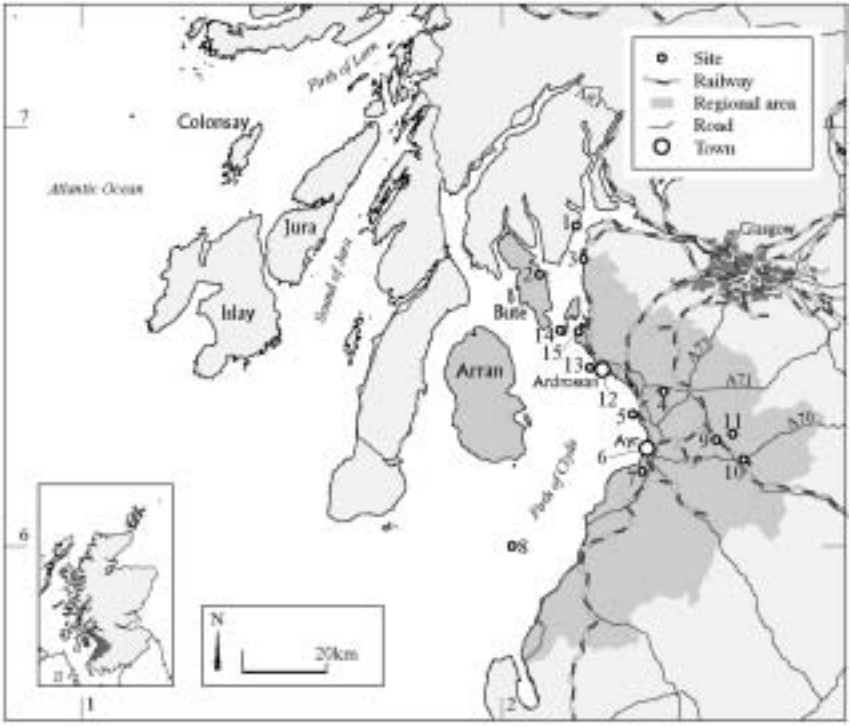


Ayrshire and Bute

1. Dunoon Pier
2. Rothesay Pier
3. Wemyss Bay Station and Pier
4. Laigh Milton Viaduct, Kilmarnock
5. Troon Harbour
6. Ayr Auld Brig
7. Brig o' Doon, Alloway
8. Ailsa Craig Lighthouse
9. Ballochmyle Viaduct, Ayrshire
10. Lugar Viaduct, Cumnock
11. Sorn Castle Footbridge (Suspension)
12. Ardrossan Harbour
13. Horse Island Beacon
14. Little Cumbrae Lighthouse
15. Hunterston 'A' Power Station

5. Ayrshire and Bute

Introduction

This chapter contains a wide swath of tourist country including the Firth of Clyde and Ayrshire coast resorts. Its maritime works include piers serving Glasgow and the west coast, and crossings of the Clyde estuary, at Dunoon, Argyll (1835–1937, 5-1); Rothesay (1781–92, 5-2); and Wemyss Bay (1865–1903, 5-3). The latter, with its magnificent station, served a branch of the Glasgow & South Western Railway, a company whose operations are outlined in a general entry, and which had a forerunner in Scotland's earliest public railway between Kilmarnock and Troon, made essentially to carry coal but it also carried passengers. (1811, 5-4)

The Kilmarnock & Troon Railway included what is now the world earliest surviving viaduct on a public railway. The viaduct was built from 1809–11 at Laigh Milton (5-4), disused from 1846 and ruinous by 1992, since when it has been handsomely restored. Troon Harbour (1808, 5-5) with which it connected is still in service but with a much changed use from its coal exporting days – it now hosts the Sea-Cat ferry to Belfast. Another historically significant harbour of this period is Ardrossan, designed by Telford. It had a chequered early history, was expanded in later years and now serves various shipping interests including the Arran Ferry. (1806–33, 5-12)

Lighthouses off the Ayrshire coast include one of Scotland's earliest at Little Cumbrae (1757, 5-14) and a spectacular Stevenson lighthouse and concrete fog-horn house at the dramatic Ailsa Craig island (1886, 5-8) some ten miles offshore from Girvan. Between the two, at the south end of Horse Island off Ardrossan, an unusual tapering unlit masony sea-mark exists that was initiated by the arctic navigator John Ross. (1811, 5-13)

Medieval bridges are represented by the Brig of Ayr (5-6) and the Brig o' Doon, Alloway (5-7), the latter immortalised by Burns in his epic poem *Tam O' Shanter*. Amongst later examples are two of the world's finest masonry viaducts on an operational railway, Ballochmyle (1848, 5-9) and Lugar (1850, 5-10), both designed by John Miller.

Power provision in the area is represented by the nuclear plants at Hunterston. (1964, 1976, 5-15)

1. Dunoon Pier

NS 1765 7648

This pier, probably of timber, was erected in 1835 as the steam boat revolution in communications, particularly with Glasgow, was gathering momentum. Its continuing growth led to extensions and other improvements in 1867 and by 1881 the jetty extended almost 400 ft from the shore. In 1896–98 the pier head was developed to its present form in a depth of about 24 ft of water with buildings by architects Clarke & Bell. It is the terminal for the ferry to Gourock connecting with the train to Glasgow.

The buildings are extensive, much more so than their rivals at Rothesay, and give an impression of Tudor-style architecture with red-tiled roofs and timber gables. A promenade balcony was added in 1937, but this fell into disuse and has since been removed. Even today this pier still provides the shortest and fastest route to Glasgow and is in daily constant use. [1]

2. Rothesay Pier

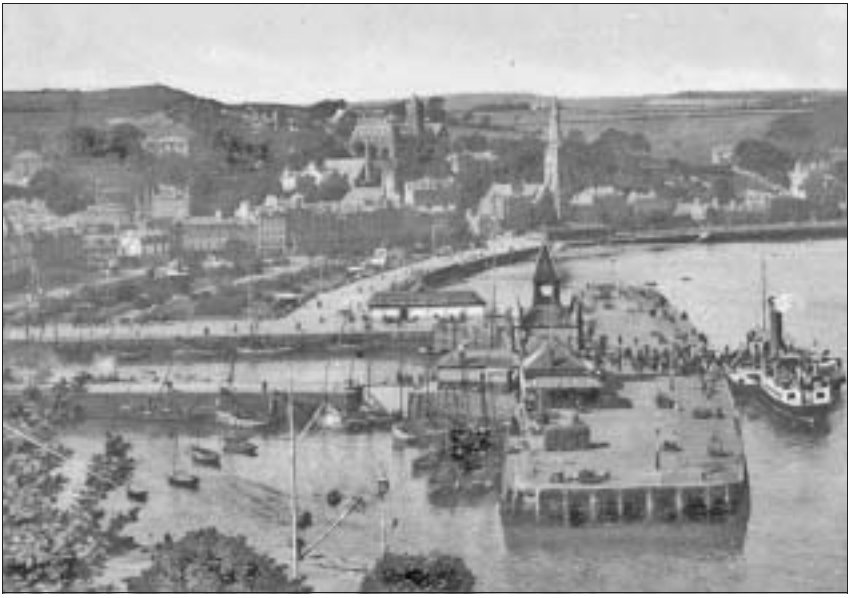
NS 0889 6483

This is a masonry pier of traditional construction opposite the Watergate. It originated in 1752, by 1756 had reached about 100 ft in length, and was completed in 1781 at about double this length and a width of 30 ft. From 1785–90 the New Quay was built parallel to it on the west side in an L-shape plan to provide a fishing boat harbour (see figure).

With the coming of the Clyde steamer and tourist boom both quays were joined by a drawbridge at the end of the original pier in 1833. A wooden and iron slip, 330 ft long, for boat repairs was erected in 1839–40 by Caird & Co. (£848), with piling and mason work by J. Kinghorn (£233). Albert Pier a smaller quay to the east, mainly for coasting vessels, was built from 1860–65.

Of Rothesay Pier's buildings of 1903 only a cabbie's shelter and the public toilets remain, both memorable survivors in their own right, particularly the latter with its tiled walls, black marble mosaic floors and burnished copper piping. The other buildings were demolished in 1967.

A new swing bridge, designed by consultant engineer J. B. Brodie, was built by G. Halliday Ltd in 1907–08 at a



Rothesay Pier [postcard 1908]

contract price of £2180. In 1908–09, under Brodie's direction, the same firm built an extension to Albert Pier in greenheart timber (£3741) and the solid quay wall at Albert Place (£1744). The present terminal, built in 1992, is reminiscent of the first pier with its pagoda roof and red tiles. [2]

3. Wemyss Bay Station and Pier

NS 1933 6854

Wemyss Bay Station and Pier, built in 1865, formed the terminus of a branch of the Caledonian Railway which served the towns on the south coast of the Clyde. This resort was the steamer terminal for much of the pleasure sailing on the Clyde operated from both Gourock and Wemyss Bay by the Caledonian Railway fleet.

To meet an increasing demand from holidaymakers the station was rebuilt in 1903 to a design by James Miller and Donald Matheson with an elegant roof of light ironwork and glass, conveying the impression of airy spaciousness. A covered way was provided to the steamer berths on the pier so that convenient access was possible in all weathers.

Wemyss Bay Station [*Railway Heritage Trust Report* 1993–94]

The station was refurbished in 1994 at a cost of £1.8 m and still serves the ferry to Rothesay and the Isle of Bute and summer excursions. It is one of Britain's finest stations and was considered by the Railway Heritage Trust as one of the most remarkable conservation projects to which it had contributed.

Glasgow and South Western Railway

The Glasgow and South Western came into existence in 1850 and was dominated throughout its existence by fierce rivalry with the larger Caledonian Railway whose territory it largely shared. By 1876 the company was using, and in 1883 had vested in it, Glasgow's prestigious St Enoch Station and a fine headquarters and hotel in St Enoch Square, all now demolished (see 4-11 and 4-29).

The railway served the rich coal-producing districts and seaside resorts of Ayrshire and the Clyde, as well as having important agricultural traffic from the farmlands. But, with the Midland Railway, it also ran expresses direct to London via Kilmarnock, Dumfries, Carlisle and Leeds. It also carried Irish traffic to the port of Stranraer. This line was

single track southwards from Girvan, contained severe gradients, and was very difficult to work. Over this route alone it had no competition from other companies.

The company's early forerunners included the Kilmarnock and Troon, the Glasgow, Dumfries and Carlisle (see 1-32) and, until 1850, the Glasgow, Paisley, Kilmarnock and Ayr, each of which had John Miller as its engineer. On the latter line his work included the 23-arch Kilmarnock Viaduct, which still dominates the town, and the spectacular Lugar Water and Ballochmyle Viaducts, all still in service.

This company, with its 493 miles of line, became part of the London Midland and Scottish in 1923. [3]

Kilmarnock and Troon Railway

HEW 1469

The Kilmarnock and Troon, Scotland's earliest public railway, incorporated by an Act of 1808, was built at the expense of the Duke of Portland, mainly for the purpose of carrying coal from his collieries near Kilmarnock to his new harbour at Troon. It became operational in 1811 and also first carried passengers in that year. The ten-mile long, double track, 4 ft gauge, cast-iron plateway line was operated by horse traction.

The harbour and railway together cost of the order of £150 000, of which about £42 000 was for work on the railway. The engineer for both was Smeaton's protégé William Jessop and the resident engineer, T. Hollis. They were set out by John Wilson, the railway company's surveyor, who from 1812 managed both undertakings as the Duke's agent. Later as a 'civil engineer' he directed an extension of the harbour from the 1820s–40s. The most notable design feature of the railway was its formation as an inclined plane from Kilmarnock to Troon with a more or less uniform downwards slope of about 1 in 660.

In 1816 a trial was made by the Duke of Portland, probably on Wilson's initiative, of a Stephenson 'Killingworth' travelling engine to haul wagons. Unfortunately this proved unsuccessful because its weight and thumping action fractured many of the cast-iron plate rails which had been designed for lighter use. Horse traction was resumed and the engine was sold to Lord Elgin in 1824 for £70, presumably for use at his works (7-1).

Horse traction continued until 1846 when the line was leased by the Glasgow, Paisley, Kilmarnock and Ayr and had its curves and track upgraded for locomotive use by Miller. By 1839 the railway was carrying 150 000 tons of coal annually, and 70 000 tons of other freight. Passenger usage in 1837–38 amounted to about 200 000 passenger miles each year. The company was commercially successful and existed until 1899. The present operational line follows much of the original route.

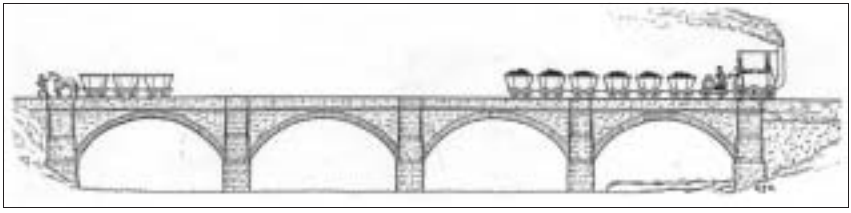
The principal engineering achievements, in addition to extensive cuttings and embankments to achieve the inclined plane, were the Laigh Milton or Gatehead Viaduct and the difficult crossing of Shewalton Moss, a peat bog a mile wide and about 30 ft deep. Most of the construction was by direct labour. [4, 5]

4. Laigh Milton Viaduct, Kilmarnock

HEW 1469/01
NS 3834 3690

This structure, believed to be the world's earliest surviving viaduct on a public railway, carried the track about 25 ft above the Irvine on four 40 ft span local freestone segmental arches. It is about 270 ft long, 19 ft wide overall and was built from 1809–11, probably by Telford's 'treasure of talents' John Simpson. The engineers were Jessop and Hollis. Wilson acted for the Duke's interest. The viaduct was closed in 1846 and bypassed in 1847.

By 1992 the viaduct had become ruinous because of crumbling stone and was about to collapse. Because of its outstanding historical significance the Laigh Milton Viaduct Conservation Project was formed to save it. The directors raised £1.065 m, bought the viaduct for £2 and, in 1995–96, it was restored within budget on a design-and-build contract basis by Barr Ltd. On excavation of the deck, the outer walls were found to be acting as gravity retaining walls with boulder clay infill between. They



Laigh Milton Viaduct

Roland Paxton – drawing by G. J. Douglas

Roland Paxton

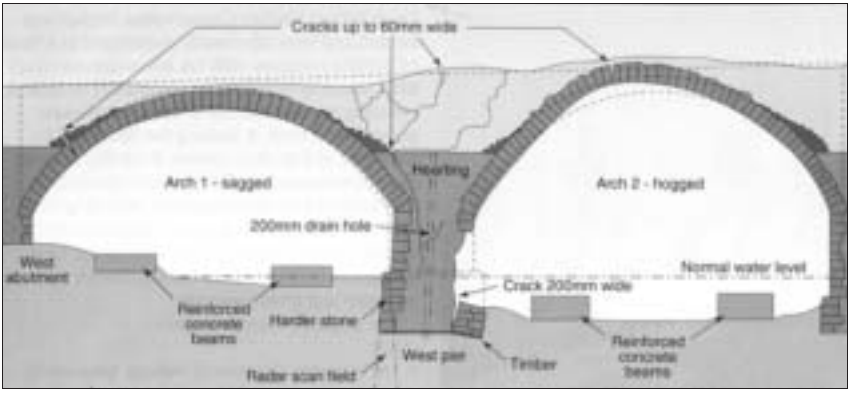
Laigh Milton Viaduct – internal construction revealed conservation

derived some lateral support from bull-nosed buttresses above the piers.

Cast-iron interpretive plaques and a short length of replica plateway are provided at the viaduct which is now owned and maintained by East Ayrshire Council Roads Department. It is reached by a footpath from near Laigh Milton Mill. Historic railway ironwork from the refurbishment is now on display at the ICE Museum at Heriot-Watt University and at the Dick Institute, Kilmarnock, which also has a fine oil painting of the railway in operation in the 1830s.

The 23-arch masonry viaduct which dominates the centre of Kilmarnock was built in 1848 and designed by

Laigh Milton Viaduct – state before conservation



Roland Paxton

John Miller, engineer to the Glasgow, Paisley, Kilmarnock and Ayr Railway. He also directed the upgrading of the Kilmarnock and Troon which was re-opened in 1847, at Laigh Milton, on a timber viaduct just upstream of the old viaduct, which was in turn bypassed by the present operational railway viaduct in 1865. [6]

5. Troon Harbour

NS 3098 3148

From 1808 the Duke of Portland developed a good natural harbour to the north-east of the rock promontory curving about a mile into the bay from which Troon derives its name. Piers were built into deep water enclosing the harbour and within two decades an inner dock, two dry docks, a lighthouse at the inner end of the pier (1827) and large storehouses had been built. This work was at first under the direction of Jessop but was mostly carried out under the superintendence of John Wilson, the Duke's surveyor. The plan shows the harbour with its breakwater as it was in the 1850s, basically in its present form. The harbour continued to flourish into the 20th century. The

Troon Harbour plan 1840 [Tidal Harbours Comm. Appendix C to 2nd Report 1847]

Ballast Bank to the south west was created by the build-up of earth and shingle from the sailing colliers where it acted as ballast. After a period of decline Troon harbour is once again a busy port having close links with Ireland through the Sea-Cat Ferry, which provides the fastest sea crossing between Scotland and Belfast. The inner harbour is now a marina. [7]

6. Ayr Auld Brig

NS 3385 2211

The Brig of Ayr and its downstream neighbour of 1785, built by A. Stevens to a design by Robert Adam, were immortalised by Burns in his poem *The Brigs of Ayr*, first published in 1787. Burns was truly prophetic in the words of the '*Auld Brig*' addressing the 'New', which was demolished in 1877–78!

> 'Conceited gowk! Puff'd up wi' windy pride!
> This mony a year I've stood the flood an' tide;
> And tho' wi' crazy eild I'm sair forfairn,
> I'll be a brig when ye're a shapeless cairn!'

The origins of the Brig are uncertain, although mention of a bridge is made in Ayr's Royal Charter of 1236. Inglis

Ayr Auld Brig 1910 – preservation nearing completion. Note temporary timber bridge [8]

mentions that a payment made by James IV to masons in 1491 is generally assumed to relate to its construction. The bridge has four arches of 52–53 ft each and the piers are 15 ft wide. The width within the parapets is 12 ft.

In 1597 the brig was described as ruinous. Little is known of its later history but in 1732 the north arch fell. The brig was rebuilt and repaired from time to time and from 1907–10, largely on the initiative of J. A. Morris, FRIBA of Ayr, against the advice of Sir William Arrol. Urgent and drastic remedial works were carried out to refurbish it under the direction of W. S. Wilson.

Shafts were sunk within the piers to the foundations and the bases grouted and concreted solid. Stonework was replaced and the superstructure strengthened internally, involving underpinning, by concrete in walls and slabs, and the whole structure was repointed and made good, retaining as much of the original work as practicable.

The engineering work was carried out by direct labour under the supervision of Simpson & Wilson, consulting engineers, and Morris, who attended to the archaeological features of the work. The bridge is now pedestrianised and a tourist attraction (see figure). [8, 9, 10]

7. Brig o' Doon, Alloway

HEW 0315
NS 3324 1783

A masonry bridge dating from about 1460 with an arch of 72 ft span, large for a medieval bridge, and a rise of 26 ft.

Roland Paxton

Brig o' Doon, Alloway

Large areas of the stonework have been replaced over the years and indifferently match the original in colour, dressing and courses. The bridge was refurbished in 1978. An unusual feature noticed by Inglis was the old parapet copestones shaped like a handrail. The bridge is now pedestrianised and a major tourist attraction.

The line of the cobbled roadway is cranked in plan, due to an ancient belief that this irregular form deterred witches from crossing. This bridge also was immortalised by Alloway born Burns in his poem *Tam O' Shanter*.

Burns tells of Tam, riding home alone on Meg, his faithful mare, on a wild night after a merry evening with his friends in an Ayr hostelry, being pursued by fiends and witches from the haunted Auld Alloway Kirk and believing, as decreed by ancient superstition, that if he crossed flowing water they could not follow,

> '...Now do thy speedy utmost, Meg
> An' win the key-stane o' the brig
> There, at them thou thy tail may toss
> A running stream they dare na cross;
> But ere the key-stane she could make
> The fient a tail she had to shake!' [11, 12]

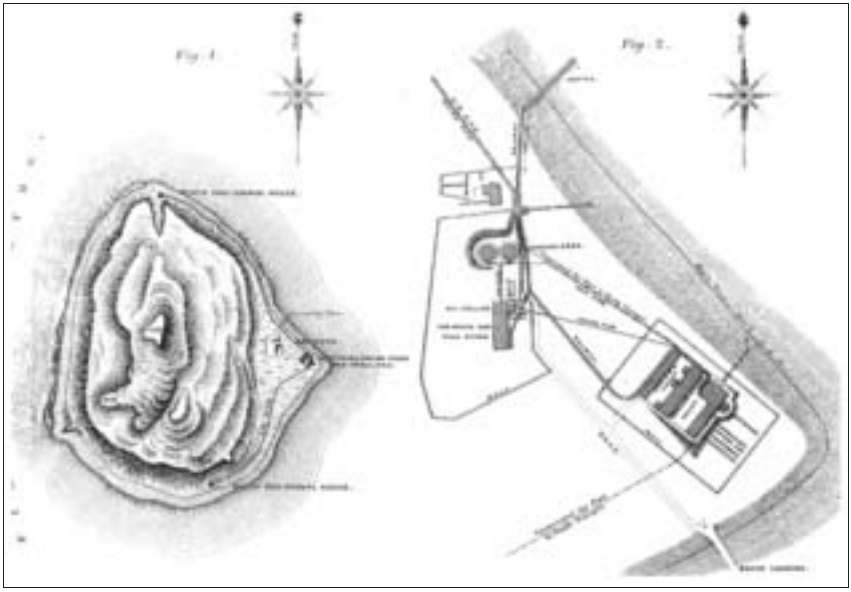
8. Ailsa Craig Lighthouse

NX 0252 9970

In 1881 petitions were received by the Northern Lighthouse Commissioners requesting two fog signals and a lighthouse on Ailsa Craig, a conical rock isle rising steeply from the Irish Sea to a height of 1110 ft ten miles west of Girvan. The commissioners agreed and work started in 1882, on what was a complex station because of its remoteness, culminating in an oil-burning light being first exhibited on 15 June 1886.

The lighthouse is a stone tower about 36 ft tall and about 59 ft above sea level just above the east shore of the isle and the substantial fog sirens were erected at the north and south sides of the isle. Their compressors were powered by 38 hp Crossley 'Otto' silent gas engines at the station and the compressed air was conveyed to the 20 ft high concrete trumpet houses in $2\frac{1}{2}$ in. diameter iron pipes.

The station was designed and installed under the direction of Board engineers T. and D. A. Stevenson. The



Top: Ailsa Craig Lighthouse plan [13]

Ailsa Craig – concrete trumpet house [postcard ca.1910]

contractor for the lighthouse and other buildings was Hill & Son, Leith; for the pumps, piping and sirens, the Calorific Fog-Signal Company; and the gas-making plant, J. Keith, Arbroath. The total cost was about £24 000.

The fog signals, which operated at a pressure of up to 75 psi, were permanently discontinued in November 1966 and replaced by a Tyfon fog signal. Until wireless communication was established in 1935 carrier pigeons from Girvan Green were used for emergency messages and when this was not practicable, a system of fires. [13]

9. Ballochmyle Viaduct, Ayrshire

HEW 0025
NS 5087 2539

Arguably Britain's most outstanding masonry arch viaduct, which comprises a main span of 181 ft span towering 164 ft above the Ayr flanked on each side by three 50 ft span arches. It was built from 1846–48 on the Cumnock Branch of the Glasgow, Paisley, Kilmarnock & Ayr Railway. All the arches are semicircular. The restrained ornamentation includes raised panels in the spandrels.

Ballochmyle Viaduct

Although the span of Grosvenor Bridge at Chester was 19 ft longer, its height was only just over one-third that of

Ballochmyle Viaduct under construction [lithograph]

Ballochmyle. The masterpiece of centring required to build the arch at this height was fortunately recorded for posterity by D. O. Hill and Newlands. The masonry is mainly of red sandstone quarried locally although the arch-ring was constructed of harder freestone quarried near Dundee. The foundation stone was laid on 5 September 1846.

The viaduct was designed by the company's engineer, John Miller, who was second to none as a designer of large masonry railway viaducts. The resident engineer was William McCandlish and the contractor, Ross & Mitchell. The viaduct's grace and excellence serve as a fitting memorial to their achievement. [14]

10. Lugar Viaduct, Cumnock

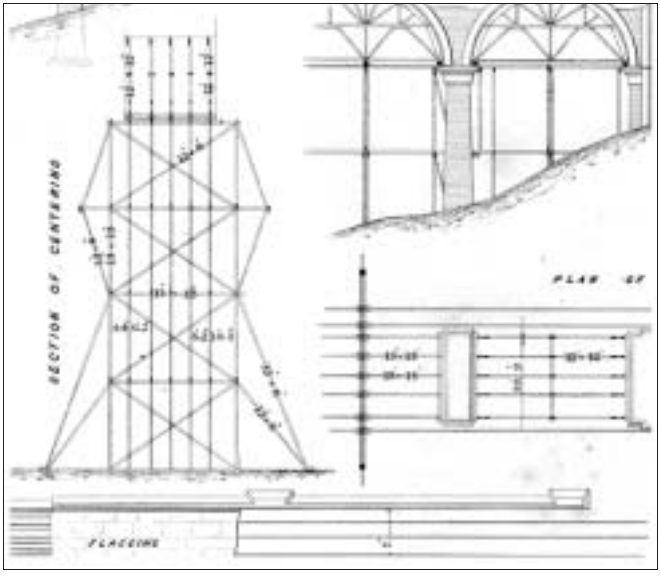
HEW 2433/05
NS 5739 2062

Another elegant Miller viaduct, completed in 1850 and still in service, originally carried the Glasgow & South Western Railway from Glasgow to Carlisle over the Lugar Water near Cumnock. It is built of local white sandstone, is 752 ft long and reaches a greatest height of $161\frac{1}{2}$ ft. It comprises 14 semicircular arches, nine of 50 ft and five of 30 ft and has hollow piers and spandrels in the best tradition of Telford's practice.

Some of the tall piers were founded on old stoop and room coal workings which gave rise to much concern regarding their stability. The cavities had to be firmly packed with carefully selected stones but the work was evidently well done as it has stood the test of time.

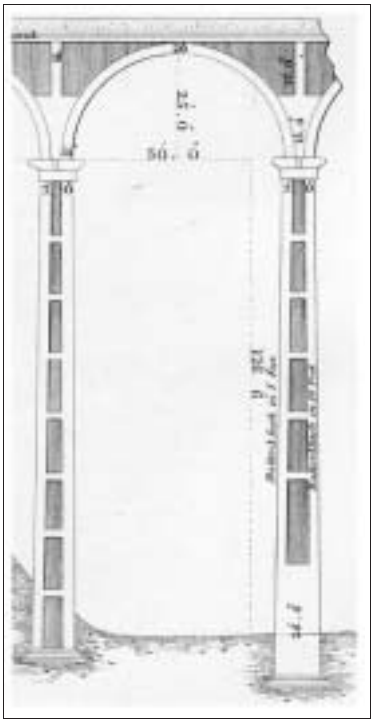
Particular attention was paid to the centring more than 100 ft high. The weight of a finished 50 ft arch was computed at 1000 tons, exerting a pressure on the foundation of $6\frac{1}{4}$ tons sq. ft. The viaduct, which contains 500 000 cu. ft of masonry weighing 33 500 tons, cost about £30 000 and the centring £4500.

The arches were designed so that the thrust pressure line was always close to the centre of the arch-ring which



Lugar Viaduct centring [15]

Lugar Viaduct – arch and pier detail [15]



is only 2 ft thick, or 1/25 of the span, taking a calculated horizontal pressure on the keystone across the arch of about 250 tons.

Miller considered this his greatest work. The contractor was James McNaughton. [15]

11. Sorn Castle Footbridge (Private)

NS 5474 2679

An early example of a wrought-iron chain bar-link suspension bridge, of about 100 ft span, $4\frac{1}{2}$ ft width and 11 ft curvature dip. It existed by 1860 and probably originated from up to three decades earlier.

Between fixed iron saddles on the tower tops accommodating adjustment spacers there are two chains of 10 ft × $1\frac{3}{4}$ in. diameter, with 9 in. connecting links. Nine suspender rods from each chain support light iron lattice parapets and a timber deck. The towers are 7 in. diameter partly fluted cast-iron columns 11 ft high. The lines of the

chains may have been influenced by similar ones at Union (2-34) and Gattonside (2-19) bridges of the 1820s.

The bridge, which is near the front of the castle, was in a ruinous condition when inspected in 1984. It has since been sympathetically restored by the Sorn Estate. No details of the bridge's origin could be found in the estate records.

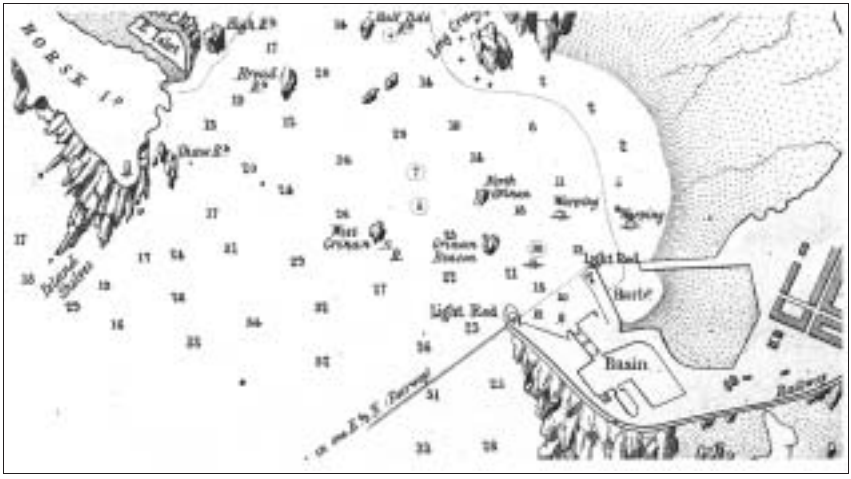
12. Ardrossan Harbour

HEW 1035
NS 2258 4222

In 1804 Telford was approached by the 12th Earl of Eglinton to examine the project of a canal from Glasgow to his Ardrossan estate where he proposed a great harbour to serve Glasgow. Telford, later supported by Jessop, planned a harbour with an area sufficient to accommodate 100 vessels. Two piers were planned embracing an entrance lock to a spacious wet dock at the shore end of which was to be the canal entrance.

Work began in 1806 and by early 1809 the southern curved pier about 900 yards long had been built (see later plan showing the pier carrying a railway). Construction turned out to be more difficult and expensive than anticipated. By 1815 Rennie had also been consulted and £70 000 had been spent against the original estimate of £40 000. Rennie estimated that £90 000 would be required.

The work came to a standstill on the death of the Earl in 1819 and was not resumed until 1833 under the 13th Earl



Ardrossan Harbour and Horse Island [Tidal Harbours Comm. Appendix C to 2nd Report 1847]

when it was completed on a reduced scale. The harbour then comprised two tidal basins of 6 and 18 acres and a wet dock of 4 acres with 19 ft of water over the sill at high water (see plan). A dry dock was built in 1846.

From 1886–92 the 10-acre Eglinton Dock was built which increased the depth of water to 27 ft at high tide. An outer tidal basin was also formed which included a new breakwater 1320 ft long. The engineer for these improvements was Robert Robertson.

The Glasgow, Paisley, Ardrossan Canal project of 1806 had only reached as far as Johnstone by 1811 when the funding ran out. It was eventually overtaken by Clyde navigation and railway developments. A railway from the harbour to Byers near Kilwinning was opened in 1831, which was connected with Glasgow in 1840. In 1832 Telford remarked, no doubt with the Caledonian Canal also in mind, that the scheme 'was a striking instance of the risk which exists in an active nation of undertaking any new work which requires time in completion'.

In later years the harbour was developed to serve shipping interests on the Clyde and is in use today by the oil industry and other shipping, including the Arran ferry, and as a marina. [16–18]

13. Horse Island Beacon

HEW 0712
NS 2128 4256

An unlit masonry beacon sea-mark near Shaw Rock at the south end of low grassy Horse Island about a mile north-west of Ardrossan harbour (see plan 5-12). It was built on the advice of John Ross, later famous as an arctic navigator. The tower, built in 1811, is 52 ft high and 19 ft square at its base, tapering to form a slender pyramid. [19]

14. Little Cumbrae Lighthouse

NS 1376 5151

This lighthouse was erected by the Cumray [sic] Lighthouse Trust set up by the merchants and magistrates of Glasgow and founded by an Act of 1756 to make navigation safer for vessels plying to and from the Clyde. Besides building a lighthouse, dwelling house and a wharf for landing coals and other materials at Little Cumbrae, a 'proper fire or light' was to be maintained 'in the night

season'. A circular stone tower about 30 ft high with walls 3 ft thick was built on the highest part of the island, supporting a cage or grate of iron containing an open coal fire. The tower still exists.

This coal light, first exhibited in 1757, was far from efficient but the increased income from shipping dues enabled a new and improved lighthouse to be built near the coast to the west in 1793 which is still in service. It was designed by Thomas Smith, the first engineer to the Northern Lighthouse Board, and operated with parabolic facetted mirror glass reflector oil lamps.

The erection of the lighthouse was superintended by Smith's 19-year-old assistant Robert Stevenson. Stevenson and the family of engineers he founded advised the trust, which later became the Clyde Lighthouses Trust, until 1952. It was the first work for which Stevenson received payment. [20]

15. Hunterston 'A' Power Station

NS 1815 5123

Hunterston 'A', Scotland's first nuclear power station, was built from 1957–64 for the South of Scotland Electricity Board by the General Electric Company Ltd in association with Simon Carves Ltd, the Motherwell Bridge and Engineering Company Ltd, and Mowlem (Scotland) Ltd. It was closed in 1990 and is now being decommissioned with completion predicted for 2017.

The station produced 360 MW from two Magnox gas-cooled reactors. An idea of some of the civil engineering operations can be gained from the provision of 3000 cu. yards of mass concrete in the foundations of the first reactor supporting a raft incorporating 8000 cu. yards of concrete with 400 tons of steel reinforcement. This work, and the turbine hall excavation 650 ft × 130 ft × 13 ft deep, was ongoing early in 1958.

Motherwell Bridge and Engineering Company built 16 massive heat exchangers and two 70 ft diameter spheres to house the two gas-cooled reactors in Hunterston's twin towers. The spheres were made out of 3 in. thick steel plates, to bend which a 2000 ton press had to be built. In order to handle the plates into position the world's largest 'Goliath' crane, 200 ft high, was designed, erected and tested with a 350 ton load. It was used to lower the

Hunterston 'A' Power Station – lowering pressure vessel top [22]

pressure vessel tops into position. The firm's fabrication work required a £1 m complex equipped with two 40 ton travelling cranes.

Nearby Hunterston 'B' power station, commissioned in 1976, produces 1288 MW from two advanced gas-cooled reactors developed from the original Magnox reactors. It includes a visitor centre which offers tours of the station and displays. From this station and Torness nuclear power station (3-5), British Energy Plc generates up to 55% of Scotland's electricity. [21, 22]

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