

Civil and Infrastructure Engineering Projects (SCQF level 4)

Outcome 1



Introduction

- Civil and Infrastructure Engineering Projects is an initiative created by the Academy9 education programme to support pupils to identify the relevance in school work to the workplace.
- This outcome is about understanding what a civil and infrastructure engineering project is.



Background

A major Civil Engineering and Infrastructure project is to be undertaken nearby a village. The company who will work on the project are keen to engage with those who live in the village to ensure they know what the project is, why it is happening and what benefits it will bring to the community. The company will hold several open sessions for village residents to attend to find out about the project and ask questions about the project. As part of the sessions the company will produce a visual display to share information about the project.



The A9 Dualling

We are going to use the Dualling of the A9 road as our Civil and Infrastructure Engineering Project.

Play this video as an introduction to the project. [Academy9](https://www.glowscotland.org.uk/academy9)
([glowscotland.org.uk](https://www.glowscotland.org.uk))



Brief

Create a poster to enable a company to inform a local community about a nearby Civil Engineering and Infrastructure project.

Include:

- 3 facts about what a Civil Engineering and Infrastructure project is.
- 2 objectives of this Civil Engineering and Infrastructure project.
- 2 benefits to the community of this project.

A9 Dualling – Kinraig to Dalraddy Scheme


Introduction

In December 2011, the Cabinet Secretary for Infrastructure and Capital Investment announced the Scottish Government's commitment to dual the A9 between Perth and Brossness by 2015.

In October 2012, we started the programme of public engagement by setting out the design and management process we need to undertake before construction starts.

In late 2012 we presented details of the corridor assessment work we have been undertaking along with details of early implementation schemes between Kinraig and Pitlochry and Kinraig and Dalraddy.

This leaflet provides a summary of the exhibition packs which present information on the Draft Orders and Environmental Statement for the Kinraig to Dalraddy scheme.



Kinraig to Dalraddy

The A9 section of the A9 between Kinraig and Dalraddy will become the first section of the route to be dualled under the A9 Dualling programme.

Proposals to widen 1.6 km of A9 to dualled standards are being undertaken between Perth and Dalraddy due back to 2015. Following consultation with road users and other bodies, and taking into account the ongoing A9 Dualling Strategic Assessment, assessment and Procurement Strategy Services submitted work, the scheme is now progressing to begin in 2015.

Further consultation is being undertaken on the project.



The scheme proposals

The existing 7.45km stretch of single carriageway will be widened to full dual carriageway standard, providing **guaranteed overnight opportunities in both directions.**

The new 1.6 km dualled section will be dualled to full dual standards to the southbound end, the road is being widened to the west of the existing road to form the northbound carriageway.


There will be a 100m section where the proposed scheme crosses the existing road which will be a part of the road which will be used to the east of the current A9 to form the new southbound carriageway.

Further widening access onto the 1.6 km dualled road will be covered as part of the scheme although two left hand lanes are proposed for 'water table' access.

Two lay-bys are proposed in the southbound direction. The lay-bys will be segregated from the carriageway by a small island and will provide 100 metres of parking space.

The existing bus stop at Dalraddy Bus Station, 3.6 km from Kinraig and 7.8 km from Perth will be upgraded as part of the scheme to allow non-registered users and allow traffic access and provide outside storage for equipment if required.

A cycleway will be provided alongside the A9 as part of a wider plan to link Kinraig, Kinross and Perth to the cycle network and improve...



Research

What is a Civil Engineering and Infrastructure project?

What are the objectives of this project?

What will be the benefits to the community from this project?

Useful links

[Academy9 pupil resource page for this qualification.](#)

What is civil engineering: [Civil engineer | My World of Work](#)

[What is civil engineering? | Institution of Civil Engineers \(ice.org.uk\)](#)

What is infrastructure: [INFRASTRUCTURE | meaning in the Cambridge English Dictionary](#)

[Funding infrastructure | The Institute for Government](#)

A9 objectives : [A9 Dualling Perth to Inverness \(transport.gov.scot\)](#)

Benefits to communities: [A9 Dualling: Luncarty to Pass of Birnam benchmark community benefits legacy | Transport Scotland](#)

Es and Os, Career Education Standard goals.

CfE:

- I am investigating different careers/occupations, ways of working, and learning and training paths. I am gaining experience that helps me recognise the relevance of my learning, skills and interests to my future life. HWB 2-20a / HWB 3-20a / HWB 4-20a
- I can solve problems through the application of engineering principles and can discuss the impact engineering has on the world around me. TCH 4-12a
- I can extend my use of manual and digital graphic techniques to realise ideas, concepts and products and recognise the importance of real world standards. TCH 4-11a
- I can assess the impact of developments in transport infrastructure in a selected area and can contribute to a discussion on the development of sustainable systems. SOC 4-09b
- I can explain the development of the main features of an urban area in Scotland or elsewhere and can evaluate the implications for the society concerned. SOC 4-10b
- I can make notes and organise them to develop my thinking, help retain and recall information, explore issues and create new texts, using my own words as appropriate. LIT 3-15a / LIT 4-15a
- I can justify my choice and use of layout and presentation in terms of the intended impact on my reader. LIT 4-24a

Career Education Entitlements:

- Experience a curriculum through which they learn about the world of work and job possibilities and which makes clear the strengths and skills needed to take advantage of these opportunities
- Develop skills for learning, life and work as an integral part of their education and be clear about how all their achievements relate to these.
- Develop understanding of the responsibilities and duties placed on employers and employees.
- Know where to find information and access support making effective use of online sources such as *My World of Work*.
- Develop CMS as an integral part of their curriculum, (horizons).