## 2.2 Drawing File Names

A. Description - (Overview)

The "File Name" is a unique identification for each drawing. The windows operating system is case-aware, not case-sensitive, but the preference is lower case lettering for the file names of all contract plan sheets. This unique “File Name” allows for the searching of a drawing for any project.

1. Highway Construction and Highway Planting Projects

   The old naming convention used the DISTRICT & EXPENDITURE AUTHORIZATION (EA). The file name is 11 characters long, combining both alpha and numeric characters.

   The new naming convention uses the PROJECT NUMBER. The PROJECT NUMBER is comprised of 2 digits representing the District and 8 digits representing a sequential number. The file name is 15 characters long, combining both alpha and numeric characters.

2. Structures Projects

   For Structures drawings, the file name length varies with the type of sheet, and also combines both alpha and numeric characters.

B. Need for Naming Uniformity

Uniformity in the naming of electronic files is necessary for the following reasons:

- Without a uniform naming convention, it is impossible to keep the system free of duplicate files, which could eventually use up a significant amount of system storage.

- Transfer of project files (design files), from district to district requires the use of a uniform naming convention to avoid repetitious explanations, misinterpretations, and additional record keeping.

- As with most records at Caltrans, the basis of the naming convention was the district/expenditure authorization. As of July 1, 2010, the basis of the naming convention will now be the Project Number. This facilitates the design files to be project specific. The use of a uniform naming convention allows for quick searches for design files, whether on current files or archived files.

- The Print Sequence Code (formerly known as CADD Alpha Code), which is part of the naming convention, automates the plotting of the contract plan sheets in the standard specified order as shown in the Plans Preparation Manual and Section 2.1 of this manual.

## C. Naming Convention

### 1. District Codes

A district code is to be included in every drawing name. These codes are as follows:

Old Naming Convention (single digit)

| **District** | **Code** |
|---|---|
| Districts 1-9 | 1-9, respectively |
| District 10 | a |
| District 11 | b |
| District 12 | c |

New Naming Convention (two digits)

| **District** | **Code** |
|---|---|
| Districts 1-12 | 01-12, respectively |

2. Highway Construction Project

Old Naming Convention

All Highway Construction Projects (Roadway) shall be named in accordance with the following naming convention:

**d12345ppXXX**

**d** = District code. The district code represents the district where the project is being constructed, (not the district creating the CADD drawings). Districts 1-9 use a single numeric character (1-9 respectively). Districts 10 through 12 use a single alpha character (a-c respectively).

**12345** = First 5 characters of the project expenditure authorization.

**pp** = Print Sequence Code (2 alpha characters).

Note: For projects with 27 to 52 Retaining Walls or Sound Walls, a third alpha character will be added to assist in the wall plan sheets being printed in the proper sequence. See Note 3 in Section 2.1 B of this manual.

**XXX** = Respective sheet numbers (numerical characters) for each Print Sequence Code used in the project.

New Naming Convention

All Highway Construction Projects (Roadway) shall be named in accordance with the following naming convention:

**dc12345678ppXXX**

**dc** = District code. The district code represents the district where the project is being constructed, (not the district creating the CADD drawings). Districts 1-9 are to have a zero preceding their single digit district number. Districts 10 through 12 are to use their two digit district number.

**12345678** = Eight digits (called the "Project"), with sequential numbering for each successive project. This eight digit number is not unique for each district. For all districts this eight digit number will start with the number 1, preceded first by 7 zeros (00000001). To make the Project Number unique, it must contain the 2 digit district code.

**pp** = Print Sequence Code (2 alpha characters).

Note: For projects with 27 to 52 Retaining Walls or Sound Walls, a third alpha character would be added to assist in the wall plan sheets being printed in the proper sequence. For projects with 53 to 78 Retaining Walls or Sound Walls, a fourth alpha character would be added to assist in the wall plan sheets being printed in the proper sequence. See Note 3 in Section 2.1 B of this manual.

**XXX** = Respective sheet numbers (numerical characters) for each Print Sequence Code used in the project.

Example 1:

Old Naming Convention

**512121ic007.dgn**

**5** = District 05.

**12121** = First 5 characters of the project expenditure authorization.

**ic** = Print Sequence Code (Drainage Details)

**007** = Sheet number (7th Drainage Detail sheet).

New Naming Convention

**0500000001ic007.dgn**

**05** = District 05.

**00000001** = Eight digit “Project”.

**ic** = Print Sequence Code (Drainage Details)

**007** = Sheet number (7th Drainage Detail sheet).

Example 2:

Old Naming Convention

**b1a039ea004.dgn**

**b** = District 11.

**1a039** = First 5 characters of the project expenditure authorization.

**ea** = Print Sequence Code (Layout)

**004** = Sheet number (4th Layout sheet).

New Naming Convention

**1100004567ea004.dgn**

**11** = District 11.

**00004567** = Eight digit “Project”.

**ea** = Print Sequence Code (Layout)

**004** = Sheet number (4th Layout sheet).

Note 1: A second Print Sequence Code character has been added to the electronic name for each contract plan sheet. Each individual type of contract plan sheet will have its own unique Print Sequence Code. Only plan sheets within the same Print Sequence Code might need to change the electronic name of the file when inserting additional sheets (plan sheets with another Print Sequence Code will not be affected). This will also eliminate the need for recreating InterPlot parameter files (Iparms) except for those affected plan sheets within the same Print Sequence Code.

Note 2: The sequence order of several sheets has been changed to better group information of similar type and to emulate the sequence of constructing a project.

Note 3: Several new sheet types have been added to allow information to be utilized without cluttering existing plan sheets with too much information or extraneous information unnecessary for that plan sheet.

Note 4: New Sheet Identifications (ID's) have been created to accommodate a unique Sheet ID for each Print Sequence Code (with the exception of signal, lighting and electrical system sheets).

Note 5: The sheet number following the Print Sequence Code will be the same as the Sheet ID number (with the exception of signal, lighting and electrical system sheets).

Note 6: Highway Planting sheets (that are part of a Highway Construction project) will no longer have HP as the Sheet ID. See Section 2.1 B of this manual.

3. Highway Planting Project

When Highway Planting is a separate project (not part of a Highway Construction project), additional Print Sequence Codes will be used (see Section 2.1 C of this manual). Highway Construction sheets, which need to be included in a Highway Planting project (ie - Title Sheet, Construction Area Signs or Traffic Handling plans), will have a different Print Sequence Code than when they are included in a Highway Construction project but the Sheet ID will remain the same. All Highway Planting sheets shall be named in accordance with the following naming convention:

Old Naming Convention

**d12345ppXXX**

**d** = District code (same as Roadway).

**12345** = First 5 numerals of project expenditure authorization.

**pp** = Print Sequence Code.

**XXX** = Respective sheet numbers for each Print Sequence Code used in the project.

New Naming Convention

All Highway Planting sheets shall be named in accordance with the following naming convention:

**dc12345678ppXXX**

**dc** = District code. The district code represents the district where the project is being constructed, (not the district creating the CADD drawings). Districts 1-9 are to have a zero preceding their single digit district number. Districts 10 through 12 are to use their two digit district number.

**12345678** = Eight digits (called the “Project”), with sequential numbering for each successive project. This eight digit number is not unique for each district. For all districts this eight digit number will start with the number 1, preceded first by 7 zeros (00000001). To make the Project Number unique, it must contain the 2 digit district code.

**pp** = Print Sequence Code (2 alpha characters).

**XXX** = Respective sheet numbers (numerical characters) for each Print Sequence Code used in the project.

Example 3:

Old Naming Convention

**712345te002**

**7** = District 7.

**12345** = First 5 numerals of project expenditure authorization.

**te** = Print Sequence Code (Plant List).

**002** = Sheet number (2nd Plant List sheet).

New Naming Convention

**0700009876te002**

**07** = District 7.

**00009876** = Eight digit “Project”.

**te** = Print Sequence Code (Plant List).

**002** = Sheet number (2nd Plant List sheet).

4. Structures Drawings

   a. All Structure drawings shall be named in accordance with the following naming convention:

      **cc-1234rl-p-sss.dgn**

      **cc** = County Code

      **1234rl** = Bridge number designation for a specific bridge in a multi-bridge project. The right (r) and left (l) can be a separate project. A single bridge does not need the (r) or (l) designation. The bridge number is always a four digit number

      **p** = Print Sequence Code. This allows for the files to be listed and plotted in chronological order; same as the logical plan order stated in the Bridge Design Details Manual.

      **sss** = Sheet type identifier. The number of characters (both alpha and numeric) for the sheet type identifier can vary according to the type of sheet (see Bridge Design Details Manual).

      **Extensions**:

      **dgn** is through expedite.
      **rev** is for revisions after expedite to second notice.
      **add** is from second notice through bid opening.
      **cco** is from bid opening through end of construction.
      **avd** is for archived vector data.

      Example 4:

      **56-3434rl-e-fpl01**

      **56** = Riverside County

      **3434rl** = bridge number with a Right and Left bridge

      **e** = Print Sequence Code (Foundation Plan sheet).

      **fpl01** = Sheet type identifier (1st Foundation Plan sheet).

b. Structures Plan Sheets require a Print Sequence Code (single letter) in the electronic name of the file for plotting sheets in the correct sequence. The Print Sequence Code system utilized by Structures is shown in the following table with the Sheet Type and an example of how the electronic name should be handled.

| PRINT SEQUENCE CODE | SHEET TYPE | ELECTRONIC NAME (EXAMPLE) |
|---|---|---|
| a | GENERAL PLAN | 59-2482rl-a-gp01.dgn |
| a | INDEX TO PLANS | 59-2482rl-a-itp.dgn |
| b | GENERAL NOTES | 59-2482rl-b-gnote.dgn |
| c | STRUCTURE PLAN | 59-2482rl-c-sp01.dgn |
| d | DECK CONTOURS | 59-2482rl-d-dc01.dgn |
| e | FOUNDATION DATA | 59-2482rl-e-fdat01.dgn |
| e | FOUNDATION PLAN | 59-2482rl-e-fpl01.dgn |
| f | ABUTMENT LAYOUT | 59-2482rl-f-a01_lo1.dgn |
| f | ABUTMENT DETAILS | 59-2482rl-f-a01dt01.dgn |
| f | ABUTMENT RESTRAINER DETAILS | 59-2482rl-f-a01rdt01.dgn |
| g | RETAINING WALL LAYOUT | 59-2482rl-g-rw_lo01.dgn |
| g | RETAINING WALL DETAILS | 59-2482rl-g-rwdt01.dgn |
| g | RETAINING WALL FOOTING | 59-2482rl-g-rwftg.dgn |
| h | BENT LAYOUT | 59-2482rl-h-b01_lo01.dgn |
| h | BENT DETAILS | 59-2482rl-h-b01dt01.dgn |
| h | BENT FOOTING DETAILS | 59-2482rl-h-b01fdt01.dgn |
| h | BENT FOOTING RETROFIT DETAILS | 59-2482rl-h-b01frdt01.dgn |
| i | PIER LAYOUT | 59-2482rl-i-p01_lo01.dgn |
| i | PIER DETAILS | 59-2482rl-i-p01dt01.dgn |
| i | PIER FOOTING | 59-2482rl-i-p01fdt01.dgn |
| i | PIER FOOTING RETROFIT | 59-2482rl-i-p01frt.dgn |
| i | PIER RESTRAINER | 59-2482rl-i-pres.dgn |
| j | COLUMN DETAILS | 59-2482rl-j-cdet01.dgn |
| j | COLUMN ISOLATION CASING | 59-2482rl-j-ciso01.dgn |
| j | COLUMN RESTRAINER DETAILS | 59-2482rl-j-crdt01.dgn |
| k | TYPICAL SECTION | 59-2482rl-k-ts01.dgn |
| k | PART TYPICAL SECTION | 59-2482rl-k-tsp01.dgn |
| l | GIRDER LAYOUT | 59-2482rl-l-g_lo01.dgn |
| l | GIRDER DETAILS | 59-2482rl-l-gdt01.dgn |

| PRINT SEQUENCE CODE | SHEET TYPE | ELECTRONIC NAME (EXAMPLE) |
|---|---|---|
| m | CAMBER DIAGRAM | 59-2482rl-m-cam.dgn |
| m | LONGITUDINAL SECTION | 59-2482rl-m-lsec.dgn |
| n | HINGE | 59-2482rl-n-hinge.dgn |
| n | HINGE DETAILS | 59-2482rl-n-hingedt01.dgn |
| n | HINGE BEARING DETAILS | 59-2482rl-n-hngbdt.dgn |
| n | HINGE RESTRAINER | 59-2482rl-n-hngres.dgn |
| o | GIRDER REINFORCEMENT | 59-2482rl-o-gir_rf01.dgn |
| o | GIRDER REINFORCEMENT TOP | 59-2482rl-o-gr_top01.dgn |
| o | GIRDER REINFORCEMENT BOTTOM | 59-2482rl-o-gbot01.dgn |
| p | PILE DETAILS | 59-2482rl-p-pdt01.dgn |
| q | BEARING DETAILS | 59-2482rl-q-brgdt01.dgn |
| q | JOINT DETAILS | 59-2482rl-q-jntdt.dgn |
| r | DECK DRAINS | 59-2482rl-r-dd01.dgn |
| r | DRAIN DETAILS | 59-2482rl-r-ddet01.dgn |
| s | STRUCTURE APPROACH DRAIN DETAILS | 59-2482rl-s-sadd.dgn |
| t | BARRIER RAILING DETAILS | 59-2482rl-t-brdt.dgn |
| t | CRASH CUSHIONS | 59-2482rl-t-crc.dgn |
| t | RESTRAINER UNIT | 59-2482rl-t-resunit.dgn |
| u | MISCELLANEOUS DETAILS | 59-2482rl-u-miscdt01.dgn |
| v | END DIAPHRAGM DETAIL | 59-2482rl-v-eddt.dgn |
| w | ADDITIONAL SLAB REINFORCEMENT | 59-2482rl-w-asr.dgn |
| x | LADDER DETAILS | 59-2482rl-x-ldt.dgn |
| y | ACCESS OPENING DETAILS | 59-2482rl-y-aodt.dgn |
| y | GIRDER ACCESS DETAIL | 59-2482rl-y-gadt.dgn |
| y | EARTHQUAKE RETROFIT DETAILS | 59-2482rl-y-erdt.dgn |
| z | LOG OF TEST BORINGS | 59-2482rl-z-ltb01.dgn |

5. Topographic Maps

   a. All topographic map files originating in or reviewed by the DES Office of Photogrammetry from fiscal year 05 (yy = 05 in file name) and onward, shall be named in accordance with the following convention:

Old Naming Convention

**dyypnnuxxss.dgn**

| | | |
|---|---|---|
| **d** | = | District Code (single digit for all districts). |
| **yy** | = | Fiscal year of the Office of Photogrammetry - Aerial Survey Contract (ASC). |
| **p** | = | Project type.<br>0 or 1 = Normal Internal Project.<br>2 = Oversight Project.<br>3 = A&E Project. |
| **nn** | = | ASC Order number. |
| **u** | = | Map unit system (**e**nglish) |
| **xx** | = | Scale.<br>english<br>02 = 1"=20'<br>05 = 1"=50'<br>10 = 1"=100'<br>20 = 1"=200' |
| **ss** | = | Sheet number (zero filled). |
| **.dgn** | = | MicroStation File Format. |

New Naming Convention

**ddyypnnuxxss.dgn**

| | | |
|---|---|---|
| **dd** | = | District Code (2 digits for all districts). |
| **yy** | = | Fiscal year of the Office of Photogrammetry - Aerial Survey Contract (ASC). |
| **p** | = | Project type.<br>0 or 1 = Normal Internal Project.<br>2 = Oversight Project.<br>3 = A&E Project. |
| **nn** | = | ASC Order number. |
| **u** | = | Map unit system (**e**nglish) |
| **xx** | = | Scale.<br>english<br>02 = 1"=20'<br>05 = 1"=50'<br>10 = 1"=100'<br>20 = 1"=200' |
| **ss** | = | Sheet number (zero filled). |
| **.dgn** | = | MicroStation File Format. |

Notes: 1”=50’ is the default scale for both roadway and bridge design. Other scales may be used for special purposes, if requested.

If an addition is made to an existing mapping file, the letter "**a**" is appended to the end of the file name (see example 6 below). If there is a second addition to an existing mapping file, the letter “**b**” is appended to the end of the file name, and so on.

All topographic map files are created in 3D.

Example 5:

Old Naming Convention

**b05016e0521.dgn**

| | | |
|---|---|---|
| **b** | = | District 11. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown. |
| **0** | = | Normal Internal Project. |
| **16** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **05** | = | 1”=50’ scale mapping. |
| **21** | = | Sheet number 21. |
| **.dgn** | = | MicroStation File Format. |

New Naming Convention

**1105016e0521.dgn**

| | | |
|---|---|---|
| **11** | = | District 11. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown. |
| **0** | = | Normal Internal Project. |
| **16** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **05** | = | 1”=50’ scale mapping. |
| **21** | = | Sheet number 21. |
| **.dgn** | = | MicroStation File Format. |

Example 6:

Old Naming Convention

**405103e1004a.dgn**

| | | |
|---|---|---|
| **4** | = | District 4. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which the original mapping was flown. |
| **1** | = | Normal Internal Project. |
| **03** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **10** | = | 1"=100' scale mapping. |
| **04** | = | Sheet number 4. |
| **a** | = | This mapping includes the first new addition to the original map sheet, compiled using the original photography. |
| **.dgn** | = | MicroStation File Format. |

New Naming Convention

**0405103e1004a.dgn**

| | | |
|---|---|---|
| **04** | = | District 4. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which the original mapping was flown. |
| **1** | = | Normal Internal Project. |
| **03** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **10** | = | 1"=100' scale mapping. |
| **04** | = | Sheet number 4. |
| **a** | = | This mapping includes the first new addition to the original map sheet, compiled using the original photography. |
| **.dgn** | = | MicroStation File Format. |

Example 7:

Old Naming Convention

**805207e0521.dgn**

**8** = District 8.
**05** = Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown.
**2** = Oversight Project.
**07** = Order number of the Aerial Service Contract.
**e** = English units mapping (US Survey Feet).
**05** = 1”=50’ scale mapping.
**21** = Sheet number 21.
**.dgn** = MicroStation File Format.

New Naming Convention

**0805207e0521.dgn**

**08** = District 8.
**05** = Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown.
**2** = Oversight Project.
**07** = Order number of the Aerial Service Contract.
**e** = English units mapping (US Survey Feet).
**05** = 1”=50’ scale mapping.
**21** = Sheet number 21.
**.dgn** = MicroStation File Format.

Example 8:

Old Naming Convention

**b05322e0527.dgn**

| | | |
|---|---|---|
| **b** | = | District 11. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown. |
| **3** | = | A&E Project |
| **22** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **05** | = | 1”=50’ scale mapping. |
| **27** | = | Sheet number 27. |
| **.dgn** | = | MicroStation File Format. |

New Naming Convention

**1105322e0527.dgn**

| | | |
|---|---|---|
| **11** | = | District 11. |
| **05** | = | Fiscal year (2005) of the Aerial Service Contract under which this mapping was flown. |
| **3** | = | A&E Project |
| **22** | = | Order number of the Aerial Service Contract. |
| **e** | = | English units mapping (US Survey Feet). |
| **05** | = | 1”=50’ scale mapping. |
| **27** | = | Sheet number 27. |
| **.dgn** | = | MicroStation File Format. |

b. Topographic map files from fiscal year 04 (yy = 04 in file name) or earlier, shall be named in accordance with the following convention:

1. Files originating in the DES Office of Photogrammetry

**dyynnnwxx.dgn**

| | | |
|---|---|---|
| **d** | = | District code. |
| **yy** | = | Fiscal year of the Aerial Survey Contract (ASC) – under which the mapping was flown. |
| **nnn** | = | Order number of the Aerial Survey Contract (zero filled). |
| **w** | = | 3D mapping (b was previously used for 2D mapping). |
| **xx** | = | Sheet number (zero filled). If the sheet number is 100 or greater, the "w" is eliminated. If map scale is 1:200, sheet number is 200 series. If map scale is 1:1000, sheet number is 100 series. |
| **.dgn** | = | MicroStation File Format. |

Note: 1:500 scale mapping is the default roadway. Bridge sites were mapped at 1:200 prior to 2001. Other scales, such as 1:1000 and 1:2000 may be used. See the sheet number key above for identification.

If an addition is made to existing mapping, the letter "**a**" is appended to the end of the sheet number. If there is a second addition to an existing mapping file, the letter "**b**" is appended to the end of the file name, and so on.

Example 9:

**a94041w07a.dgn**

| | | |
|---|---|---|
| **a** | = | District 10. |
| **94** | = | Fiscal year (1994) of the Aerial Service Contract under which the original mapping was flown. |
| **041** | = | Order number of the Aerial Service Contract. |
| **w** | = | 3D map file. |
| **07** | = | Sheet number 7. |
| **a** | = | This mapping includes the first new addition to the original map sheet, compiled using the original photography. |
| **.dgn** | = | MicroStation File Format. |

2. Files developed from Oversight projects

**dyyrnnnwxx.dgn**

| | | |
|---|---|---|
| **d** | = | District code. |
| **yy** | = | Fiscal year of the Aerial Survey Contract (ASC) – under which the mapping was flown. |
| **rn** | = | Review number (fixed at 20) |
| **nn** | = | Order number of the Aerial Survey Contract (zero filled). |
| **w** | = | 3D mapping (b was previously used for 2D mapping). |
| **xx** | = | Sheet number (zero filled). |
| **.dgn** | = | MicroStation File Format. |

Example 10:

**3022004w01.dgn**

| | | |
|---|---|---|
| **3** | = | District 3. |
| **02** | = | Fiscal year (2002) of the Aerial Service Contract under which the original mapping was flown. |
| **20** | = | Review number (fixed at 20). |
| **04** | = | Order number of the Aerial Service Contract. |
| **w** | = | 3D map file. |
| **01** | = | Sheet number 1. |
| **.dgn** | = | MicroStation File Format. |