On the basis of your performance in this examination, the examiners will provide results on each of the following criteria taken from the course statement:

**Criterion 3**  Apply features and principles which will contribute to environmental sustainability within design decisions.

**Criterion 4**  Understands and applies architectural design principles relating to the functional use of space.
CANDIDATE INSTRUCTIONS

You **MUST** ensure that you have addressed the externally assessed criteria on this examination paper.

There are **TWO** sections to this paper.

Answer **ONE** question from each section, on the A3 answer sheet for that question.
Answer ONE question from this section.

This section assesses Criterion 3.

Question 1

Refer to the adjacent drawing.

Tamara needs to purchase a house in Launceston. She has identified a street that is close to her new workplace and the local shops. There are three houses for sale in the street and they are all the same size and price. Tamara is not sure which house to buy. She thinks they all look fine but wants to know which house would perform better thermally and reduce her energy costs. Houses 62 and 66 are both framed and clad with timber, whereas House 64 is brick veneer.

Aim

You have to give Tamara advice about which house is the best to buy in relation to thermal comfort and energy required for heating.

Response

Using text and diagrams, fulfil this aim by analysing and describing the potential of each house and then make your recommendation.

Use the answer sheet provided to answer this question.

Section A continues opposite.
**Section A (continued)**

**Question 2**

Refer to the drawing opposite.

Simon wants to design guest accommodation for his property on the North Queensland coast. Simon likes the layout of the adjacent plan but is unsure what features and principles of passive climatic design should be considered for this project.

**Aim**

You have to show Simon the features and principles that maximise thermal comfort in this climate.

**Response**

- On the answer sheet, draw and orientate the plan on Simon’s site to demonstrate the principles of passive climatic design. Use a scale of 1:100.

- Draw a cross-section of the plan, and identify five key features and/or principles of passive climatic design that will assist Simon in creating a thermally comfortable environment. Use a scale of 1:50.

Use the **answer sheet** provided to answer this question.
Answer ONE question from this section.

Use the answer sheet provided for your answer to this section.

This section assesses Criterion 4.

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**Question 3**

Refer to the drawing opposite.

Mr and Mrs Wallace want to extend their current house. The extension is to provide more independence for their daughter Jane, a first-year university student who is paraplegic. In addition, the extension must include accommodation for another university student. The extension will be approximately 42 square metres in floor area.

**Aim**

You have to make design recommendations to the Wallace family that best meet the needs of Jane and the other student.

**Response**

Design an extension that includes two bedrooms, a shared bathroom and a shared study. Show the layout of furniture and fittings.

On the answer sheet provided, draw the plan at scale 1:50 and add annotations to explain your design decisions.

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Question 3 continues opposite.
Question 3 (continued)

Section B continues over the page.
Section B (continued)

Question 4

Refer to the drawing opposite.

Keith and Catriona are planning to build an extension to the back of their house. They wish to have modern uncluttered spaces with simple lines, and space for socialising. They need a kitchen, dining room and computer workstation and have calculated that they can afford 42 square metres of new floor area.

Aim

You have to make design recommendations for Keith and Catriona about spaces that best meet their vision and needs.

Response

Design an extension for Keith and Catriona that shows the layout of spaces, furniture and fittings.

On the answer sheet provided, draw the plan at scale 1:50 and add annotations to explain your design decisions.
Question 4 (continued)
This question paper and any materials associated with this examination (including answer booklets, cover sheets, rough note paper, or information sheets) remain the property of the Tasmanian Qualifications Authority.
Recommendations for Tamara
HOUSING AND DESIGN (HDS315113)

ANSWER SHEET FOR QUESTION 2
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ANSWER SHEET FOR QUESTION 3