

Te Kura Hoahoanga/School of Architecture  
ARCH 8121- Semester ONE - 2022

# Regenerating Avondale Town Centre

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## Project/Kaupapa

Panuku Development Auckland's 'Unlock Neighbourhoods' initiative has identified Avondale as a priority location area, resulting in significant opportunities for urban intensification in its town centre. The Eke Panuku Unlock Avondale Programme includes a plan to deliver a town square and the upgrading of the surrounding public space to complement the new community facilities and increase broader regeneration benefits for the entire neighbourhood.

For this project, you are tasked with conceptualising a **Masterplan** for a city block located in the Avondale town centre. This urban intensification project will be driven by the principles for a green & thriving city neighbourhood, that embrace both the imperative of emissions reduction and the critical goal to ensure the quality of life for local communities. Projects should focus on improving connections and mobility, providing new public spaces, activating streets, and increasing density with mixed-use programs and a variety of new residential typologies.

The site design must also include a long-span building that has a structural span of no less than 25m. The use of the building must be appropriate to accommodate a **Multiformat Performance Space** for the local community. Its structure will be of timber construction with the aim of achieving a zero-carbon building.

## Site/Pae



*Aerial photographs of the site.*

The site is located at the corner of Great North Road and Racecourse Parade. Much of the site, vacant for more than 15 years, has been purchased by Panuku to support the regeneration of Avondale's town centre.

Approximate site area: 0.85 hectares.

### Timetable

Quarter 1 (40%) will focus on a masterplan of the selected site. A mixed-use program driven by the principles for a green & thriving city neighbourhood.

Quarter 2 (60%) will focus on the long-span building (Multiformat Performance Space). The final outputs will include technical drawings supported by sketches and physical models. Assignment 2 material, for ARCH 8411, will form part of the hand in requirement for this project.

|    |          |   |
|----|----------|---|
| W1 | 8 March  | Course introduction.<br>Project introduction.<br>Task: site visit, site analysis, study and interrogation of Panuku's and Isthmus' plans and conceptual designs.  |
| W2 | 15 March | Discussion of previous task.<br>Panuku presentation: Morgan Reeve (Principal Urban Designer at Eke Panuku).<br>Task: study and interrogation of green and thriving city neighbourhoods (design principles), and precedents. |
| W3 | 22 March | Discussion of previous task.<br>Discussion of design ideas.   |
| W4 | 29 March | <b>Interim critique presentation (10%)</b> - conceptual masterplan (design ideas, block modelling, key strategies, and programmes).   |
| W5 | 5 April  | Discussion of design development.   |
| W6 | 12 April | <b>Final critique presentation (30%)</b> - masterplan.  |

### Mid-semester break

|     |         |   |
|-----|---------|---|
| W7  | 3 May   | Introduction of Multiformat Performance Space.<br>Lecture presentation: The Historical Development of Theatre Spaces (Pedro Ilgenfritz, Senior Lecturer, School of Performing and Screen Arts at Unitec).<br>Task: precedent analysis and interrogation (typology, programme, and structural principles - long span). |
| W8  | 10 May  | Discussion of previous task.<br>Discussion of design ideas.<br>Task: research on materials + systems + net zero emissions approach (structural and cladding systems and materials)  |
| W9  | 17 May  | Discussion of previous task.<br>Discussion of design ideas and systemic approach.   |
| W10 | 24 May  | <b>Interim critique presentation (20%)</b> - conceptual design.   |
| W11 | 31 May  | Discussion of design development.<br>Task: research on constructional details and methods of fixing.  |
| W12 | 7 June  | Discussion of previous task.<br>Discussion of design development.   |
| W13 | 14 June | <b>Final critique presentation (40%)</b> - final design.  |

### Design process

Through a process of research, analysis, and design iterations, you will be required to produce 2D & 3D drawings of an appropriate scale that illustrate a clear understanding of the architectural problem and the design proposal. Concept and detail drawings should be complete alongside sketch models. Hand drawings and sketches to support CAD drawings

are essential. The final outputs will include technical drawings supported by sketches and physical models. Drawings should also include dimensions, structural grids, levels, and other relevant topographical data. A bound sketchbook of the whole development is also essential. This should include all concept and developed sketches including those discarded through trial and error.

## Resources

The proposals should interact with the existing Eke Panuku Unlock Avondale Programme, acknowledging the community concerns (stated at the Whau Local Board, Open Agenda - June 2021), and the existing plans for the Avondale town square, library, and community hub (Athfield Architects + Isthmus).

Mana Whenua: The proposal should also seek to acknowledge the rich Maori history of both the immediate site and the larger landscape. Using the Te Aranga principles gives techniques and tools to manifest the whakapapa of the site.

### Panuku Development Auckland

<https://www.youtube.com/watch?v=-NUNsJadhf0>

<https://www.panuku.co.nz/avondale>

<https://www.panuku.co.nz/projects/avondale/chapter/the-regeneration-of-avondale>

- High Level Project Plan - November 2017

<https://www.panuku.co.nz/downloads/assets/4896/1/avondale>

- Avondale town square, library and community hub - April 2021

[https://ehq-production-australia.s3.ap-southeast-2.amazonaws.com/c24d1f9ff8641697bb20a196c8838939f3b97fce/original/1618915817/d471e882a80160453a1e793a688bc84f\\_20210420\\_Avondale\\_town\\_square\\_library\\_and\\_community\\_hub\\_consultation\\_document.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUK4Z04WUUA%2F20220302%2Fap-southeast-2%2Fs3%2Faws4\\_request&X-Amz-Date=20220302T053534Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=ed6cd7be8564026ee5a580dc6bacb80ff2656c8bafc893ff5ad198633ee42e3](https://ehq-production-australia.s3.ap-southeast-2.amazonaws.com/c24d1f9ff8641697bb20a196c8838939f3b97fce/original/1618915817/d471e882a80160453a1e793a688bc84f_20210420_Avondale_town_square_library_and_community_hub_consultation_document.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUK4Z04WUUA%2F20220302%2Fap-southeast-2%2Fs3%2Faws4_request&X-Amz-Date=20220302T053534Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=ed6cd7be8564026ee5a580dc6bacb80ff2656c8bafc893ff5ad198633ee42e3)

### Auckland Council

<https://ourauckland.aucklandcouncil.govt.nz/news/2021/04/exciting-progress-being-made-in-avondale/>

<https://ourauckland.aucklandcouncil.govt.nz/news/2020/11/renowned-architectural-groups-to-design-avondale-community-facility-and-town-square/>

- Whau Local Board, Open Agenda - June 2021

[https://infocouncil.aucklandcouncil.govt.nz/Open/2021/06/WH\\_20210623\\_AGN\\_10592\\_AT.htm](https://infocouncil.aucklandcouncil.govt.nz/Open/2021/06/WH_20210623_AGN_10592_AT.htm)

- Geomaps

<https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html>

### Kāinga Ora

<https://kaingaora.govt.nz/news/senior-housing-design-builds-connection/>

<https://kaingaora.govt.nz/developments-and-programmes/what-were-building/public-housing-developments/auckland-region/community-lane-and-great-north-road-highbury-triangle/>

### Architectus

<https://architectus.co.nz/work/kainga-ora-highbury-triangle-senior-living/>

### Ockham

<https://www.ockham.co.nz/aroha/>

### Stuff (Avondale: The Auckland suburb dubbed 'Third World' starts to rebuild)

<https://www.stuff.co.nz/national/123587354/avondale-the-auckland-suburb-dubbed-third-world-starts-to-rebuild>

### Bike Auckland (The New Lynn to Avondale path - back on track?)

<https://www.bikeauckland.org.nz/new-lynn-avondale-back-on-track/>

## Guidance to Design a Green and Thriving City Neighbourhood (ARUP Group)

[https://www.c40reinventingcities.org/data/uni-competition\\_3ef69/categorie/6/guidance\\_to\\_design\\_a\\_green\\_and\\_thriving\\_city\\_neighbourhood\\_14055.pdf](https://www.c40reinventingcities.org/data/uni-competition_3ef69/categorie/6/guidance_to_design_a_green_and_thriving_city_neighbourhood_14055.pdf)

### Auckland's Climate Plan and environmental plans and strategies

- Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan

[www.climateakl.co.nz](http://www.climateakl.co.nz)

- Auckland Council environmental plans and strategies

<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/Pages/default.aspx>

### Auckland planning framework and legislation

- Auckland Plan 2050

<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/Pages/default.aspx>

- The Auckland Unitary Plan

<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/Pages/what-is-the-auckland-unitary-plan.aspx>

### H10. Business – Town Centre Zone

<https://unitaryplan.aucklandcouncil.govt.nz/Images/Auckland%20Unitary%20Plan%20Operative/Chapter%20H%20Zones/H10%20Business%20-%20Town%20Centre%20Zone.pdf>

### H6. Residential – Terrace Housing and Apartment Buildings Zone

<https://unitaryplan.aucklandcouncil.govt.nz/Images/Auckland%20Unitary%20Plan%20Operative/Chapter%20H%20Zones/H6%20Residential%20-%20Terrace%20Housing%20and%20Apartment%20Buildings%20Zone.pdf>

### Māori design

- Te Aranga Principles

[http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te\\_aranga\\_principles/guidance/about/where\\_principles\\_come\\_from#/design-subjects/maori-design/te\\_aranga\\_principles](http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te_aranga_principles/guidance/about/where_principles_come_from#/design-subjects/maori-design/te_aranga_principles)

- Kāinga Hou Māori Housing Values Design Matrix

These values have been created to guide the design of Māori housing, but they also strongly aligned with human centric, inclusive, sustainable and resilient design.

<http://content.aucklanddesignmanual.co.nz/design-subjects/maori-design/maori-housing/details/guidance/kainga-hou/sections/introduction/values-and-design-matrix/Documents/K%C4%81inga%20Hou%20Housing%20Values%20+%20Design%20Matrix.docx>

### Other plans and guidance for consideration

- Designer's Guide to Design Statements

A useful guide to the design process and communicating your design thinking.

<http://www.aucklanddesignmanual.co.nz/resources/design-statements/DesGuideDS>

- Apartment Design Guide

<http://www.aucklanddesignmanual.co.nz/sites-and-buildings/apartments>

- Mixed Use Design Guide

<http://www.aucklanddesignmanual.co.nz/sites-and-buildings/mixed-use>

- Neighbourhood/Subdivision Design Guide

<http://www.aucklanddesignmanual.co.nz/sites-and-buildings/subdivision>

- Transport Design Manual

Includes Section 1: Design Guidance

<https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/>

- Impact on Urban Amenity in Pedestrian Environments

<https://www.nzta.govt.nz/assets/planning-and-investment/docs/impact-on-urban-amenity-in-pedestrian-environments-march-2020.pdf>

- The Shared Path

How low-traffic areas in Aotearoa's cities can decarbonise transport, save lives, and create the connected urban communities we need in a post-pandemic future.

<https://drive.google.com/file/d/1tubgoGIDIW4iDVUOxSgzuAYGY0Tp4jgr/view>

### Specific Objectives of this Kaupapa

- To explore the opportunities and constraints of a real project (The Eke Panuku Unlock Avondale Programme).
- To explore urban sustainability and decarbonization principles in larger site area.
- To engage with stakeholders (Panuku and local community) and other programmes (School of Performing and Screen Arts at Unitec).
- To explore the potentials of adapting and applying new technologies and sustainable design principles to the long span building typology.

[These objectives embed Learning Outcomes 1-5 and address the NCSA Criteria outlined later in this document].

### Marking Criteria

|                                  |                            |
|----------------------------------|----------------------------|
| <b>DESIGN DEVELOPMENT [10]</b>   | conceptual process         |
|                                  | models                     |
|                                  | drawings                   |
|                                  | communication              |
| <b>DESIGN RESOLUTION [90]</b>    |                            |
| Programme 10                     | planning                   |
|                                  | circulation                |
| Structure 30                     | material appropriation     |
|                                  | zero carbon strategies     |
|                                  | structure/span             |
|                                  | construction method        |
|                                  | connection/detail          |
|                                  | dimensions/module          |
| Cladding/Envelope performance 30 | material appropriation     |
|                                  | zero carbon strategies     |
|                                  | thermal performance        |
|                                  | sun/light                  |
|                                  | ventilation/wind           |
|                                  | acoustic performance       |
|                                  | rain/ground/water          |
|                                  | maintenance                |
| Context 20                       | relationship to masterplan |
|                                  | local references           |
|                                  | te aranga principles       |

### ARCH 8121 Learning Outcomes

By the end of the course the student will be able to:

1. Research a range of sources and ideas in the interrogation of a complex architectural brief by drawing on architectural precedent case studies, theoretical writings, representational systems, technical studies and form-making design research processes including the generation and evaluation of design options.
2. Derive and argue a conceptual or theoretical position to drive the design process.

3. Design with creative imagination and aesthetic judgement to devise and integrate formal, spatial, circulatory, constructional, environmental and contextual place-based strategies to generate coherent design for high-rise, long-span and large-volume buildings.
4. Generate detail solutions for selected structural, material and constructional and environmental systems aspects of a project.
5. Evaluate and apply appropriate techniques and phases of design project communication.

### **Attendance and Contact Hours**

During the first quarter the studio will be online. The studio will require attendance on Tuesday during semester time between the hours of 1:00pm and 3:00pm. Any variations to this schedule will be advised a minimum of one week in advance of these events.

Once we are back on campus, you are encouraged to attend and engage with your peers and to use the Unitec facilities. You are required to follow Unitec's Nga Tikanga Whakahaere/Code of Conduct and guidelines. Students are expected to maintain regular and punctual attendance in the Design Studio (studio room: 48-1043). Participation is critical for you to progress. Participation means not just being in Studio but being in Studio prepared with new work to present for discussion every time.

### **Late Submission**

Projects are due on the date, time, and place specified. Late submissions will be penalised in accordance with Unitec's submission guidelines. Please note that incomplete submissions may not be accepted for critiquing. Incomplete refers to substandard presentation materials and/or insufficient material to fully explain your scheme. Any sources not referenced may be considered as plagiarism.

### **Affected Performance Consideration (APC)**

The purpose of applying for Affected Performance Consideration (APC) is to ensure your academic progress is not unfairly affected by critical personal circumstances beyond your immediate control. You can apply for Affected Performance Consideration (APC) for final examinations or other summative assessments. Further information on the subject and where to apply can be found at:

<https://www.unitec.ac.nz/current-students/study-support/student-forms>

### **Use of Studio Space**

Please keep the studio tidy and clean. This is a shared space and is used by other year groups. Dispose of all your rubbish, keep tables and floors tidy, and move back furniture back to where you found them. Unitec is not liable for the removal of your work if deemed to be a hazard. All unauthorised/non-compliant electronics and furniture will be removed without notice. The studio (or any other space at Unitec) is not a place for alcohol. Please refer to the 'Student alcohol and drug policy' if you are unsure of the rules. For further information please review Unitec's Nga Tikanga Whakahaere/Code of Conduct.

### **Assessment and Grading Description**

A student's final grade is calculated from an aggregation of all summative assessment activities prescribed for that course. The following grading scale applies in the Master of Architecture (Professional) Programme for all level 8 courses:

| Grade mark range |    |   |     |        |
|------------------|----|---|-----|--------|
| A+               | 90 | — | 100 |        |
| A                | 85 | — | 89  |        |
| A–               | 80 | — | 84  |        |
| B+               | 75 | — | 79  |        |
| B                | 70 | — | 74  |        |
| B–               | 65 | — | 69  |        |
| C+               | 60 | — | 64  |        |
| C                | 55 | — | 59  |        |
| C–               | 50 | — | 54  |        |
| D                | 40 | — | 49  | (fail) |
| E                | 0  | — | 39  | (fail) |

#### Grades profile

##### A (pass)

- Very good knowledge and understanding of all primary concepts.
- Good knowledge and understanding of secondary concepts.
- Integrates concepts very well.
- All-round competence at relevant skill.
- Very good level of appropriate communication and presentation.

##### B (pass)

- Good knowledge and understanding of all primary concepts.
- Moderate knowledge and understanding of secondary concepts.
- Integrates concepts to a moderate degree. Competence at relevant skill.
- Good level of appropriate communication and presentation.

##### C (pass)

- Adequate knowledge and understanding of all primary concepts.
- Indications of ability to understand secondary concepts.
- Indications of ability to integrate concepts. Competent level of appropriate communication and presentation.

##### D (fail)

- Has demonstrated at least adequate knowledge, understanding, relevant skills and communication abilities in some areas, but these are compromised by inadequacies in other areas.

##### E (fail)

- A general failure to demonstrate adequate knowledge, understanding, relevant skills, and communication ability.

A 'plus' (+) may be used in conjunction with passing grades (eg. "B+") and indicates that the student has clearly shown some significant characteristics of the grade above. A grade of "A+" indicates all-round assurance and finesse in meeting the requirements of an 'A' grade.

A 'minus' (-) may be used in conjunction with passing grades (eg. "B-") and indicates that all grade profile components are at the bare minimum for that grade.

## **NCSA Criteria**

This course is taking consideration of the National Standard of Competency for Architects (NCSA) accreditation requirements 1.2, 1.4, 2.1, 2.2, 3.1, 3.2, 3.4, 3.5, 3.8, 4.1, 4.2, 4.3, 4.5, 4.6, 5.3, 6.2, 6.4, 6.5:

- 1.2 - Establishment, analysis and evaluation of client project requirements and objectives.
- 1.4 - Identification of factors that may impact on client project requirements and objectives.
- 2.1 - Identification, analysis and integration of information relevant to siting of project.
- 2.2 - Application of principles controlling planning, development and design for the project site.
- 3.1 - Design response integrates the objectives of brief, user intent and built purpose.
- 3.2 - Application of creative imagination, aesthetic judgement and critical evaluation in formulating design options.
- 3.4 - Design response incorporates assessment of relevant legislation, codes and industry standards.
- 3.5 - Exploration and application of ordering, sequencing and modelling of three-dimensional form and spatial content.
- 3.8 - Application of manual and digital graphic techniques and modelling to describe three-dimensional form and spatial relationships.
- 4.1 - Evaluation of design options in relation to project requirements.
- 4.2 - Evaluation of design options against values of physical, environmental and cultural contexts.
- 4.3 - Application of creative imagination aesthetic judgement to produce coherent design.
- 4.5 - Investigation and integration of appropriate structural, construction, service and transport systems in the project design.
- 4.6 - Investigation and integration of appropriate material selection for the project design.
- 5.3 - Evaluation and integration of regulatory requirements.
- 6.2 - Continuing coordination and integration of information and project material from relevant consultants, specialists and suppliers.
- 6.4 - Timely completion and communication of accurate and comprehensible documents that will include, as required, drawings, models, specifications, schedules and other relevant modes of information.
- 6.5 - Nomination of quality and performance standards with regard to selected materials, finishes, fittings components and systems.