

**THESIS PLAN**

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**'The Second Industrial Revolution?' An exploration and analysis of the impact of Dounreay Nuclear Research Establishment on the Far North of Scotland.**

This thesis will examine the impact which Dounreay Experimental Research Establishment had on the built environment, community, and development of the far north of Scotland. Focusing on the years from the founding of the United Kingdom Energy Authority (UKAEA) in 1954 to the completion of the housing programme for employees in 1963-1964, the study is set within a number of contexts pertinent to not only the far north, but the Highlands, Scotland, and the United Kingdom in general.

This thesis plan sets out the steps required to determine the above impact. It poses a series of questions which will be considered in the relevant chapters.

Chapter	Content	Word Count
<b>Introduction.</b>  This will summarise why the research establishment was sited at Dounreay, providing context for the discussion which follows. It will:	<ul style="list-style-type: none"> <li>• Outline the aims and objectives of the research.</li> <li>• Set out the original contribution of the research to the field.</li> <li>• Introduce signposting which will recur throughout the thesis.</li> <li>• Establish the key research questions and the arguments which result.</li> <li>• Review the historiography of the subject, which reveals the interdisciplinary approach required to examine the key research questions. This literature can broadly be divided into five sections: the nuclear context; the development of the Highlands and Islands; the debate around the 'rural'; the built environment; and how the new developments impacted on community.</li> <li>• Enable the research to be positioned within a framework of existing academic studies, highlighting the significant contribution of the research to the field. The introduction will then set out the methodology used and its relevance to the study, before outlining the chapters in which the arguments will be posited.</li> <li>• Highlight the importance of the collaborative nature of this scholarship, with a view to informing the debate about heritage and conservation policy. Identifying how my research will provide a framework for Historic Environment Scotland with regards to future projects covering different subjects within its archive.</li> </ul>	12000

<p><b>One</b></p> <p><b>Housing in Thurso: post- war planning and the UKAEA</b></p>	<ul style="list-style-type: none"> <li>• Chapter one addresses the impact of Dounreay on the built environment of Thurso.</li> <li>• The key research question considers Dounreay's impact on the built environment of Thurso, with focus on how housing needs were met in a rapidly growing population.</li> <li>• Establishes the architectural context with a particular focus on Modernism.</li> <li>• It questions how post-war national policy affected planning and architecture in the area; the extent to which development was influenced by eminent contemporary architects; whether concession was made to the traditional architecture of Thurso; and the nature of the relationship between the UKAEA and Thurso town council.</li> <li>• How all this comes together reveals the complexity of the UKAEA's housing project, which was very much a first for the Far North of Scotland.</li> <li>• The chapter will highlight the original contribution of the research to the historiographical debate.</li> </ul>	<p>12000</p>
<p><b>Two</b></p>	<ul style="list-style-type: none"> <li>• Chapter two furthers the discussion of the built environment by questioning how Dounreay and its impact on the built environment shaped the community.</li> <li>• The key question of the chapt</li> </ul>	

	<p>of being remote (or otherwise)?</p> <ul style="list-style-type: none"> <li>• How much strain was put on Caithness as a result of the influx?</li> <li>• How was traditional industry and agriculture affected? What was the effect of the relocation of farmers?</li> <li>• Did Dounreay help sustain crofting communities in the Far North of Scotland?</li> <li>• What was the impact of the growth of Dounreay as a site and its visual impact on an agricultural, coastal landscape – with reference to a cultural reading of the landscape.</li> <li>• The chapter will highlight the original contribution of the research to the historiographical debate.</li> </ul>	
<p><b>Four</b></p> <p>Chapter four is based on comparative studies, which are still to be finalised. The following potential issues and points of comparison are triggers for discussion:</p>	<ul style="list-style-type: none"> <li>• How did Dounreay transform Thurso into an industrial ‘frontier’ town and how does this compare to other examples of industrial development in Scotland and the United Kingdom?</li> <li>• How does the experience in Caithness compare with that in Los Alamos?</li> <li>• What similarities can be made with other industrial sites in remote areas in Scotland, such as the impact of the hydro schemes and the aluminium industry in Kinlochleven?</li> <li>• What comparisons can be made with projects further afield, such as Harwell? How did housing there develop?</li> <li>• With regards to architectural development and town planning, how does Thurso compare with key projects elsewhere, such as the new towns of East Kilbride and Cumbernauld?</li> <li>• What comparisons can be drawn with the rise and fall of industry in urban communities, such as Clydebank and Dumbarton?</li> <li>• The chapter will highlight the original contribution of the research to the historiographical debate.</li> </ul>	12000
<p><b>Five</b></p>	<ul style="list-style-type: none"> <li>• Chapter five will offer the opportunity to reflect on my research – enabling me to incorporate wider contexts and reflect on collaborative aspects, the wider impact of my study and how it has been influenced and will influence. This will include:</li> <li>• The nature of the collaboration between UHI and HES. The research into the Sinclair Macdonald collection will be an exemplar of how other collections at HES can form the basis of research projects.</li> <li>• The legacy of Dounreay’s impact, asking to what extent did the Thurso community become dependent on Dounreay?</li> <li>• It will pose questions for further study, including what lessons can be learned for future built environments?</li> <li>• The chapter will highlight the original contribution of the research to the historiographical debate.</li> </ul>	10000
<p><b>Conclusion</b></p>	<ul style="list-style-type: none"> <li>• A reflective and analytical conclusion, drawing together and addressing the aims and objectives of the study whilst making explicit its original contribution to the field.</li> </ul>	10000

## Timetable

<b>Year</b>	<b>Date</b>	<b>Activity</b>
2016-2017	October - May	Refine aims, objectives and methodology. Integrate theory into work.  Continue research: including archival research at Historic Environment Scotland, National Records of Scotland, High Life Highland, The National Archives.
2017	May	Submit chapter two
	September	Submit chapter three
2018	March	Submit chapter four
	June	Submit chapter five
	October	Submit draft of completed thesis
2018 - 2019	November - February	Re-drafting of thesis
2019	March	Submit final thesis

## 'The second industrial revolution?' An exploration and analysis of the impact of Dounreay Nuclear Research Establishment on the far north of Scotland.



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Historic Environment Scotland  
Nov 2016



### Research overview

As a region, Caithness was changed when it was chosen as the location for the construction of Dounreay Nuclear Power Research Establishment. Although sited away from decision-makers in central government, it was in relatively close proximity to Thurso, and as a result the fact that it would have an impact on the town and area was inevitable. This impact is the central focus of this thesis.

- What was Dounreay's impact on the built environment of Thurso?
- How did Dounreay and its influence on the built environment of the area shape the local community?
- What was Dounreay's impact at local, regional and national level with regard to the idea of the Highlands as an agricultural, rural and 'wild' landscape?

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## UKAEA housing

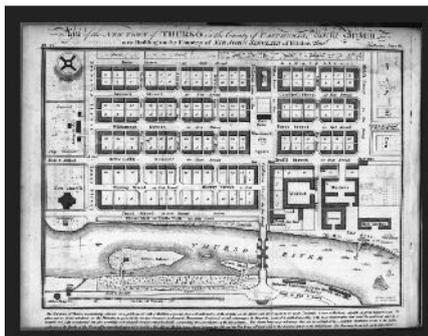


Dounreay: 'The greatest event that has occurred in the far north of Scotland' (Sir David Robertson, Caithness & Sutherland MP, 1954)



- 'We are now living in the atomic age'.
- In 1954 Caithness, a crofting county, was selected as the centre of cutting edge nuclear development.
- The airfield at Dounreay suited the government's requirements for a site which was both near and far from an existing settlement – Thurso, 9 miles to the east.
- Between 1955 and 1964 the population of Thurso grew from 3350 to 9190.

## Planning in Thurso



- Plan of Thurso, copy of plate VI from Henderson's Caithness, 1812.
- The rational grid pattern of Sir John Sinclair's plan is evident.
- <https://canmore.org.uk/collection/684283>
- Aerial view of Thurso, 1955.
- Sinclair's 'new town' can be seen to the left of the bridge.
- Early work on the UKAEA scheme is underway at top right.
- <https://canmore.org.uk/collection/1438414>

## 'The Highlands and Islands are not dead'

- 'I do not need to tell you what this means to the North in terms of stimulus to new industries and of new hope for the crofters, fishermen, and other useful people...it means too, something more important – that people all over the world will realise that the Highlands and Islands are not dead, but they are still very much alive.' (J.J. Robertson, Joint Under-Secretary of State for Scotland, 1949).
- Dounreay was established within the wider context of Highland development, including investment in forestry and hydro electricity.

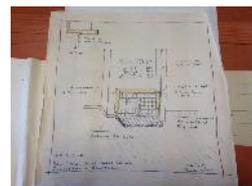
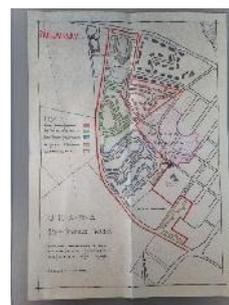
FORESTRY PROVIDES  
WORK IN ONCE  
DESOLATE AREAS

LOGS AND RIVERS  
ARE BEING HARNESSSED  
-AS IN GLEN MORISTON-  
TO PROVIDE  
HYDRO-ELECTRIC POWER

PYLONS REMAIN  
THE NEW SYMBOLS OF  
POWER THROUGHOUT  
THE NORTH

Stills from 'North  
of the Great  
Glen',  
Educational  
Films of  
Scotland, 1956.

## Sinclair Macdonald & Son Collection

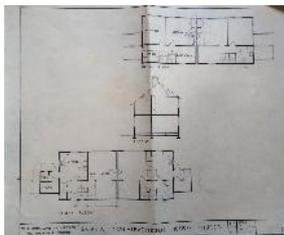
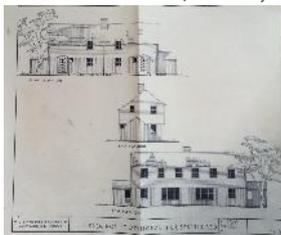


## Housing 'the atomics'



Some of the different housing types built by the UKAEA, including semi-traditional, flats, and non-traditional timber. The flats and timber houses were for the lower grades of qualifying staff.

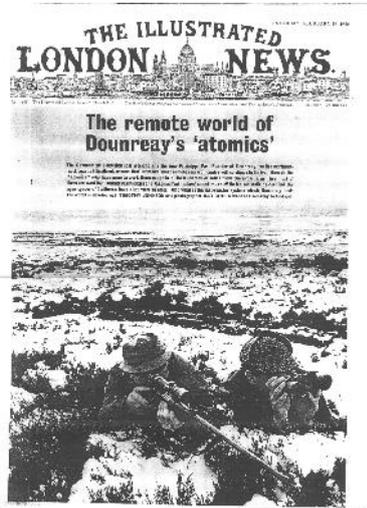
## 'A house of considerable charm and character' (Hugh Sinclair Macdonald, 1954)



Planning and design: Simms' timber houses, designed specifically for the UKAEA, could be quickly constructed with non-traditional materials.



Next steps: analysing community and challenging perceptions of 'remote'



## Questions to consider

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Thank you

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