

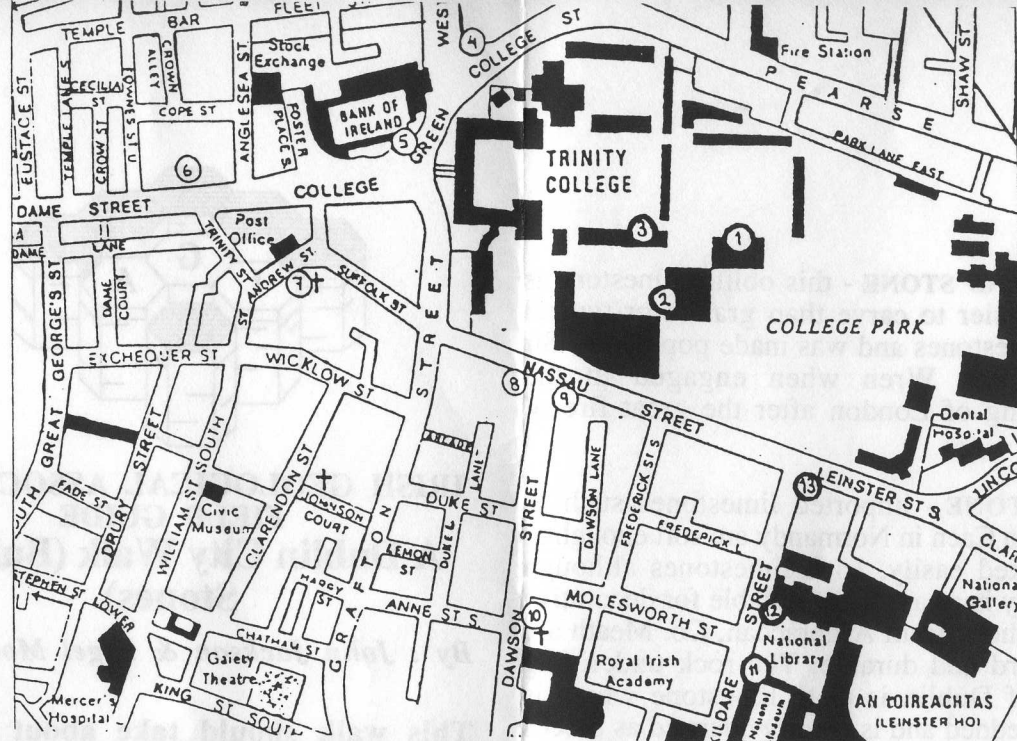
**IRISH GEOLOGICAL ASSOCIATION  
FIELD GUIDE  
A Dublin City Walk (Building  
Stones)**

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**This walk should take about an hour depending on the time spent inspecting the various building stones and architectural features of buildings not included in the itinerary but passed en route.**

**BUILDINGS**

1) Museum Building, Trinity College.  
Predominantly granite from Ballyknockan, Co. Wicklow with horizontal 'string courses' of Portland Stone. The carved moulding of the architrave of the doorway is probably Caen Stone. The interior of the building contains marbles from Connemara (green), Cork (Red) and Kilkenny (black).



**2) Berkeley Library, Trinity College.**

Faced with Wicklow granite from Ballybrew. Note the dark patches (schlieren), called 'pots' by the local stonemasons.

**3) The Old Library, Trinity College.**

The ground floor is of local Calp limestone weathered to warm brown and grey colours. The upper storeys were originally of sandstone but were replaced by granite facing at some date prior to 1844. The cast iron window frames are from Coalbrookdale foundry, Shropshire, where iron was first smelted with coked coal.

**4) Allied Irish Bank, College Street.**

The sandstone on the street corner of the building is from Scraboe Hill or Comber, Co. Down and contrasts with the liver-red sandstones on either side from Dumfries in Scotland.

**5) The Bank of Ireland, College Green.**

This magnificent building is faced with Wicklow granites from Ballybrew and Ballyknockan. Behind this outer 'ashlar' stonework is a rubble-cored wall of local Calp limestone. The string courses, portico, pediment and other features are of Portland Stone.

**6) Central Bank, Dame Street.**

The cladding of this exciting building is of granite from Ballyknockan which contrasts well with that from Ballybrew in the adjacent Corn Exchange, recently restored.

**7) St. Andrew's Church, Suffolk Street.**

This building shows the use of different styles of stonework with more rounded granite blocks in the lower storey and regular granite blocks higher up. The edges or 'quoins' are in limestone.

**8) Nassau House, Nassau Street.**

This modern office block uses facing stone at ground storey level to clad and conceal the underlying reinforced concrete. The thickness of the cladding slabs is revealed in the square pillars. Those of Nassau Street are a dark 'granodiorite', while on Dawson Street are of granite ('Balmoral Red') in which one of the minerals, called feldspar, is coloured red. The main entrance to the building on Nassau Street is faced with a creamy coloured limestone called travertine from Tivoli, Italy which forms from lime being chemically precipitated from lime saturated waters.

**9) The Lombard and Ulster Bank, Dawson Street.**

This former hotel is made from limestone in which the fossil shells of various animals can be seen. Farther along on the pavement, outside No.3, there are fossil brachiopod shells appearing as white circular shapes in a black limestone called 'Kilkenny black marble'.

**10) St Anne's Church, Dawson Street.**

The grey Leinster Granite and the New Red Sandstone look attractive, but the use of a porous stone such as this sandstone in string courses can allow damp and frost to penetrate the building. The finer stone work is in Portland Stone and a pale grey Irish limestone has also been used in horizontal string courses.

**11) National Museum, Kildare Street.**

The lower storeys are of Leinster Granite and these contrast with the sandstones which are badly damaged by the city's pollution. The window reveals are of Lower Carboniferous Mount Charles Sandstones from Co. Donegal. The portico at the entrance has protected the sandstone pillars from the acid rain and the chisel marks can still be seen.

12) National Library, Kildare Street.

The upper storeys of this sister building to the Museum were largely rebuilt using the famous limestone from Ardbracon, Co. Meath to replace the seriously deteriorated Mount Charles Sandstone.

13) Kildare Street Club, Kildare Street.

This former gentleman's club is of red brick with pillars and cornices of limestone from Ballydule, Co. Offaly. The string courses and motifs are of Portland Stone and their damage by pollution can be clearly seen at the bases of the pillars at street level.

## ROCK TYPES

**GRANITE** - a coarse igneous rock cooled from magma deep in the earth's crust. Southwest of Dublin is the large body of the Leinster Granite stretching as far as Co. Wexford. It is still quarried at Barnacullia, Co. Dublin and Ballyknockan in Co. Wicklow.

**MARBLE** - this term is used loosely for limestones which will take a polish and more accurately for those which have been altered by heat and pressure in the earth's crust. True marbles such as the green or white Connemara marble and limestones such as the Cork Red and Kilkenny Black should not be used out of doors as the polished surface weathers rapidly when rainfall is acidulated.

**PORTLAND STONE** - this oolitic limestone is much easier to carve than granite or typical Irish limestones and was made popular by Sir Christopher Wren when engaged in the rebuilding of London after the great fire of 1666.

**LIMESTONE** - imported limestones such as that from Caen in Normandy are soft enough to be worked easily. Irish limestones although generally hard are quite suitable for decorative work. Those from Ardbracon, Co. Meath are very hard and durable. The rock underlying much of Dublin is Calp limestone which is thinly bedded and is readily quarried as blocks suitable for construction. It is very common in older buildings and walls.

**SANDSTONE** - the important feature of a sandstone is the natural cement holding the sand grains together. In the Mount Charles Sandstone it is of lime and breaks down readily in the aggressive atmosphere of the city. In local use in Co. Donegal there are no problems with it in the unpolluted air.