WELLS CITY BUILDING STONES TRAIL

Introduction.

Wells, with buildings dating from 12th Century onwards and rocks from the Devonian, Carboniferous, Triassic and Jurassic periods of earth history in the area, is a great place to look at the building stones.

Why a Building Stones Trail? There are two main reasons why the study of building stones is important and relevant today. Firstly, for conservation it's important to know the type of stone when planning repair and conservation of historic buildings to ensure that the character of the building is retained. Secondly, for education and scientific purposes many stone types are no longer visible in the field can easily be seen in older buildings. The variety of stone used is a reflection of changing sources over the centuries.

The building stones described in this trail leaflet are seen in buildings mostly built before 1900. After that time improved transport links and increased prosperity enabled an increased range of stone types to be imported from elsewhere in the UK and overseas.

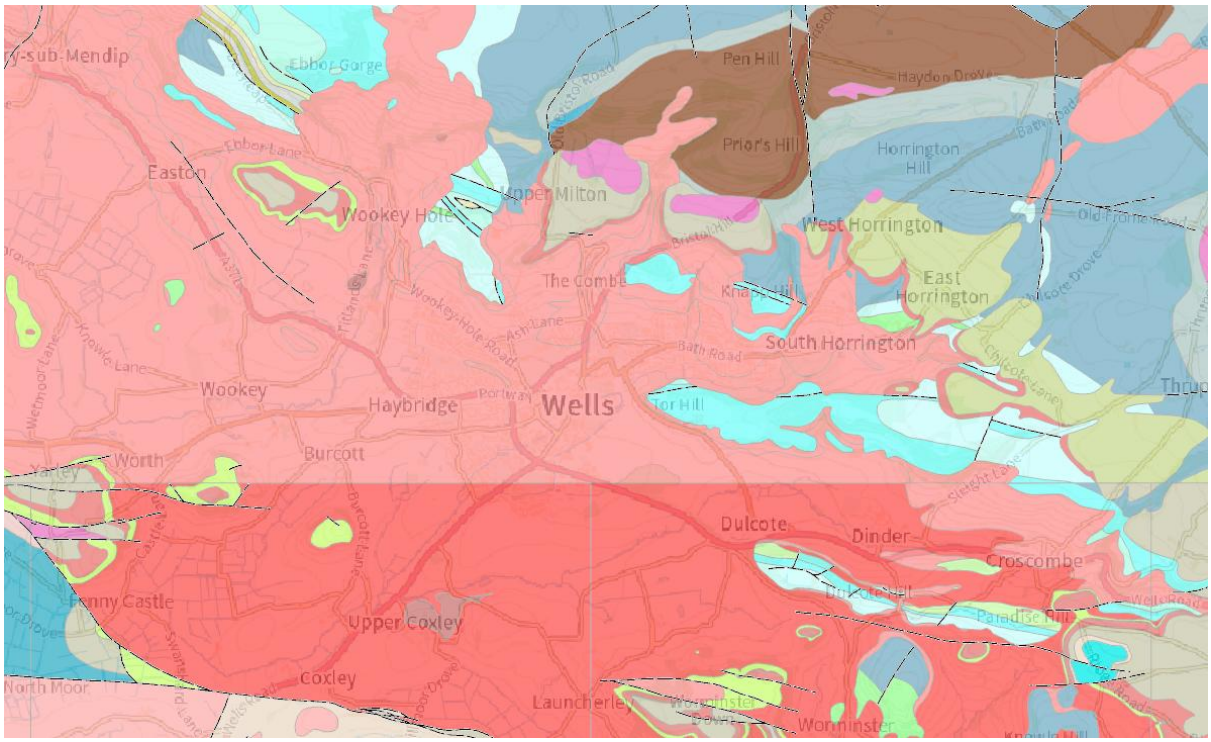
The Cathedral interior, Bishop's Palace, Bishop's Barn and Vicar's Close have not been included in this trail but are well worth visiting if time permits. Information on the building stones of the Cathedral and Bishops Palace may be available to visitors but entry fees are payable. At all four locations you will see the building stones featured in this guide. See below for directions to Bishop's Barn and Vicars Close.

The eight stone types visible on this trail in approximate order of appearance are Dolomitic Conglomerate, Carboniferous Limestone, Doulting Stone, Chilcote Stone, Blue Lias, Devonian Sandstone, Pennant Sandstone and Kilkenny Marble. When first seen stone types are shown in bold text with their approximate age.

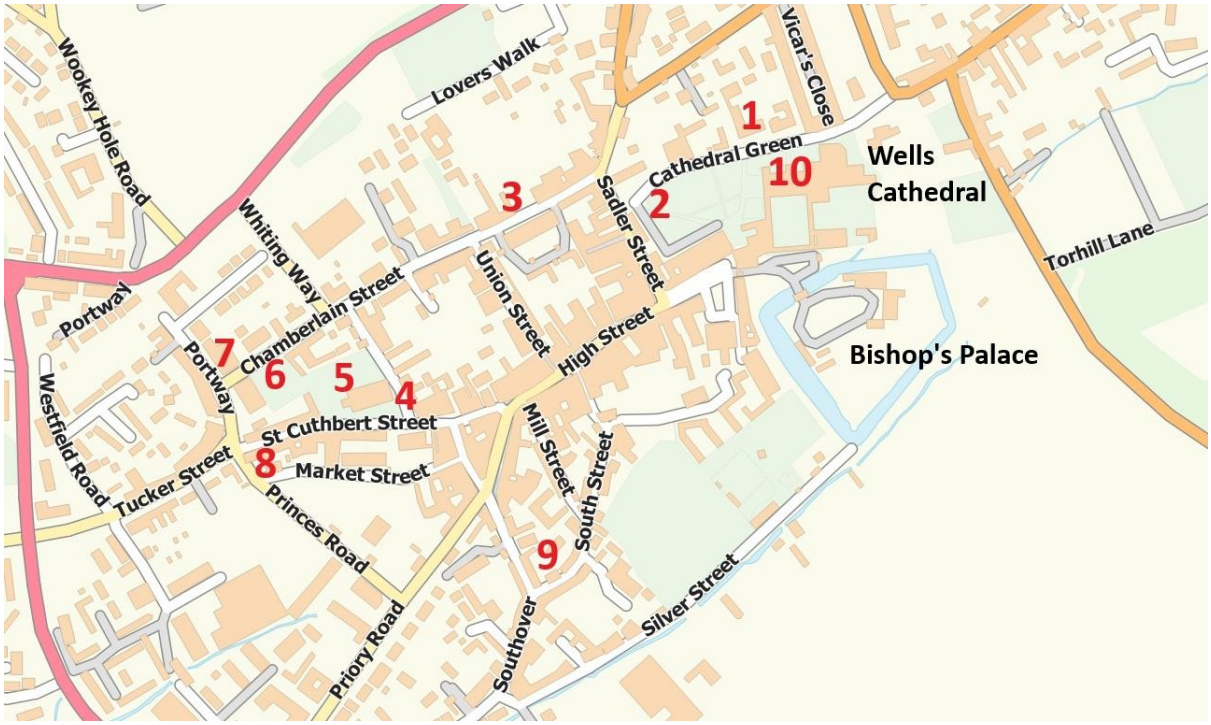
The start of the trail Stop 1, is outside the Museum at GR ST 5507 4592.

Nomenclature – this guide uses the local or traditional names for the building stones. Recent British Geological Survey (BGS) publications and media outlets may use different names. For example, Dolomitic Conglomerate is known by BGS as Merica Mudstone Lateral Facies. These have been adapted by the BGS to enable the correlation with rocks in different parts of the country.

All photographs courtesy of Garry Dawson.



Map showing the geology and sources of building stones seen on the trail. *Reproduced with the permission of the British Geological Survey © UKRI 2026. All Rights Reserved*.



Map of Wells City Centre. Stops on the trail are marked with red numbers. *Contains OS data © Crown Copyright 2026.*

STOP 1 – Walls by Wells Museum

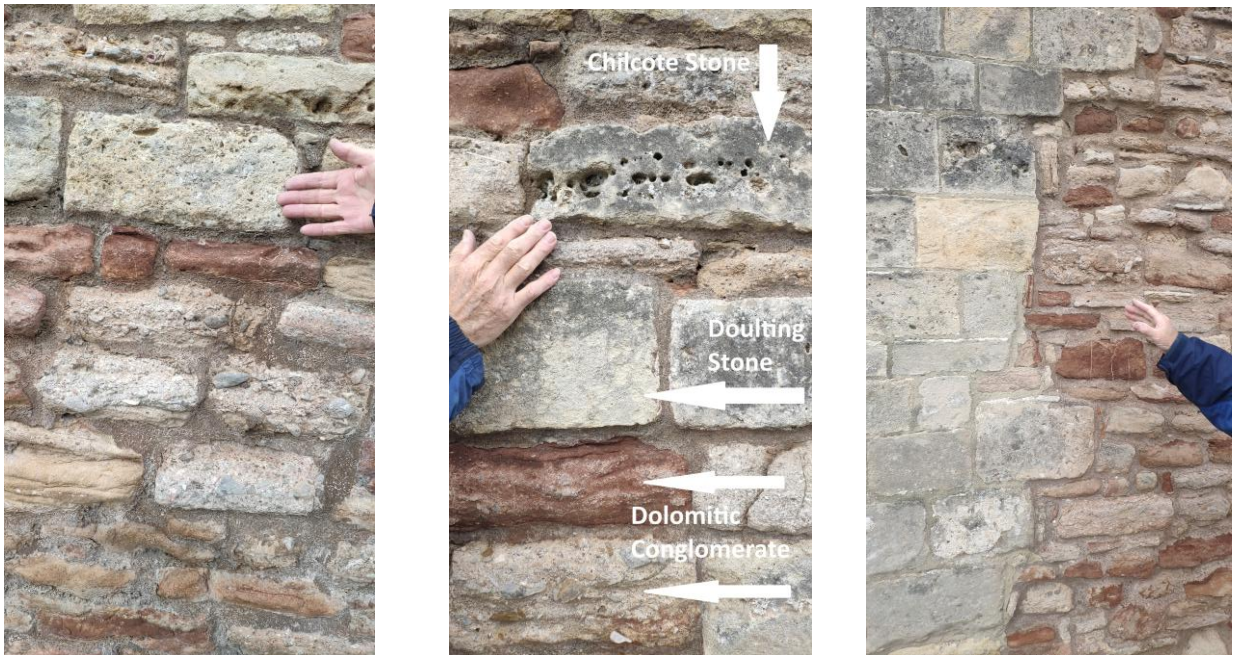


Figure1: the wall at Stop 1 with the stone types labelled



Figure 2: close up of wall at Stop 1 showing Dolomitic Conglomerate

At Stop 1, the wall to the left of the museum along Cathedral Green contains several of the building stone seen in the city making it a good place to start the walk.

The wall is largely built of Triassic-age **Dolomitic Conglomerate** (the exact age is uncertain but in the range 237-201 mya) which is known as Mercia Mudstone Marginal Facies by the British Geological Survey (BGS). It outcrops to the West and North of Wells.

Dolomitic Conglomerate often consists of angular boulders and smaller fragments of **Carboniferous Limestone** (360-300 mya) with mud and clay but, it is very variable, and in places it is red sandstones and mudstones which can be seen in walls throughout the city. The angular nature of the boulders and pebbles suggests that they were only transported a short distance. During Triassic times, in occasional periods of high rainfall within a long period of predominantly desert conditions, limestone eroded from the mountains was transported by flood water towards the lowland. As the floods subsided the eroded limestone was deposited in steep-sided desert canyons and on the steep mountain slopes to form the rock seen today. The rock is often red in colour but with prolonged exposure to weather it can become grey.

Two Jurassic-age building stones, **Chilcote Stone** (also called **Downside Stone**) (200 mya) and **Doulting Stone**, (170 mya) can be seen in the wall. Chilcote Stone was laid down in a shallow coastal sea in early Jurassic times and is contemporaneous with the **Blue Lias Limestone** (200-195 mya). It is distinguished by its holes, either caused by biological activity or where small pebbles have fallen out of the stone. It was quarried from the area between Wells and Shepton Mallet.

Doulting Stone is a Jurassic limestone, often containing oolites, which formed in a warm coastal sea with little sediment coming in from land. Its yellowish-brown colour reflects the presence of iron. It has been quarried since Roman times at Doulting, east of Shepton Mallet and has been used widely in Somerset for high-status buildings, including walls, windows, door frames, fireplace lintels and decorative carving.

STOP 2 – Brown's Gate Sadler Street

At Stop 2, the wall of Brown's Gate facing Sadler Street is attractively faced in Doulting Stone with thin courses of Dolomitic Conglomerate. When constructed the latter would have been red in colour in contrast to the Doulting Stone but over the centuries the red colour has weathered and faded. The Doulting Stone has been cut particularly finely to use an absolute minimum of mortar.

On the inside wall of the Gate the rubble stone used behind the facing stone is exposed with the remains of the render which in the past has covered the stone.



Figure 3: Sadler's Gate with facing stone of Doulting Stone and Dolomitic Conglomerate. The wall shown under the archway is of rubble stone with partial render cover remaining.

STOP 3 – Along Chamberlain Street - The Catholic Church, building walls and the Job Centre.

Stop 3 is by the church on the left-hand side of Chamberlain Street which is constructed of light-coloured Jurassic Blue Lias Limestone. In many parts of Somerset (see Stop 4) this limestone has a blue hue but here we see a variant of Blue Lias, probably from the area east of Wells, which is rarely blue in colour. Blue Lias was deposited in a warm shallow sea.

Around the windows, doors and the corners of the walls of the church Doulting Stone has been used. The house to the right of the church and others further down the road use the same stone as the church. Seeing clusters of buildings of similar ages using the same stone is common in many places – presumably a reflection of changing supply of building stone with time.



***Figure 4: Chamberlain Street Catholic Church and adjacent house of Blue Lias with Doulting Stone dressings*.**

Immediately after the church look left into Union Street. The first building wall is a typical Wells wall of Dolomitic Conglomerate with some Doulting Stone but it also contains at least one block of **Devonian Sandstone** (385-359 mya). This is the purple-coloured piece approximately five courses above the first window – see Figure 5. This stone originates from the Mendip Hills to the north and single pieces are seen in several walls in the city.



Figure 5: Left and centre - rubble wall in Union Street with Devonian Sandstone block by white arrow. Square of black line indicates approximate position of centre photo.

Right - modern wall of Blue Lias at the Job Centre.

Further down Chamberlain Street on the right-hand side is the Job Centre with a modern wall of Blue Lias limestone. A contrast to the stone seen in the church, this is typical Blue Lias which is used widely for building in Somerset and quarried today in the Somerton/Langport area.

STOP 4 – St Cuthbert's Church – South side



Figure 6: Left and centre - older part of St Cuthberts Church South-East corner with Chilcote Stone in buttress and Doulting Stone in walls. Right Doulting Stone walls and tower.

Cross over the road and go down Priest Row to the magnificent St Cuthbert's Church. At the SE corner of the church the walls and buttresses are of Chilcote Stone – note the characteristic holes in the stone. This is the older part of the church. Further along the south side in a later phase of construction the stone in the walls and tower is all Doulting Stone.

STOP 5 – St Cuthbert's Church – North side

The north side of the church is built of Dolomitic Conglomerate and Doulting Stone with the former being largely rubble stone. Cross-bedding, showing that the lime-rich sediment which formed the limestone was deposited by a current in a shallow sea, can be seen in some of the stone. Here on the north side of the church the stone is grey due to the growth of lichen which prefers the damp and shady side to the building – see Fig 7



Figure 7: Left - Doulting Stone with grey lichen growth showing cross-bedding - indicated by black lines. Right - rubble Dolomitic Conglomerate and Doulting Stone.

STOP 6 – Almshouses

The Almshouses are located across the churchyard. The walls facing the church are of Blue Lias with Doulting Stone around the windows and to the side and the walls facing the road Dolomitic Conglomerate is used.



Figure 8: South and West facing walls of the Almshouses with Blue Lias, Doulting Stone and Dolomitic Conglomerate.



Figure 9: North and West facing walls of the Almshouses.

STOP 7 – Portway /Princes Road

At Stop 7 on Portway, close to its junction with Chamberlain Street, is a row of terraced houses and a pub are built of Dolomitic Conglomerate with Doulting Stone around the windows and doors. The very varied nature of the stone here can be seen with many blocks containing large angular pebbles of Carboniferous Limestone.

The Dolomitic Conglomerate seen here is probably from the villages west of Wells such as Draycott. Stone from quarries around Draycott will take a polish and was used as ornamental stone. Although in geological terms it is not a proper marble, as this requires the rock to have been subjected to high temperatures and pressures, it was sold as Draycott Marble. The stone from that area was also used to make large gateposts and window/door lintels. Good examples of large gateposts can be seen to the right of the pub and later on St Johns Street. They are even larger than they appear as only 2/3 the gatepost is typically seen above ground and often, to aid stability, the gatepost will have been cut underground wider than above.







Figure 10 – Above - Terrace of houses on Portway with coarse Dolomitic Conglomerate and Doulting Stone dressings.

Left – large gatepost of Dolomitic Conglomerate by pub side entrance.





STOP 8 – Market Street.



Figure 11: Above - terrace on Market Street. Carboniferous Limestone with fossils and Dolomitic Conglomerate.

Left - Lower Carboniferous coral - probably Diphyphyllum – by the hand

At the end of Market Street there is a short terrace of houses built of Carboniferous Limestone with Dolomitic Conglomerate. Carboniferous Limestone was laid down in a warm, tropical, shallow sea. These waters were rich in life, and when organisms such as corals, crinoids, bivalves and brachiopods died, their remains accumulated on the sea floor as calcium carbonate-rich sediment to form the grey coloured Carboniferous Limestone seen today. Many of the limestone blocks in the wall contain numerous fossils particularly corals.

STOP 9 – Walking along St Johns Street and South Street



Figure 12: Left - typical Wells old stone house. Right - Modern terrace with blend of building stone. Note the use of purple Devonian sandstone.

The route of the trail now goes along St Johns Street and South Street back towards the start point passing old stone houses and some modern properties with a mix of stone used in an attempt to blend in with the older stone properties. It's a matter of personal opinion if this blend works but the newer properties make more use of Devonian Sandstone than seen elsewhere – see Figure 12. At this point a short detour can be taken to see the Bishop's Barn otherwise continue along South Street through the Market Place, past the Bishop's Palace to the Cathedral. In front of the Cathedral, in the pavement, you will see local Carboniferous-age **Pennant Sandstone** (310 mya) flags some showing structures indicating that they were laid down by flowing water.



Figure 13: Wells Cathedral West side - Doulting Stone carved stone with Kilkenny Marble and Blue Lias columns

STOP 10 – Cathedral West and North sides

The magnificent west front of Wells Cathedral, once described as the best of its age in all England, is constructed of Doulting Stone. The decorative pillars are mostly Irish

Carboniferous Limestone, known as **Kilkenny Marble**, replacements for the original Blue Lias Limestone pillars (like Draycott Mable not a true marble – see Stop 7). Some of the latter remain behind the front columns where they have been protected from the effects of weathering by the columns in front.

Going around the north side in places Chilcote Stone has been used in the lower parts of the wall. The Doulting Stone quarries were controlled by the Abbot of Glastonbury Abbey and when, in the 12th Century, the Abbot of Glastonbury fell out with the Bishops of Wells he refused to supply Doulting Stone for construction of the Cathedral. Without a supply of stone from Doulting the masons used Chilcote Stone instead.

Vicar's Close, said to be the oldest continually inhabited street in Europe is across the road from Stop 10 through Chain Gate.



Figure 14: Wells Cathedral North side - Chilcote Stone with its characteristic holes

Glossary of Terms

Carboniferous: Geological Period 360–300 million years ago

Conglomerate: Coarse-grained sedimentary rock formed by cemented, gravel-sized pieces set in a finer matrix, such as sand or mud.

Cross-bedding: Beds at an angle to main bedding plane indicating they were laid down in flowing water.

Devonian: Geological period 419-359 million years ago

Dolomite: Sedimentary carbonate rock composed primarily of the mineral calcium magnesium carbonate

Dressing: stone, usually finely cut, around doors and windows

Jurassic: Geological period 201-145 million years ago

mya: Million Years Ago

Oolites: Spherical grains which feature concentric, layered coatings around a nucleus (like shell fragments or sand)

Triassic: Geological Period 252–201 million years ago

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