
| Se Eng. Leader Note   |  |
| 1 IADOT Eng. Angular Dim.                                       |  |
| V IADOT Eng. Leader Note  |  |
| Stadial Dim.  |  |
|   |  |
|   |  |
| Geometry Units Text   | Symbology Advanced                                   |
| Style   | Not  |
| Text Styles Se I  | ADOT Dimension                                       |
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| Width: 0:01   |  |
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| Justification: Cent   | ter > Left 👻 📿                                       |
|   |  |

# Placing the Title Block Text Field Cell

The new CONNECT "Bridge Plan Production Seed" file includes the proper Bridge and Culvert Sheet Models with the Title Block included using text fields to auto populate text when the sheet model is added to the Sheet Index. The below guidance is to show how to attach the cell in a manual process if desired.

When placing the Title Block Cell for plan sheets ensure "Place as Shared Cell" is **UNCHECKED**. This will allow editing of the individual title block text lines for each sheet. If "Place as Shared Cell" is activated, then all instances of that cell will show the same changes.

Shared Cell definition: A cell whose elements are stored only once in the DGN file, regardless of how often the cell is placed. Any change made to one instance of a shared cell reflects in all instances of that shared cell.

Title Block cells for Bridge and Culvert sheets are in the **BridgeGeneralUseCells.cel** file on ProjectWise. PWMain\Documents\IowaDOTStandardsConnect\Configuration\Organization-Civil\IowaDOT\_Standards\Cell\BridgeGeneralUseCells.cel

The image below is showing the cell library with the Title Block cells.



# Create Text Subscript/Superscript

The use of the Subscript and Superscript in the Text Editor tools provide text that is too small to adequately read if a pdf is printed on paper. To create an adequate size subscript/superscript, the use of "Insert Stacked Fraction" in the Text Editor provides a good option.

In the Text Editor, right click to get the menu to pop up and select Insert Stacked Fraction...



In the <u>Numerator</u> window hit the "space bar" to create an empty space (this is just a place holder, blank numerator).

In the <u>Denominator</u> window enter the required text/number for the subscript entry.

In the Type window select No Bar.

In the <u>Alignment</u> window select Middle.

Select OK to complete the subscript creation.

For Superscript the entries of information in Numerator and Denominator are reversed.

The image shows the example of a flow rate value label for 100 years.



## <u>Levels</u>

This guidance is for 2D detailing. When using a 3D model to develop 2D details, some of the levels used in the 3D model will be set from the model features and may differ from what is listed below. Examples of these levels would be the OBD and OBM prefixed levels.

The **PC\_** & **PS\_** levels were put in place with the intent of being used with ProStructures 3D rebar/steel modeling. If only applying 2D details, without the ProStructures rebar/steel tools (not 3D model based), then the recommendation would be to use the rebar type/coating levels **PC\_REBAR, PC\_REBAR\_EPOXY** and **PC\_REBAR\_STAINLESS** similar to what was done in the past with 2D detailing. In addition, the other **PC\_** levels may be used in a logical manner (structural element) based from their descriptions in the Level Manager list.

Some levels have prefix letters to signify the application elements they are tied to. These prefix levels may be used for any detailing, as desired.

- PC = ProConcrete
- PS = ProSteel
- OBD and OBM = OpenBridge Designer/Modeler
- OBD\_D and OBM\_D = OpenBridge Designer/Modeler Decorations (2D elements tied to the 3D OBM model components).
- All levels ending in **GL** are intended to be used in ProStructures as "Guide Lines" when modeling rebar.

#### **Recommended Conversion of V8i to CONNECT Levels:**

The one recommended conversion to make, is change all V8i <u>text</u> and <u>dimensions</u> levels to CONNECT SheetText level. This conversion is not mandatory, it is a suggested change that would make V8i text and dimensions black on the white background of the CONNECT Sheet Model and ensure consistent output of a B&W print.

Below are some of the recommended level conversions from V8i to CONNECT. When using V8i standard worksheets in a CONNECT file, it is not required to convert the levels of V8i linear elements to CONNECT levels. The V8i worksheets may be used "as is" in a CONNECT file. The use of B&W print output is recommended for these sheets.

| <u>V8i Level</u>  | CONNECT Level                         |
|-------------------|---------------------------------------|
| brgTextNormal     | SheetText                             |
| brgTextSubheader  | SheetText                             |
| brgTextHeader     | SheetText                             |
| brgDimensionLines | Dimensions (Change Color=0, Weight=1) |
| brgTableBorder    | SheetGridMajor                        |
| brgTableLines     | SheetGridMinor                        |
| brgTextBlockOut   | TextBlockOut                          |
| brgBorder         | SheetBorder                           |

#### November 2023

| <u>V8i Level</u>       | CONNECT Level   |
|------------------------|---|
| brgShading             | PC REPAIR SHADING   |
| brgRevAnnotation       | PC_REVISION_ANNOTATION, Revisions   |
|                        |   |
| brgAluminum            | Aluminum  |
| brgBentoniteSlurry     | BentoniteSlurry   |
| brgDirtRock            | Dirt  |
| brgConcrete            | Concrete <i>or</i> PC_CONCRETE (either may be used for all 2D concrete), PC_CONCRETE_MISC, PC_CULVERT_CIP |
| brgConcreteAbutFoot    | PC_ABUT, PC_FTG   |
| brgConcreteAbutWall    | PC_ABUT, PC_WALL  |
| brgConcreteAbutWing    | PC_ABUT, PC_WALL  |
| brgConcreteDeck        | PC_DECK   |
| brgConcretePierCap     | PC_PIER_CAP   |
| brgConcretePierCol     | PC_PIER_COLUMN  |
| brgConcretePierFoot    | PC_FTG, PC_PADFOOTING   |
| brgConcretePrecast     | PC_CULVERT_PC   |
| brgConcreteRail        | PC_BARRIER  |
| brgConcreteRustication | PC_CONCRETE_MISC, ConcreteRustication   |
| brgDeckBottom          | PC_DECK   |
| brgDeckTop             | PC_DECK   |
| brgConstructionLines   | PS_CONST (Ensure Element Class is set to Construction.)   |
| brgErosionStoneBottom  | ErosionControl  |
| brgErosionStoneTop     | ErosionControl  |
| brgGranularMaterial    | TC_Granular   |
|                        | TC_GranularBackFill   |
|                        | TL_GranularTop  |
| brgXsFabric            | TC_EngineeringFabric  |
| brg3DFabric            | TC_EngineeringFabric  |
| brgFlowableMortar      | FlowableMortar  |
| brgJointMaterial       | Joints  |
| brgNeoprene            | Neoprene  |
| brgPVC                 | PVC   |
| brgRebarBlack          | PC_REBAR  |

| <u>V8i Level</u>  | CONNECT Level                                    |
|---|--|
| brgRebarEpoxy<br>brgStainless   | PC_REBAR_EPOXY<br>PC_REBAR_STAINLESS             |
| brgRemovals   | PC_REPAIR_REMOVALS, Removals                     |
| brgRevetmentBottom<br>brgRevetmentTop<br>brgXsRevetment<br>brg3DRevetment | Revetment<br>Revetment<br>Revetment<br>Revetment |
| brgStrandsPrestressed   | OBD_Tendon                                       |
| brgStructuralSteel<br>brgStructuralSteelWeathered                         | PS_GIRDER, PS_PLATE, Steel                       |
| brgTemporaryStructures<br>brgTimbers                                      | BridgeTemporaryStructure<br>Timbers              |
| brgUtility  | UtilitiesAboveGround, UtilitiesBelowGround       |
| brgWireMesh   | WireMesh   |

# See additional CONCRETE and REBAR options shown below.

| Δ | Name ^                      |            | \$  |               | Description             |              | <u>ل</u> |       | 2        |
|---|-----------------------------|------------|---|---------------|-------------------------|--------------|----------|-------|----------|
|   |                             |            |   |               |                         |              |          |       |          |
|   | Bridge                      |            | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | vels.dgnlib   |                         |              | 0        | 0     | 0        |
|   | BridgeExistingStructure     |            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnli     | ib            |                         |              | 234      | 0     | 1        |
|   | BridgeSubstructure          |            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib    |               |                         |              | 65       | 0     | 8        |
|   | BridgeSubstructureExisting  | 9          | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 234      | 0     | 0        |
|   | BridgeSubstructurePropose   | ed         | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | vels.dgnlib   |                         |              | 3        | 0     | 0        |
|   | BridgeSuperStructure        |            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib    |               |                         |              | 3        | 0     | 8        |
|   | BridgeSuperStructureExistin | ng         | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 234      | 0     | 0        |
|   | BridgeSuperStructurePropo   | osed       | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 3        | 0     | 0        |
|   | BridgeTemporaryStructure    |            | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 15       | 0     | <u> </u> |
| ۵ | Name ^                      |            | 6   |               | Description             |              | <u>G</u> | 39    |          |
|   |                             |            |   |               |                         |              |          |       |          |
|   | Culvert                     |            | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 0        | 0     | 0        |
|   | CulvertExisting             |            | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 234      | 0     | 0        |
|   | CulvertProposed             |            | lowaDOT_FeatureDefinitions_ElementTemplates_Annotation_Le   | evels.dgnlib  |                         |              | 3        | 0     | 0        |
| _ |                             |            |   |               |                         |              |          |       |          |
| ▲ | Name 🔷                      | 8          |   | Description   |                         | <u></u>      | 10       | -2    | Used     |
| • | Dimensions                  | lowaDOT_   | eatureDefinitions_ElementTemplates_Annotation_Levels.dgnlib |               |                         | 0 🗌          |          | -01   | •        |
|   | Dirt                        | lowaDOT_   | Bridge_Features_Levels_Elem Temp Imperial.dgnlib            | Dirt, Rock, I | Porous Backfill, Soil B | ackfill 📃 28 |          | -0 -4 |          |
| - | DisDOW Existing             | Internet E | =   | POW wittin    | ~                       | III 10       |          | - 0   | 1        |
| Δ | Name ^                      | <b>\$</b>  |   | Descript      | tion                    | _            | 10       | 2     | Used     |
|   |                             |            |   |               |                         |              |          |       |          |
|   | Dimensions                  | lowaE      | OT_FeatureDefinitions_ElementTemplates_Annotation_Levels.dg | nlib          |                         | 230          | 0        | 0     | •        |
|   | Dirt                        | IowaD      | OT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib         | Dirt, Roo     | ck, Porous Backfill,    | 28           | 0        |       |          |

| Δ | Name ^                 | <b>\$</b>  | Description                           | G     | 12      | 8        |
|---|------------------------|--|---------------------------------------|-------|---------|----------|
|   |                        |  |                                       |       |         |          |
|   | PC_ABUT                | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Abutment                              | 13    | 0       |          |
|   | PC_APPROACH            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Approach Slab                         | 35    | 0       | 8        |
|   | PC_BARRIER             | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Curb and Barrier                      | 131   | 0       | 6        |
|   | PC_BEAM                | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Concrete Beam                         | 19    | 0       | 8        |
|   | PC_BEARING             | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Bearings                              | 89    | 0       | <u> </u> |
|   | PC_COLUMN              | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Column                                | 13    | 0       | 8        |
|   | PC_CONCRETE            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Concrete                              | 3     | 0       | 8        |
|   | PC_CONCRETE_MISC       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Structure: Misc Concrete              | 3     | 0       | 8        |
|   | PC_COVER               | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Rebar Cover                           | 32    | 0       | 0        |
|   | PC_CULVERT_CIP         | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Culvert: Cast-in-place                | 35    | 0       | 8        |
|   | PC_CULVERT_PC          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Culvert: Precast                      | 46    | 0       | 8        |
|   | PC_DECK                | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Deck                                  | 3     | 0       | 8        |
|   | PC_DIAPHRAGM_CONC      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Concrete Diaphragm                    | 51    | 0       | 8        |
|   | PC_FTG                 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Footing/Floor                         | 13    | 0       | 8        |
|   | PC_MARKER              | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Marker                                | 6     | 0       | 0        |
|   | PC_OBJECT              | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Object                                | 2     | 0       | 0        |
|   | PC_PADFOOTING          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Pad Footing                           | 13    | 0       | 8        |
|   | PC_PIER_CAP            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Concrete Pier Cap                     | 13    | 0       | 8        |
|   | PC_PIER_COLUMN         | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Concrete Pier Columns                 | 13    | 0       | 8        |
|   | PC_REBAR               | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar                           | 12    | 0       | <u> </u> |
|   | PC_REBAR GL            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | -·-·· 4 | 0        |
|   | PC_REBAR GL 1          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | -·-·· 4 | 0        |
|   | PC_REBAR GL 2          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | -·-·· 4 | 0        |
|   | PC_REBAR GL 3          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | 4       | <u> </u> |
|   | PC_REBAR GL 4          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | 4       | <u> </u> |
|   | PC_REBAR GL 5          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Black Rebar Guideline                 | 16    | 4       | <u> </u> |
|   | PC_REBAR_ABUT          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Abutment                 | 28    | 0       | <u> </u> |
|   | PC_REBAR_ABUT GL       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | <u> </u> |
|   | PC_REBAR_ABUT GL 1     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | <u> </u> |
|   | PC_REBAR_ABUT GL 2     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | <u> </u> |
|   | PC_REBAR_ABUT GL 3     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | 0        |
|   | PC_REBAR_ABUT GL 4     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | 0        |
|   | PC_REBAR_ABUT GL 5     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Abutment       | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Approach Slab            | 82    | 0       | <u> </u> |
|   | PC_REBAR_APPROACH GL   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH GL 1 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH GL 2 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH GL 3 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH GL 4 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_APPROACH GL 5 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Approach Slab  | 16    | 4       | 0        |
|   | PC_REBAR_BARRIER       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Barrier and Curbing      | 34    | 0       | 3        |
|   | PC_REBAR_BARRIER GL    | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing |       | 4       | 0        |
|   | PC_REBAR_BARRIER GL 1  | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing |       | 4       | 0        |
|   | PC_REBAR_BARRIER GL 2  | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing |       | 4       | 0        |
|   | PC_REBAR_BARRIER GL 3  | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing |       | 4       | 0        |
|   | PC_REBAR_BARRIER GL 4  | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing |       | 4       | 0        |
|   | PC_REBAR_BARRIER GL 5  | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guid\ Barrier and Curbing | 16    | 4       | 0        |
|   | PC_REBAR_BEAM          | IowaDOI_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Beam                     | 60    | 0       | 3        |
|   | PC REBAR BEAM GL       | IowaDOI Bridge Features Levels Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam           | LL 16 | 4       | 0        |

## See additional CONCRETE and REBAR options shown below.

| Δ | Name ^                    | <sup>(3)</sup>   | Description                            | <u>i</u> |   | 8        |
|---|---------------------------|--|--|----------|---|----------|
|   |                           |  |  |          |   |          |
|   | PC_REBAR_BEAM             | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Beam                      | 60       | 0 | <u> </u> |
|   | PC_REBAR_BEAM GL          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_BEAM GL 1        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_BEAM GL 2        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_BEAM GL 3        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_BEAM GL 4        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_BEAM GL 5        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Beam            | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Cast-in-place Culvert     | 12       | 0 | <u> </u> |
|   | PC_REBAR_CULVERT_CIP GL   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP GL 1 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP GL 2 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP GL 3 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP GL 4 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_CIP GL 5 | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: for CIP Culvert | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Precast Culvert           | 12       | 0 |          |
|   | PC_REBAR_CULVERT_PC GL    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC GL 1  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC GL 2  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC GL 3  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC GL 4  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_CULVERT_PC GL 5  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guidelin: Precast Culvert  | 16       | 4 | 0        |
|   | PC_REBAR_DECK             | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Decking                   | 18       | 0 | <u> </u> |
|   | PC_REBAR_DECK GL          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DECK GL 1        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DECK GL 2        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DECK GL 3        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DECK GL 4        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DECK GL 5        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Decking         | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Diaphragm                 | 12       | 0 | <u> </u> |
|   | PC_REBAR_DIAPHRAGM GL     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM GL 1   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM GL 2   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM GL 3   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM GL 4   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DIAPHRAGM GL 5   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Diaphragm       | 16       | 4 | 0        |
|   | PC_REBAR_DOWELS           | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Dowels                    | 10       | 0 | <u> </u> |
|   | PC_REBAR_DOWELS GL        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Dowels          | 16       | 4 | 0        |
|   | PC_REBAR_EPOXY            | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Epoxy Rebar                            | 18       | 0 | 3        |
|   | PC_REBAR_EPOXY GL         | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Epoxy Rebar Guideline                  | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Foundations               | 42       | 0 |          |
|   | PC_REBAR_FOOTING GL       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING GL 1     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING GL 2     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING GL 3     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING GL 4     | IowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_FOOTING GL 5     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Foundations     | 16       | 4 | 0        |
|   | PC_REBAR_MISC             | IowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Misc                      | 12       | 0 | <u> </u> |
|   | PC_REBAR_MISC GL          | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc            | 16       | 4 | 0        |
|   | PC REBAR MISC GL 1        | lowaDOT Bridge Features Levels Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc            | 16       | 4 | 0        |

# See additional CONCRETE and REBAR options shown below.

| ۵ | Name ^                  | <b>B</b>   | Description                        | 1        |          | 8        |
|---|-------------------------|--|------------------------------------|----------|----------|----------|
|   |                         |  |                                    |          |          |          |
|   | PC_REBAR_MISC           | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Misc                  | 12       | <u> </u> | <u> </u> |
|   | PC_REBAR_MISC GL        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_MISC GL 1      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_MISC GL 2      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_MISC GL 3      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_MISC GL 4      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_MISC GL 5      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Misc        | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Pier Cap              | 10       | 0        | <u> </u> |
|   | PC_REBAR_PIER_CAP GL    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP GL 1  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP GL 2  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP GL 3  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP GL 4  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_CAP GL 5  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Cap    | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Pier Column           | 26       | 0        | <u> </u> |
|   | PC_REBAR_PIER_COL GL    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL GL 1  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL GL 2  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL GL 3  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL GL 4  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PIER_COL GL 5  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Pier Column | 16       | 4        | 0        |
|   | PC_REBAR_PILE           | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Piling                | 12       | 0        |          |
|   | PC_REBAR_PILE GL        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_PILE GL 1      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_PILE GL 2      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_PILE GL 3      | IowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_PILE GL 4      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_PILE GL 5      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing Guideline: Piling      | 16       | 4        | 0        |
|   | PC_REBAR_STAINLESS      | IowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Stainless Rebar                    | 41       | 0        | 3        |
|   | PC_REBAR_STAINLESS GL   | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Stainless Rebar Guideline          | 16       | 4        | 0        |
|   | PC_REBAR_STAINLESS GL 1 | IowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Stainless Rebar Guideline          | 16       | 4        | 0        |
|   | PC_REBAR_STAINLESS GL 2 | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Stainless Rebar Guideline          | 16       | 4        | 0        |
|   | PC_REBAR_STAINLESS GL 3 | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Stainless Rebar Guideline          |          | 4        | 0        |
|   | PC_REBAR_STAINLESS GL 4 | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Stainless Rebar Guideline          |          | 4        | 0        |
|   | PC_REBAR_STAINLESS GL 5 | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Stainless Rebar Guideline          | 16       | 4        | 0        |
|   | PC_REBAR_WALL           | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Reinforcing: Wall                  |          | 0        | 3        |
|   | PC_REBAR_WALL GL        | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Reinforcing Guideline: Wall        |          | 4        | 0        |
|   | PC_REBAR_WALL GL 2      | IowaDOI_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Reinforcing Guideline: Wall        |          | 4        | 0        |
|   | PC_REBAR_WALL GL 2      | IowaDOT_Bridge_Features_Levels_Elem_Temp Imperial.dgnlib | Reinforcing Guideline: Wall        |          | 4        | 0        |
|   | PC_REBAR_WALL GL 3      | IowaDOT_Bridge_Features_Levels_Elem_Temp Imperial.dgnlib | Reinforcing Guideline: Wall        |          | 4        | 0        |
|   | PC_REBAR_WALL GL 5      | IowaDOT_Bridge_Features_Levels_Elem_Iemp Imperial.dghlib | Reinforcing Guideline: Wall        |          |          | 0        |
|   | PC_REBAR_WALL GL 5      | IowaDOT_Bridge_Features_Levels_Elem_Temp Imperial.dgnlib | Reinforcing Guideline: Wall        |          | 4        | 0        |
|   | PC_REBAR_WINGWAL GL     | lowaDOT_Bridge_Features_Levels_Elem_lemp Imperial.dgnlib | Reinforcing Guideline: Wingwall    |          | 4        | 0        |
|   | PC_REBAR_WINGWAL GL 1   | IowaDOT_Bridge_Features_Levels_Elem_Iemp Imperial.dgnlib | Reinforcing Guideline: Wingwall    |          | 4        | 0        |
|   | PC_REDAR_WINGWAL GL 2   | iowaDOT_bridge_reatures_tevels_tiem_iemp_imperial.dgnlib | Reinforcing Guideline: Wingwall    |          |          | 0        |
|   | PC_REDAR_WINGWAL GL 3   | IowaDOT_Dridge_reatures_Levels_Elem_lemp_imperial.dghlib | Reinforcing Guideline: Wingwall    | 10       |          | 0        |
| 1 | DC DEDAD WINGWAL OL 4   | IowaDOT_Dridge_reatures_tevels_tiem_temp_tmperial.dghlib | Reinforcing Guideline: Wingwall    | 10       |          | 0        |
| 1 |                         | lowaDOT_bridge_reatures_cevels_clem_temp_tmperial.dghlib | Reinforcing Wingwall               | 20       |          |          |
|   | FC REDAR WINGWALL       | iowapor phage reduires Levels clem lemp imperial.ddhlib  | NennorCing: wingwall               | <u> </u> | 0        |          |

| Δ | Name ^                 | 8  | Description                | 6   |          | 8          |
|---|------------------------|--|----------------------------|-----|----------|------------|
|   |                        |  |                            |     |          |            |
|   | PC_REBAR_WINGWALL      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Reinforcing: Wingwall      | 28  | 0        | 3          |
|   | PC_REPAIR_EXISTING     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Repair: Existing Structure | 230 | 0        | 1          |
|   | PC_REPAIR_REMOVAL      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Repair: Removal            | 228 | 0        | <u> </u>   |
|   | PC_REVISION_ANNOTATION | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Revision: Markups and Text | 5   | <b>0</b> | <b>—</b> 5 |
|   | PC_SHADING             | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Shading                    | 233 | 0        | 0          |
|   | PC_SLAB                | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Slab                       | 99  | 0        | 8          |
|   | PC_STRIPFOOTING        | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Strip Footing              | 115 | 0        | 8          |
|   | PC_STRUCT_WALL         | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Structure: Wall Concrete   | 19  | 0        | 8          |
|   | PC_WALL                | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Bridge Wingwall            | 13  | 0        | 8          |

## See additional STEEL options below.

| ▲ | Name ^       | 8  | Description       | <b>1</b> | 19       | 8        |
|---|--------------|--|-------------------|----------|----------|----------|
|   |              |  |                   |          |          |          |
|   | PS_BOLT      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Connection Bolts  | 57       | <b>0</b> | <u> </u> |
|   | PS_CONST     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Construction Line | 0        | 0        | 0        |
|   | PS_DAWA      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib |                   | 5        | 0        | 0        |
|   | PS_DIM       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Dimension         | 0        | 0        | 0        |
|   | PS_Elev_flag | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Elevation Flag    | 0        | 0        | 0        |
|   | PS_GIRDER    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Steel Girder      | 57       | 0        |          |
|   | PS_HANDRAIL  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Handrail          | 62       | 0        |          |
|   | PS_HATCH     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Hatching          | 3        | 0        | 0        |
|   | PS_HIDDEN    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Hidden Lines      | 2        |          | 0        |
|   | PS_KOTE      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib |                   | 4        | 0        | 0        |
|   | PS_MID       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Midline           | 5        | 7        | 0        |
|   | PS_OBJECT    | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Object            | 2        | 0        | 0        |
|   | PS_PLATE     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Plate-Metal       | 1        | 0        |          |
|   | PS_POS       | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Poition Flag      | 1        | 0        | 0        |
|   | PS_RoofWall  | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Roof Wall         | 5        | 0        | 0        |
|   | PS_SHAPE     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Shape             | 7        | 0        |          |
|   | PS_SOLID     | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Visible Lines     | 7        | 0        | 0        |
|   | PS_TEXT      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Text              | 0        | 0        | 0        |
|   | PS_WELD      | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Connection: Weld  | 1        | <u> </u> | 4        |
|   | PS_WORKFRAME | lowaDOT_Bridge_Features_Levels_Elem Temp Imperial.dgnlib | Workframe         | 6        | 0        | 0        |