# JACOBS ARUP

# **Forth Replacement Crossing**

**St. Margaret's Hope Archway** 

**Standing Building Survey Report** 

**July 2010** 

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# JACOBS ARUP

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Figure 1 Location Plan

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# JACOBS ARUP

#### 1 Summary

A Level 2 Standing Building Survey of the stone archway (NGR: NT 12308 81105, HB number 6405) has been undertaken by Jacobs Arup on behalf of Transport Scotland. The archway is sited over the drive to Admiralty House, St Margaret's Hope, North Queensferry (NGR: NT 12340 81031).

The archway is part of a category B group listing that includes Admiralty House, St Margaret's Hope boundary walls and walled garden. The archway contains two sandstone Marriage Pediments dated 1376 and 1570.

The removal of the archway is required to facilitate access for vehicles involved in the construction of a proposed radar station, to be complete in advance of works for the Forth Replacement Crossing anticipated to commence in 2011. It should be noted that archway removal would also be required for construction of the FRC and during subsequent operation (for emergency and maintenance vehicle access). As such this removal was assessed and reported in the FRC Environmental Statement (Jacobs Arup, 2009) as an impact of slight significance (subject to historic building recording being undertaken prior to relocation or dismantling to record the features and setting of the archway).

Although no record of its construction could be found, the survey results suggest that the structure is a composite folly constructed during the period following enlargement in 1916 of the original St. Margaret's House (built 1829), when the Royal Navy acquired it for the Commander in Chief, Coast of Scotland. The substantial renovations and extensions to Admiralty House were designed by the renowned English Arts and Crafts Architect Ernest Newton.

As it currently stands, the structure spans the approach road to Admiralty House where the access road narrows considerably. On the south side of the road adjacent to the structure the ground falls away steeply not allowing access to the side and around the archway. Overall, the structure measures 11.31m in length by 4.47m in height and 0.65m wide.

#### 2 Introduction

#### 2.1 General

The scope and methods of the building survey were discussed and agreed with Historic Scotland and Fife Council Archaeologist Douglas Speirs. It was recommended by Fife Council that the structure be recorded to the minimal standard detail specified as Level 2 in the *Recording of Historic Buildings: a descriptive specification, Third Edition* (Royal Commission on Historical Monuments of England, RCHME, 1996).

A level 2 survey is defined within the specification as:

... "a descriptive record, made in similar circumstances to Level 1, but when rather more information is needed. It may also be made of a building which is judged not to require any fuller record. Both the exterior and interior of the building will be seen, described and photographed. The examination of the building will have produced an analysis of its development and use and the record will include the conclusions reached, but will not discuss the evidence on which this analysis is based. A plan will be made and the possibility of publication must be borne in mind".

#### 2.2 Objective

The objective of this assessment is to report on the visual inspection and deskbased study of the origins and current condition of the archway, battlement and pediments. The evidence presented, and the conclusions reached, aim to offer a comprehensive report on the archway prior to its potential demolition.

The scope of this building recording report meets the requirements of current planning regulations set out in the Institute for Archaeologists (1994, revised 1999) 'Standard and Guidance for Archaeological Desk Based Assessments' and 'Recording of Historic Buildings: a descriptive specification, Third Edition' (Royal Commission on Historical Monuments of England, RCHME, 1996), which is followed by Historic Scotland.

#### 3.1 General

The historic building recording was carried out on 01 April 2010 to Level 2 (as per RCHME), in accordance with the recommendations of Fife Council Archaeologist Douglas Speirs.

The archway is situated on the drive to Admiralty House, St Margaret's Hope, North Queensferry, as shown on Figure 1.

#### 3.2 Building Survey

A photographic record was compiled during the site survey using a digital Panasonic DMC-LZ8 camera. An appropriate photographic record was undertaken of both sides of the archway, battlement and the two carved pediments which have been incorporated within the archway.

Jacobs Arup conforms to the standards of professional conduct outlined in the Institute for Archaeologists Code of conduct, and relevant Standards and Guidance documents. Jacobs Engineering UK is a Registered Archaeological Organisation (RAO) with the Institute for Archaeologists (IfA). This status ensures that there is regular monitoring and approval by external peers of our internal systems, standards and skills development.

The archway was visually inspected, sketched, accurately measured and notes made in relation to any points of interest.

#### 3.3 Desk-based Assessment

In order to assess the historical background to the gate structure a desk-based assessment was carried out. Data were acquired from the following sources:

- Historic Scotland for Listed Building information, Gardens and Designed Landscapes and Historic Battlefields;
- National Monuments Record of Scotland (NMRS)
- Grant, J. (1822-87) 'Cassell's Old and New Edinburgh' (www.oldandnewedinburgh.co.uk/)
- Napier of Wrichtishousis (<u>www.clannapier.org/wrchtnap.htm</u>).
- Historic Scotland (2009) 'Scotland's Listed Buildings. Policy, Conservation, Repair and Maintenance'
- A comprehensive internet search of documentary and digital resources and references.

#### 4 Historical Background

#### 4.1 Documentary and Archival Sources

As previously stated, there is very little available information on the date of construction or origins of the archway. It is presumed that the structure was built during the 20th century by the Royal Navy, perhaps as an additional security measure and part of a general upgrading to this important naval building. Admiralty House was clearly of some importance and the numerous trees planted by British Royalty and foreign Heads of State attest to the importance of the complex. It was probably considered that the erection of the gate structure, complete with archway and battlements would improve the grandeur of the building.

The main historical and built heritage interest are the two carved pediments set into the crown of the archway on either side. The NMRS notes (NT 18 SW 217.03) that these two stone pediments were originally mounted on a house called the Wrychthouse (Wrighthousis estate) in Bruntsfield, Edinburgh (NGR NT 24884 72499).

The Chamberlain Rolls (early Scottish Treasury accounts) record that in 1390 and again in 1402 William Napier was Constable of the Castle of Edinburgh and was granted the lands of Wrightshouses by King Robert II in return for the princely sum of one penny (Grant, 1880, Vol 5, Ch 3, 32-33). It may be assumed that this was the William Napier first associated with the Wrychthouse. Plate 10 in Appendix B shows a sketch of Wrightshouse from Grant 1880.

The Wrychthouse was demolished in 1800 during the construction of Gillespie's Hospital and School. During the demolition of the house many of the ornate carved stones were saved and some were incorporated into the walls of Gillespie's hospital and school, with pediments and heraldic carvings built into the hospital boundary wall. Others were acquired by Lord Woodhouselee where they were added to a ruin built in the grounds of Woodhouselee, a mansion on the southern outskirts of Edinburgh. On the demolition of Gillespie's Hospital in 1976 a collection of carvings were rescued and are now retained by the Huntley House Museum on the Royal Mile in Edinburgh.

There is no record as to how the stones (pediments) within the archway were acquired by St. Margaret's Hope.

#### 5 Structural Description

#### 5.1 General

The archway exhibits four separate phases of construction:

- Phase 1. Construction of gate piers.
- Phase 2. Landscaping to the south and east of the gate piers, including the construction of an embankment with steps and roughly coursed, unmortared retaining wall.
- Phase 3. Construction of the false battlement and archway.
- Phase 4. Reconstruction of the archway.

Plates 1-9 in Appendix A provide illustrative photographs including the archway, battlement and the two carved pediments. Appendix B lists the full photographic record compiled.

#### 5.2 Gate Structure including Archway

In total the structure measures 4.47m in height, from the upper cap stones to ground level and 11.31m in length including the battlement, and is 0.65m wide. The aperture of the archway measures 3.23m wide and 3.41m high.

The Phase 3 segmented archway and battlement are constructed from roughly dressed sandstone blocks ranging in size from approximately  $0.30m \times 0.20m$  to  $0.15m \times 0.10m$ , although it should be noted that eight concrete blocks have been incorporated as voussoirs in the archway during the Phase 4 reconstruction. The bonding is of Portland cement. It was noted during the survey that the rebate cut into the voussoirs to facilitate the closing of gates had been reconstructed on the western rather than the eastern elevation. It is presumed that this also occurred during the Phase 4 reconstruction.

To the south of and bonded to the archway there is a section of battlement with crenulations. The battlement measures 5.95m long and stands to a height of 0.90m. The merlons on average measure 0.69m high by 0.45m wide and 0.67m thick with north-west facing chamfers.

#### 5.3 Fittings

At the top of the embankment (see Phase 2 description above) there are the remains of bases for military signal lamps. They comprise concrete blocks measuring 0.95m by 0.63m by 0.18m thick with steel fittings on the upper side to which the signal lamps would have been bolted. (Plate 9).

At the southern end of the battlement attached to a coping stone is a hinged metal loop through which a flag pole would have been inserted (Plate 8).

#### 5.4 Pediments

The semi-circular carved stone on the eastern facing side of the archway is believed to be a marriage stone, commemorating the wedding of William Napier (WN) and his wife IF (name unknown) in 1376 (Plate 4). The stone bears the religious inscription SICVT OLIVA FRVCTIFERA 1376 which translates to 'Fruitful as an olive', with

illustrated olive branches. The stone is in excellent condition and the relief carving is clear with some damage to the outer banding. Grant (1880, p.32) notes that this pediment originally featured above a window.

The stone on the opposing side of the archway is a triangular pediment and is also a marriage stone marking the marriage of William Napier (WN) to his wife, Eliza Park (EP) in 1570 (Plate 5). The stone is inscribed with a coat of arms, with a 16th century family motto 'DITAT SERVATA FIDES 1570', which translates to 'Faith preserved maketh rich'. As with the other stone, the stone is in excellent condition, with the only visible damage occurring on the banding below the central star.

Brunskill, R. W. (2000). Vernacular Architecture; An Illustrated Handbook, Faber and Faber.

Grant, J. (1880). Old and New Edinburgh, Vol. 5, Chapter 3, page 36-40

Pride, G. L. (1996). Dictionary of Scottish Building. The Rutland Press, Edinburgh.

RCHM (1996). Recording Historic Buildings: A Descriptive Specification. Third Edition, Royal Commission on Historical Monuments of England.

Scottish Office (1994). Planning Advice Note 42, Archaeology and Planning. Published by the Scottish Office Environmental Department.

Scottish Government (2010). Scottish Planning Policy.

### Appendix A Photographic Plates



Plate 1: The archway, west facing elevation: from west.



Plate 2: The archway, east facing elevation: from east.

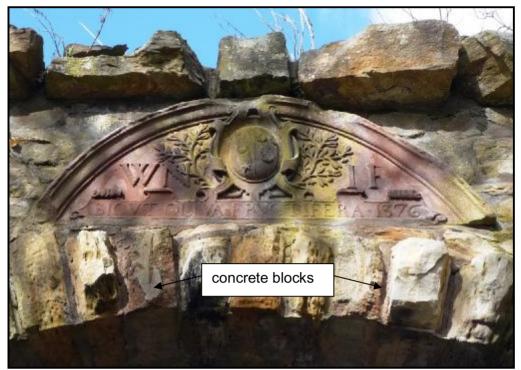


Plate 4: Detail of pediment eastern elevation: from east

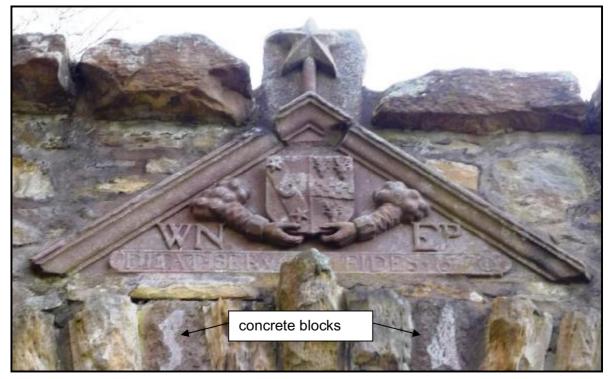


Plate 5: Detail of pediment western elevation: from west

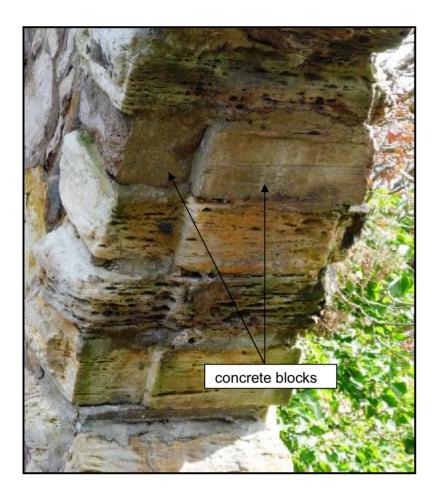


Plate 6: Detail of gate rebate: from South-west.



**Plate 7**: Embankment and crenulations and the location of the gate bar (circled): from northeast.



Plate 8: Detail of fittings for flag pole: from south.



Plate 9: Detail of Signal Lamp base: from south.

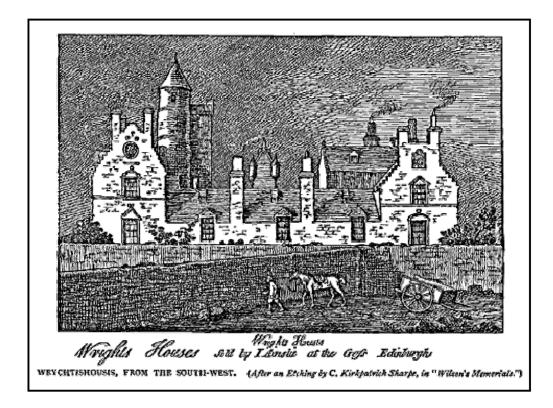


Plate 10: Sketch of Wrightshouse from Grant 1880, Vol. 5, Ch 3, page 36.

### Appendix B Photographic Register

The following photographs form the Photographic Register held for this structure. Those of relevance for illustrative purposes are provided in Appendix A. Hardcopies of these photographs will be provided to the Royal Commission on Ancient and Historical Monuments of Scotland with this Building Survey Report for archiving.

#### **Photographs**

Photo No.	Description	Direction from
1	St Margaret's Hope Archway eastern elevation	East
2	Embankment and crenulations	East
3	Detail of pediment eastern elevation	East
4	St Margaret's Hope Archway western elevation	West
5	St Margaret's Hope Archway western elevation	West
6	Detail of pediment western elevation	West
7	Detail of gate rebate	South-west
8	Detail of southern gate pier	North
9	Detail of southern gate pier	North
10	Detail of northern gate pier	South
11	Detail of northern gate pier	South
12	Detail of signal lamp base	South
13	Detail of crenulations	South
14	Detail of crenulations	South
15	Detail of crenulations	South
16	Detail of fittings for flag pole	South
17	General view of pediment on south-east facing side	South-east
18	Detail of southern gate pier	North-east
19	Panorama of western elevation	West

The following Discovery and Excavation in Scotland (DES) entry will be provided to Archaeology Scotland for inclusion in The Journal of Archaeology Scotland (annual publication).

LOCAL AUTHORITY:	Fife Council	
PROJECT TITLE/SITE NAME:	St. Margaret's Hope Archway; Standing Building Survey	
PROJECT CODE:	80900006	
PARISH:	Inverkeithing	
NAME OF CONTRIBUTOR:	Claire Shaw	
NAME OF ORGANISATION:	Jacobs Engineering UK (as part of Jacobs Arup joint venture)	
TYPE(S) OF PROJECT:	Standing Building Survey	
NMRS NO(S):	NT 18 SW 217.03	
SITE/MONUMENT TYPE(S):	Archway	
SIGNIFICANT FINDS:	N/A	
NGR (2 letters, 8 or 10 figures)	NT 12308 81105	
START DATE (this season)	April 2010	
END DATE (this season)	April 2010	
PREVIOUS WORK (incl. DES ref.)		
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Jacobs Arup was commissioned by Transport Scotland to carry out a level 2 Standing Building Survey at the archway within the grounds of St. Margaret's Hope (NGR: NT 12308 81105, HB number 6405). The archway is a Category B-Listed structure and although there is no record noting its construction the Building Survey has shown it to be a composite folly that may be contemporary with the extensive renovations and extensions conducted in 1916 by the renowned English Arts and Crafts Architect Ernest Newton. Within its recent history the archway has been demolished and subsequently re-erected, as is evidenced by the inappropriate use of modern materials i.e. concrete blocks and Portland cement. As it currently stands, the archway spans the main approach road to the house abutting the surrounding bedrock to the north. The archway measures 5.36m in length and stands to a height of 4.47m, and the attached battlement with crenulations measures 5.95m in length and stands to a height of 0.9m.	
PROPOSED FUTURE WORK:	Demolition	
CAPTION(S) FOR ILLUSTRS:	N/A	
SPONSOR OR FUNDING BODY:	Transport Scotland	
ADDRESS OF MAIN CONTRIBUTOR:	Jacobs UK 95 Bothwell Street Glasgow G2 7HX	
EMAIL ADDRESS:	claire.shaw@jacobs.com	
ARCHIVE LOCATION	NMRS	