



# QR Feature Code Library

QR Feature Codes (V1.2).FXL

February 2022



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## Introduction

This guide looks at the details included in the QR Feature code library put together by UPG. This library has been designed to match as closely as possible the current feature library outlined by QR and used in the 12d map file "*MASTER\_QR\_ATTR\_Field File v8.1.mapfile*".

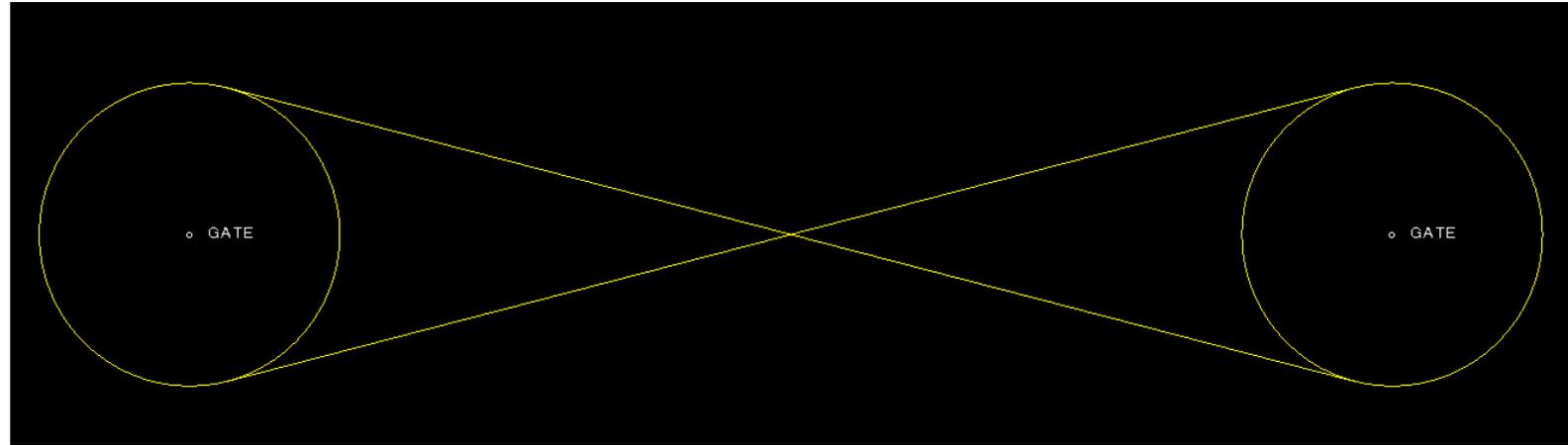
This contains the feature codes which have been mapped with the colours, blocks, symbols and line styles as defined in their guide.

The line feature points once processed in TBC will all end up on Layer "0".

The code of the linestrings has been placed in front of the string name to allow mapping in 12D if required once processed in TBC.

## Gate Block

The symbol for the gate block (GATE) is displayed in the picture to the right. Two points are required to place and to orientate the gate block.



## Importing a JXL file into 12d

You are able to export a JXL file from your controller and import it straight into 12d. The following steps demonstrates the process to import the QR codes that include a space in the coding:

### Step 1.

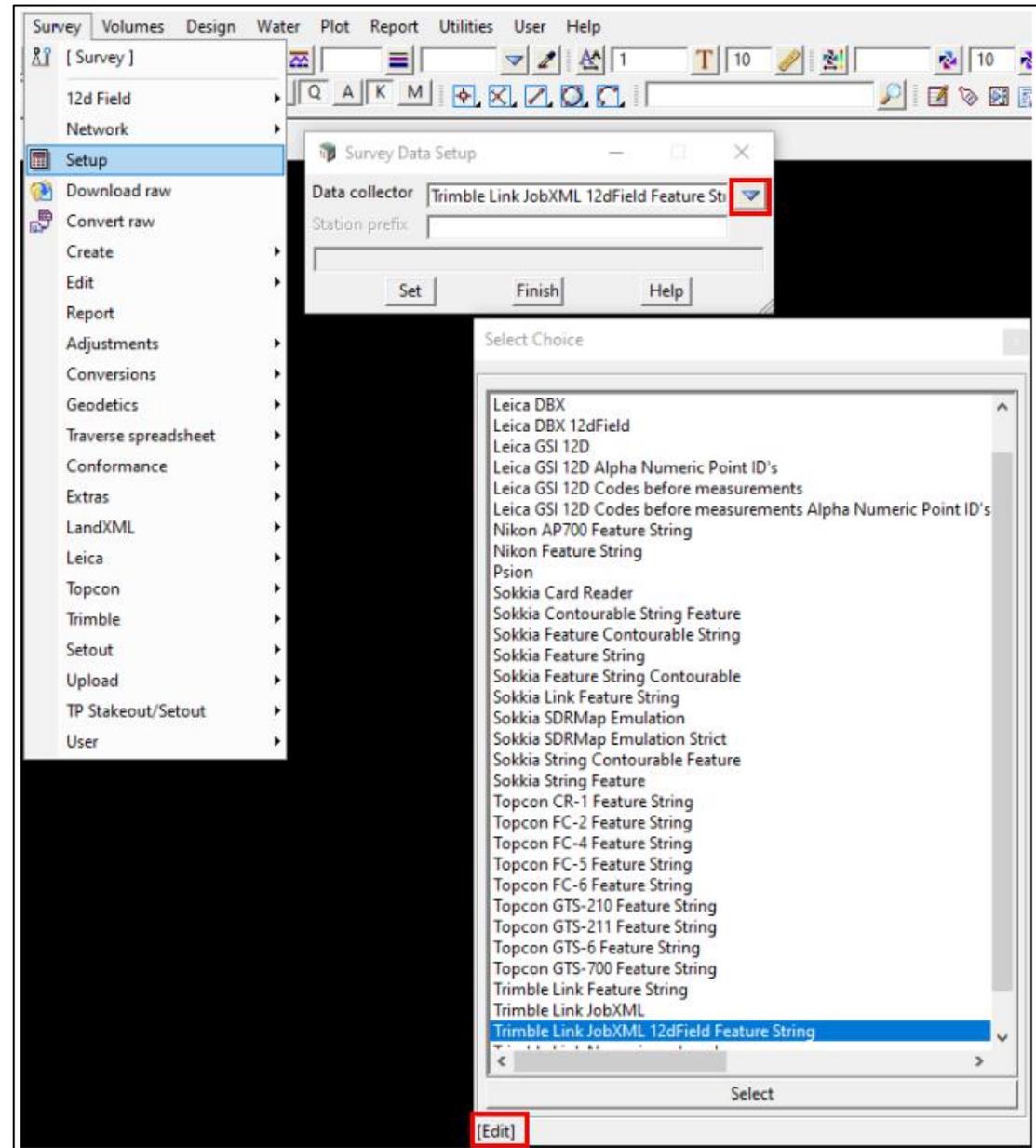
*Launch a new 12d project.*

Under the Survey tab *select Setup.*

The *Survey Data Setup* window will display.

*Click the Down Arrow* and scroll to **Trimble Link JobXML 12d Field Feature String** and *select it.*

*Click Edit* in the bottom left hand corner of the window.



## Step 2.

In the *Edit* window. Select the **Delimiters** tab.

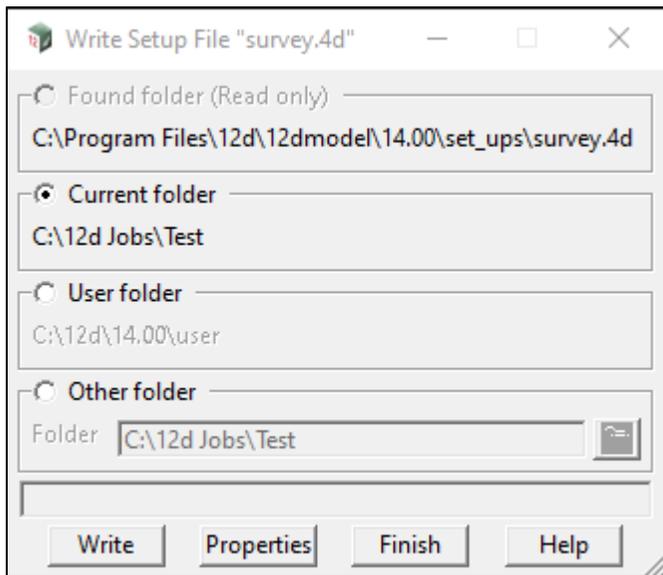
In the *Comment* box it will look as if there is nothing there. However, there is a space. *Delete* the space and change it to a **Comma**.

Next, select the **Feature Coding** tab. Ensure the **Allow Spaces in Feature Codes** box is *ticked*.

Click **Set** then **Finish**.

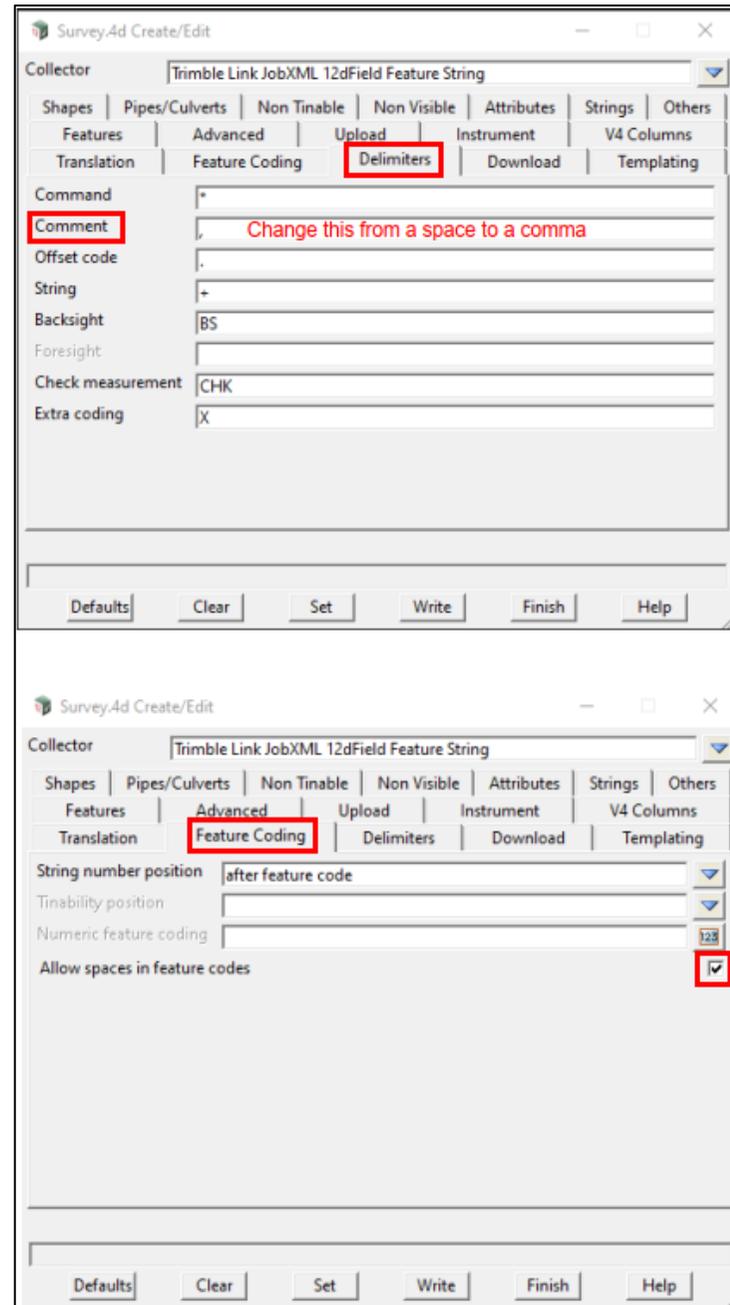
**Note:** By clicking set these settings will save for the project, however once you close and reopen the project the settings will be back to default.

To save these settings click **Write**. Displaying the window below.



Select **Current folder** if you wish to save the settings for this project only or select **User Folder** to save the settings for all future projects.

Click **Write** then **Finish**.

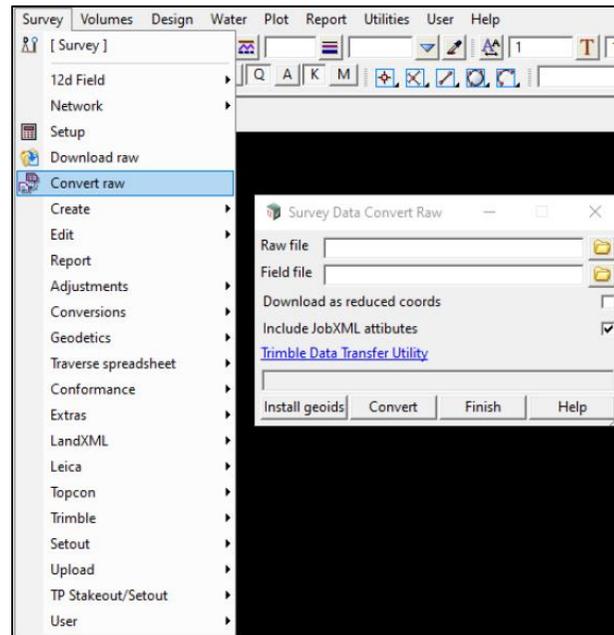


### Step 3.

Next, under the *Survey* tab click **Convert Raw**.

The **Survey Data Convert Raw** window will display. Click the **folder icon** next to the Raw file box. Navigate to the **JXL file** you wish to use and *select* it.

Click **Convert** then **Finish**.



### Step 4.

Finally, select the *survey* tab and in the *create* list click **Field file**.

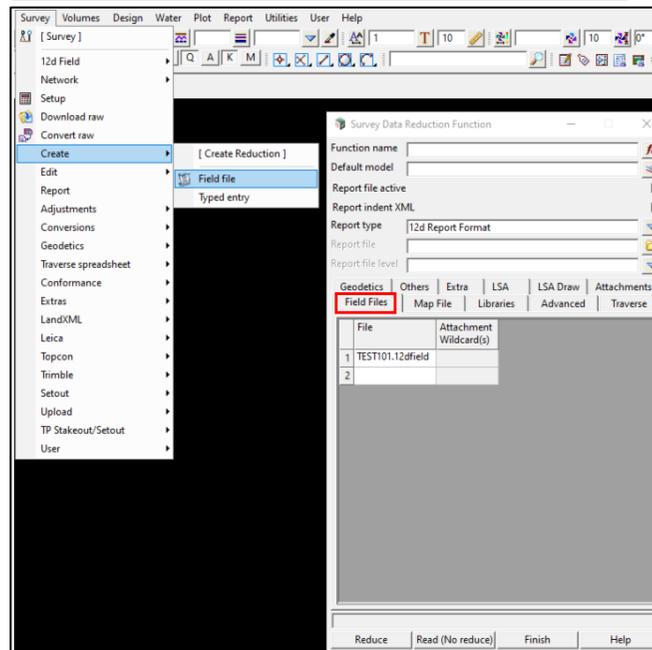
*Input* a **Function name** and **Default model**.

*Select* the *field files* tab. Your converted JXL file should be in the file list as a 12dfield file.

Click **Reduce** then **Finish**.

The points, lines and polygons from your JXL should now be in your 12d project.

**Note:** You can also select a map file under the map file tab. This associates the line styles, colours and layers with the correct feature codes.



## Control Codes

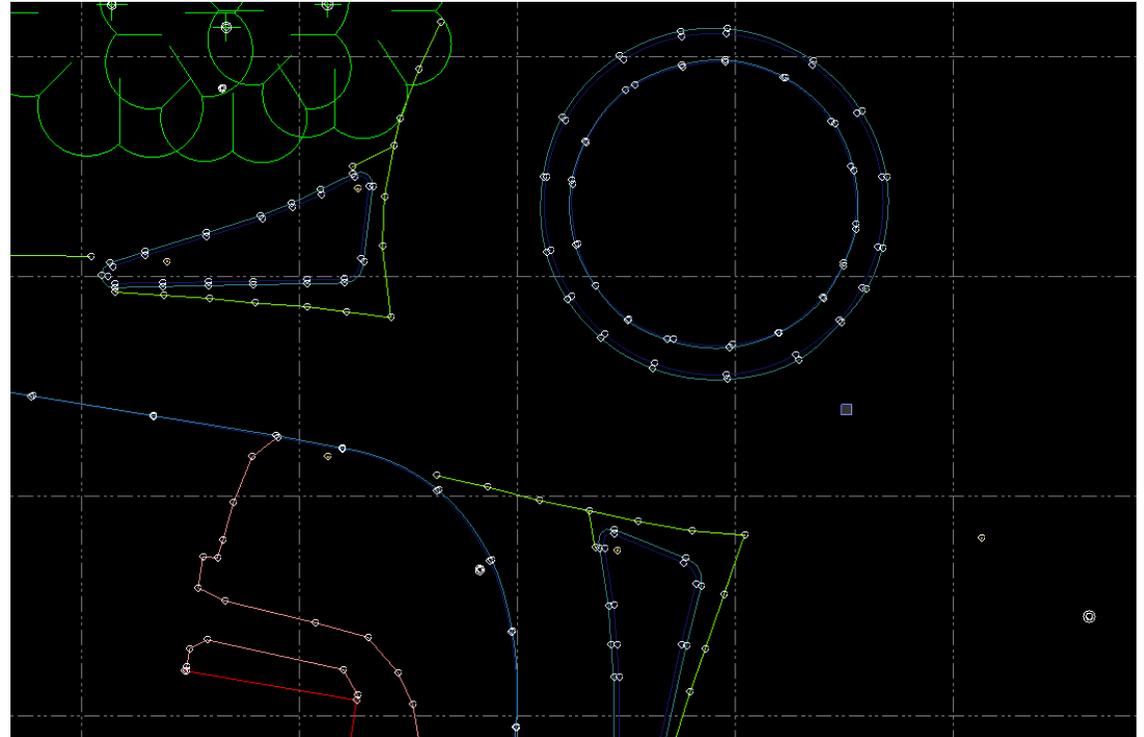
Control codes have been included in this library for enhancing field pickup if desired and allowing for greater editing in TBC through the use of editing feature codes.

Control codes give extra line joining control in the field for creating arcs, shapes, start new line sequences, close figures, and join specific points. They are defined as seen below:

XXXX # - space and then the control code is entered

So, a code would look like:

EJ02 1



Line Control Codes	
Name	Code
Line - Start	1
Smooth Curve - Start	10
Smooth Curve - End	11
Circle Edge - Start	12
Circle Centre - Start	13
Rectangle - Start	14
Horizontal Offset	15
Vertical Offset	16
Line - End	2
Joint to Point	3
No Join	4
Close Line	5
Tangential Arc - Start	6
Tangential Arc - End	7
Non-Tangential Arc - Start	8
Non-Tangential Arc - End	9

## Other Items

### **EDITING:**

We recommend not editing the FXL and providing UPG with any required edits, however you are able to do any required editing within TBC or the Feature Definition Manager.

### **ATTRIBUTES:**

We have strived to ensure that attribute information is correct, however this may change moving forward with updates, requiring an update to the FXL.

### **FINAL NOTE**

UPG is committed to supporting the QR code library and enhancing functionality to assist with the use of this feature code library. Please contact us with any requests and suggestions that can be made to this library and also for any enhancements that could be made in TBC to improve the user experience when working with QR, and we will try to accommodate them.