

- Objectives:** Place
- Outcome:** 2.1 - A diverse, well planned built environment.
- Strategy:** 2.1.1 - Actively engage in the development and promotion of an effective planning framework.

## Purpose

### 1. Primary Objective

Council's objective, recognising the site's ecological significance and relationship to the Jarrahdale Heritage Park site and adjoining State Forest, is to ensure retention of the character of the site as a whole and set a new standard in building design and construction that incorporates sustainable building principles and practices.

### 2. Secondary Objectives

The secondary objectives are set out in each section of the guidelines, in section 3.0 Development Control.

## Definitions

Not Applicable

## Background

The Woodlot Design Guidelines apply to Lots 820-826 Jarrahdale Road, Jarrahdale (inclusive) (the policy area).

These Design Guidelines are prepared to assist the Shire dealing with development within the Woodlot Subdivision area, where State Planning Policy 7.3 Residential Design Codes Volume 1 apply.

These Design Guidelines are intended to retain most of the bushland vegetation present on the site, achieve sustainable building design and indicate the desired form and nature of development.

The development control provisions of these guidelines will be given full regard by the Shire and any development application to depart from these provisions will require justification and approval of the Shire.

## Policy

### 1. Development Requiring Shire Approval

Development within the policy area requires the written planning consent of the Shire. Development for the purposes of this policy includes, but is not necessarily limited to, the following:

- Development of new buildings
- Significant landscaping
- Demolition or removal of buildings



- Works, which affect the external appearance of a building
- Construction of additions and outbuildings
- Erection of a fence or a wall In relation to 3.1

**2. Information to be lodged with planning application**

A planning application must be lodged for all developments in the policy area. The following additional information must be lodged with your planning application as shown in the following table:

<b>REQUIRED COMPLIANCE DETAILS</b>	<b>DETAILS TO BE PROVIDED ON DESIGN PLAN/S</b>	<b>DETAILS TO BE PROVIDED ON CONSTRUCTION PLAN/S</b>
Demonstration of meeting Compliance Design Requirements as set out in Section 3.0 Development Control  AND  Scorecard Completed with backing evidence of initiatives to be undertaken Minimum score of 7 points must be achieved. Scorecard Assessment Sheet in Appendix A.	1. Site Analysis 2. True North 3. Floor Plan Layout 4. All existing vegetation 5. Proposed Trees & Planting 7. Planting list which includes species list and proposed plant sizes 8. Location of all Hard Landscape Areas including driveways and paved areas 9. Landscape Materials Legend which includes grass species, paving type/s and colours 10. Building Materials Schedule outlining colours and finishes of external materials. 11. On site Drainage 12. Trees to be removed 13. Trees to be retained and protected 14. Bin Store areas 15. Shadow diagrams if building to be located within 5m (single storey) and 10m (2 storey) of adjacent property boundary 16. Effluent Disposal	1. True North 2. Floor Plan Layout 3. All existing vegetation 4. Trees and vegetation to be removed 5. Trees to be retained and protected 6. Location of Protective Tree Fencing 7. Location of silt fencing to prevent run off from site 8. Site Access during Construction 9. Materials Storage Area 10. Blasting Management
The details submitted are not limited to the above		

**3. Matters to be Considered by the Shire- Site Guidelines and Requirements**

**3.1 Site Layout**

Aim: To protect the integrity of the site

Principles:

- Buildings and associated works to be integrated with site landform and vegetation
- Design of buildings and associated works to consider privacy and overshadowing of neighbours



- Ensure adequate and appropriate area is allocated for site facilities including bin and recycling storage, letterbox and clothesline.

### Requirements:

- Buildings are only permissible to be constructed within the 350m<sup>2</sup> building footprint area. Figure 1 shows approximate locations for siting of buildings on each lot. The 350sqm area allowable for buildings can be any shape to allow flexibility in the design of the building. Written approval by the Shire is required to substantially vary the location of the building envelope.
- Driveways are to be located as shown on Figure 1 and to be a maximum width of 5 metres. Each site can only have one driveway and formal access (entry and exit) point. Ensure there is informal access through the bush to the strategic firebreak.
- Buildings are to have a 3 metre wide clearance of all vegetation around the entire building, this requires all vegetation to be removed for the full 3 metre width vertically.
- The Strategic Fire Break as shown on Figure 1 is to be left clear at all times during construction and building occupation.
- No cats allowed unless they are kept in a cat run which is approved by the Shire.
- Front setbacks are to be in accordance with R5 requirements and side setbacks are to be a minimum of 3 metres.
- There is to be nothing stored under the house.

Scorecard Initiatives: (refer scorecard for total initiatives required for approval) None

### 3.2 Existing Site: Landform, Soil and Vegetation

Aim: To protect existing landform, maintain water flows and protect existing vegetation.

### Principles:

- To encourage the integration of site landforms and features into design of building and landscaped areas
- Any excavated materials is to be encouraged to be used on site in building and landscaping
- Building and associated works minimises adverse environmental impacts

### Requirements:

- Maximum 350sqm of site can be used for building (measured by building footprint and inclusive of garage and shed). This is also the maximum area that can be cleared of existing vegetation if required for building (including all existing site vegetation groundcovers, shrubs and trees). This area is to be from within the designated building footprint envelope area as per, 3.3.1 Site Layout and Figure 1.
- Maximum 650sqm of site can be used for building and landscape works. This is also the maximum area that can be cleared of existing vegetation if required for building and landscaping works (including all existing site vegetation groundcovers, shrubs and/or trees) for the building and landscaping areas including building footprint, turf, gardens, decks and paving.
- An application can be made to the Shire to remove trees 15 metres directly to the north of the northern façade for solar access to the house. Trees are defined as being over 4 metres in height or 150mm diameter at 1.5 metres in height.



- Existing vegetation that is cleared to be mulched and reused on site where practicable. Mulch not to be used on existing bushland area.
- Cut and Fill: Site can only be excavated for the construction of the house supporting structures to depth required and for associated paving, planting and turf areas to a maximum depth of 300mm. Planting holes to a depth of 1000mm for trees accepted.

Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- Less than 650m<sup>2</sup> of site used for building and associated works. This area (Less than 650m<sup>2</sup>) is to be fenced off as per 3.3.4 Hard Landscaping Requirements - 1 point

### 3.3 Soft Landscaping

Aim: To protect the existing biodiversity through ensuring new vegetation is native and suitable to site conditions.

Principles:

- To achieve landscape design that promotes solar access to buildings.
- The use of locally indigenous species is preferred.
- To encourage the use of plants with low water requirements and the use of mulch to retain soil moisture.

Requirements:

- Native species (local species, from within the Jarrahdale catchment) only to be planted on site.
- New Trees: Minimum number of trees to be planted to match number removed (Trees are defined as being over 4 metres in height or 150mm diameter at 1.5 metres in height) for building construction and associated works.
- 30m<sup>2</sup> maximum area of turf allowed on site.
- No planting in undisturbed areas.

Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- no turf within site - 1 point
- moisture sensor drip irrigation installed to all landscaped areas - 1 point

### 3.4 Hard Landscaping

Aim: To keep impermeable Paving areas to a minimum to maintain existing water flows on site.

Principles:

- Decks raised above ground level and pervious paving materials are encouraged to be used instead of impervious pavers.

Requirements:

- 200m<sup>2</sup> of site (within the 650m<sup>2</sup> for building and associated works) can be covered with impermeable surface which includes driveway and paved areas constructed of impermeable paving materials.



- Cleared area for house and associated facilities (650m<sup>2</sup> or less) to be fenced to separate and protect existing vegetation. Fencing to be open timber picket, post and wire or post and rail fencing to a height of 0.8-1.2m. the three lots on Jarrahdale Road need to provide gate or openable/removable fence access to fence to allow vehicle access to strategic firebreak.
- No boundary fences are permitted between properties. Properties can be marked by posts on corners of boundary to adjacent properties. Boundary fencing to the street frontage and the state forest boundary interface is permissible as a 1.2m post and rail to street frontage and 1.2m post and wire to the State Forest interface. No vegetation is to be cleared when any such fences are constructed.
- If there are dogs the property fence must be adequate to keep dogs out of the bushland area of the property and contained within the designated cleared fenced area (650m<sup>2</sup> or less plus driveway).

Scorecard Initiatives: (refer scorecard for total initiatives required for approval) None

#### 4. Matters to be Considered by the Shire– Building Design Guidelines and Requirements

##### 4.1 *Building Construction/Form*

Aim: To encourage innovative design that responds to the environmental issues and character of both the site and Jarrahdale. To encourage sustainable building design that integrates technologies and materials with minimal environmental impact and responds to the site ecology and climatic conditions.

Principles:

- The opportunity exists to design buildings that respond to the site character.
- The building form responds to environmental and energy issues through the use of sunshading, materials selection, colours etc.
- Garages not to be visually intrusive from the street.

Requirements:

- Floor level of Buildings must be raised a minimum of 300mm above existing ground level. Existing ground to be undisturbed except for supporting posts and central mass wall if constructed for thermal mass.
- Maximum 50m<sup>2</sup> slab on ground for enclosed garage and/or workshop can be constructed within the 350m<sup>2</sup> building envelope.

Scorecard Initiatives: (refer scorecard for total initiatives required for approval) None

##### 4.2 *Passive Solar Design*

Aim: To heat and cool buildings throughout the year without the use of air conditioning systems and to light the building in the day without the use of electrical systems throughout the year.

Principles:

- The design of Buildings and associated works incorporates solar passive design principles eg internal planning layout, thermal mass, ventilation, glazing, window treatments, landscaping.



- The building should be oriented so that the long axis or the length of the building faces north to maximise solar gain opportunities.

### Solar Passive Design Principles

Orientation	Orient the living areas to the north Face windows where possible generally to the north, varying between 30 degrees east and 20 degrees west.
Windows	North facing windows should be shaded from direct summer sun. Ways of achieving this include heavy curtains, high performance glass The use of natural light is maximised
Insulation	R1 insulation is recommended under suspended floors Insulation is required in walls and roofs
Ventilation	Designs should consider natural cross ventilation and use of security provision to allow cross ventilation in summer
Vegetation	Keep a minimum of 4 m clear of trees or tall vegetation to north facing façade.
Thermal Mass	Thermal Mass can be achieved through a central mass wall which is earthed to the ground Thermal mass can also be achieved through suspended concrete floors

### Requirements:

- No living or workspace more than 10m from a window
- Roof Insulation in accordance with current Building Code of Australia requirements.
- Wall insulation in accordance with current Building Code of Australia requirements.

### Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- No living or workspace more than 6m from a window-1 point
- Floor Insulation of R1.0 or more-1 Point

### 4.3 Energy Efficiency

Aim: To reduce energy consumption

#### Principles:

- Promotes the use of energy efficient measures including cooling, heating, lighting, fixtures and appliances.
- Use energy efficient design measures
- Considers the use of renewable energy
- Thermal Mass-maximise thermal mass in the building particularly to north facing rooms

#### Requirements:

- Minimum 4 Star Hot Water System- Gas, solar, heat pump or equivalent technology



Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- Photovoltaic cells or renewable energy source (not including greenpower) supply 80% or more of the houses energy-3 points, 50%-2 points and 20%- 1 point
- Solar Hot Water System- 2 points
- 5 Star Gas Hot Water System - 1 point
- No air conditioner/s – 2 points

### 4.4 *Water Efficiency*

Aim: To reduce water consumption

Principles:

- To achieve best practice water management-through a reduction in water consumption and exploring grey water reuse
- Uses water efficient design measures
- AAA rated low water use appliances are used

Requirements:

- Dual Flush Toilets
- Roof fed water tanks for irrigation purposes - all roof water to be captured in a water tank and only be connected to irrigation. Tank must comply with Australian standard AS3500 and AS3855. (Tank water can be used for other purposes)
- Septic tanks and leach drains are not acceptable within the subdivision. Aerobic Treatment Unit systems will be integrated within the site.

Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- AAA rated dual flush toilet - 1 point
- AAA rated showerhead - 1 point
- Flow regulators on all taps - 1 point
- Non Standard septic systems that utilize recycled water-2 points

### 4.5 *Building Materials*

Aim: To reduce the impact of building materials through supporting the use of low resource using and low emission materials through their life cycle of manufacturing, use and demolition.

Principles:

- The use of earthy colours and materials is encouraged
- Low reflective materials is encouraged
- Locally produced materials is encouraged and supported over imported materials



- Materials from renewable resources is encouraged
- Recycled materials are encouraged
- Durable materials with a long life and low maintenance requirements are encouraged

### Requirements:

- A full building materials list indicating material and colour for all external building elements is to be submitted with the building application.

### Scorecard Initiatives: (refer scorecard for total initiatives required for approval)

- 20% new buildings materials from recycled, salvaged or remanufactured material-1 point
- 10% of materials to be locally manufactured (within Peel Region and South East Metropolitan Region of Perth)-1 point

### 4.6 Bushfire Risk Reduction Requirements

Aim: To reduce the fire risk of housing in the subdivision by meeting the Building Code of Australia bushfire housing requirements

### Requirements:

- The requirements of the Building Code of Australia (BCA) for Fire Safety, as set out in Section 3.7 are to be met in the building design and construction. The building design is to meet the requirements for the extreme fire risk. (Appendix C)
- Sprinklers are to be installed on the roof.
- Comply with Australian standard AS3959 *Construction of Buildings in Bushfire Prone Areas* - only requirements in relation to the building construction and materials not requirements relating to site clearing. (Copy available to view at the Shire)

Scorecard Initiatives: (refer scorecard for total initiatives required for approval) none





### 5. Matters to be Considered by the Shire – Construction Guidelines and Requirements

#### 5.1 *Site Access*

Aim: To minimise vehicle impacts on site during construction.

Principles:

- Site Access is to be restricted to reduce site compaction.

Requirements:

- Access off the road must be where final driveway location will be.

Scorecard Initiatives: None

#### 5.2 *Materials Storage*

Aim: To reduce site impacts during construction.

Principles:

- Construction minimises the amount of land used.

Requirements:

- Construction materials can only be stored in areas designated on the application drawings. These areas are to be within the designated 650m<sup>2</sup> cleared area and not within the canopy of trees to be retained.

Scorecard Initiatives: None

#### 5.3 *Tree Protection*

Aim: To protect existing trees to be retained from damage during construction.

Principles:

- Protect tree roots from damage due to excavation or compaction of soils.
- Retain existing soil levels around base of trees.
- Protect trees to their canopy line.

Requirements:



- During Site Construction fence off existing trees to be retained in area adjacent to construction works. Fence should be to the edge of the tree canopy and be temporary fencing.

Scorecard Initiatives: None

### 5.4 Construction Waste

Aim: To reduce construction waste generated.

Principles:

- Packaging is avoided where possible during construction.
- Construction waste is sorted and recycled where possible.
- Excessive packaging is returned to supplier.
- Materials to be made to size to reduce waste from materials being cut on site.

Requirements

- Construction waste to be sorted on site to allow for recycling.

Scorecard Initiatives:

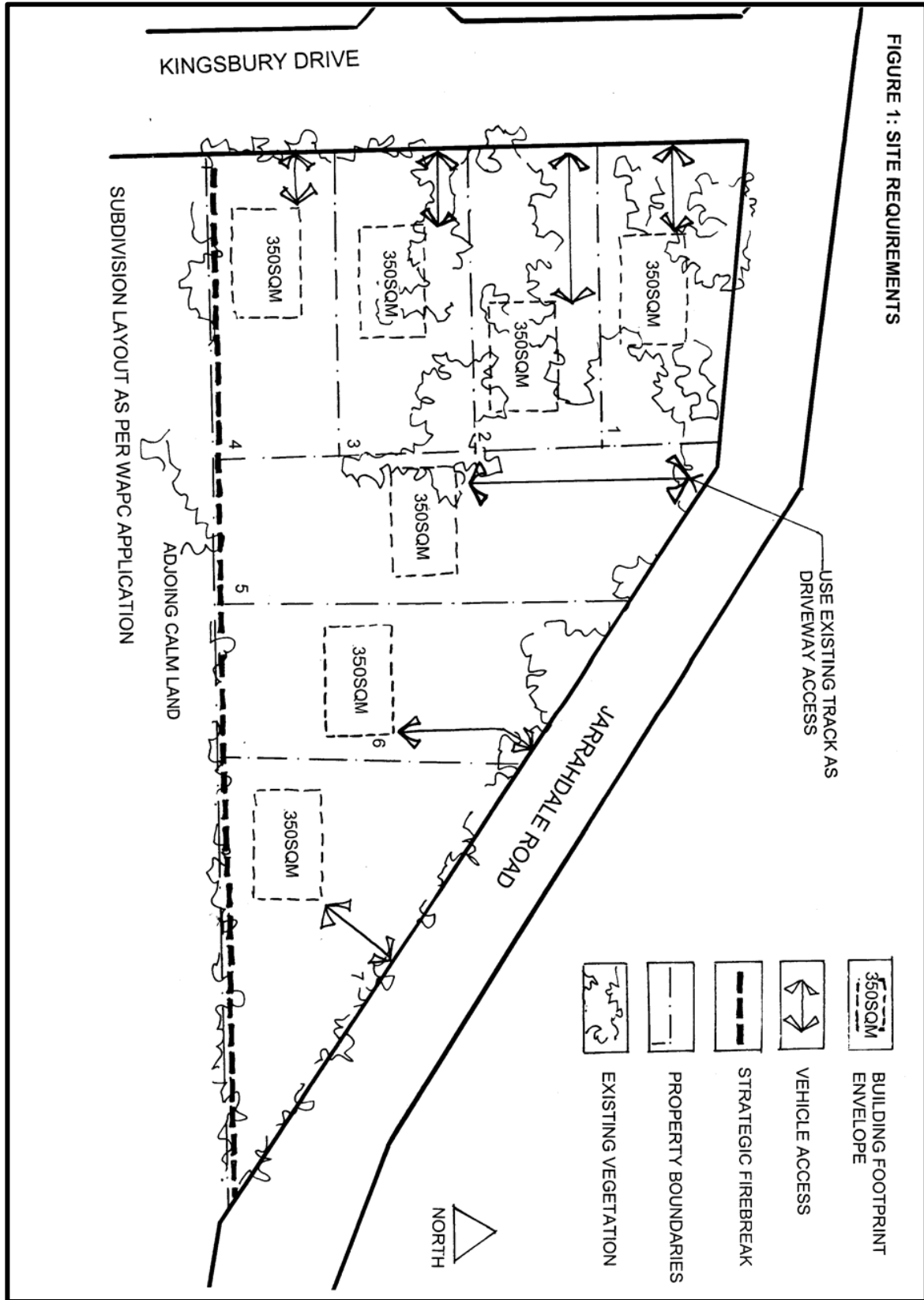
- Waste Management Plan prepared which addresses the following issues: 1 point
- Volume of Waste to be generated during construction
- Type of Waste to be generated during construction
- How construction waste will be stored and treated on site
- How construction waste will be disposed of off site
- Ongoing site waste management and minimization methods

### VARIATION IN STANDARDS

Consideration may be granted to variation of standards where it can be demonstrated to the Shire's satisfaction by way of a comprehensive written statement outlining how the proposal meets the objectives of these guidelines.



FIGURE 1 - SITE REQUIREMENTS





APPENDIX A: SCORECARD ASSESSMENT SHEET

WOODLOT BUILDING DESIGN GUIDELINES  
ASSESSMENT FRAMEWORK

	MANDATORY	SCORING	SHOWN APPLICATION IMPLEMENTED	IN	NOTES
<b>SITE</b>					
<b>Site Layout</b>					
Site Works Area					
Driveways					
Clearance around Buildings					
Strategic Fire Break					
Cat requirements					
Setbacks					
Storage under house					
<b>Existing Site: Landform, Soil and Vegetation</b>					
Site use and Clearance for Building-350sqm					
Total Site use and Clearance-650sqm					
Trees to northern façade					
Existing Vegetation					
Cut & Fill/Site Disturbance					
Site Clearance-less than 650m2		1			
<b>Soft Landscaping</b>					
Use of Indigenous Plants Species					
New Trees-numbers					
Use of Turf					
No Planting in undisturbed areas					
No Turf		1			
Use of Drip irrigation		1			
<b>Hard Landscaping</b>					
Impermeable Area					
Fencing to Cleared Area					
Boundary Fencing					
Dogs					
<b>BUILDING DESIGN</b>					
<b>Building Construction/Form</b>					
Ground Floor Construction					
Carpark /Shed Slab Area					



**WOODLOT BUILDING DESIGN GUIDELINES  
ASSESSMENT FRAMEWORK**

	MANDATORY	SCORING	SHOWN APPLICATION IMPLEMENTED	IN	NOTES
<b>Passive Solar Design</b>					
Living Space from windows-10m					
Roof Insulation					
Wall Insulation					
Living Space from windows-6m		1			
Floor Insulation		1			
<b>Energy Efficiency</b>					
4 star hot water system					
No air conditioners		2			
Photovoltaic cells & renewable energy		3/2/1			
Solar Hot Water System		2			
5 star gas Hot water system		1			
<b>Water Efficiency</b>					
Dual Flush Toilets					
Water Tanks					
Aerobic Treatment Unit					
AAA dual flush Toilets		1			
AAA Shower fittings		1			
Flow regulators		1			
Non standard septic utilising recycled water		2			
<b>Building Materials</b>					
Building Materials palette					
Recycled material		1			
Locally manufactured materials		1			
<b>Bushfire Risk Reduction Requirements</b>					
BCA-Extreme risk					
Sprinklers on roof					
Australian Standard					
<b>CONSTRUCTION</b>					
<b>Site Access</b>					
Site Access-location					

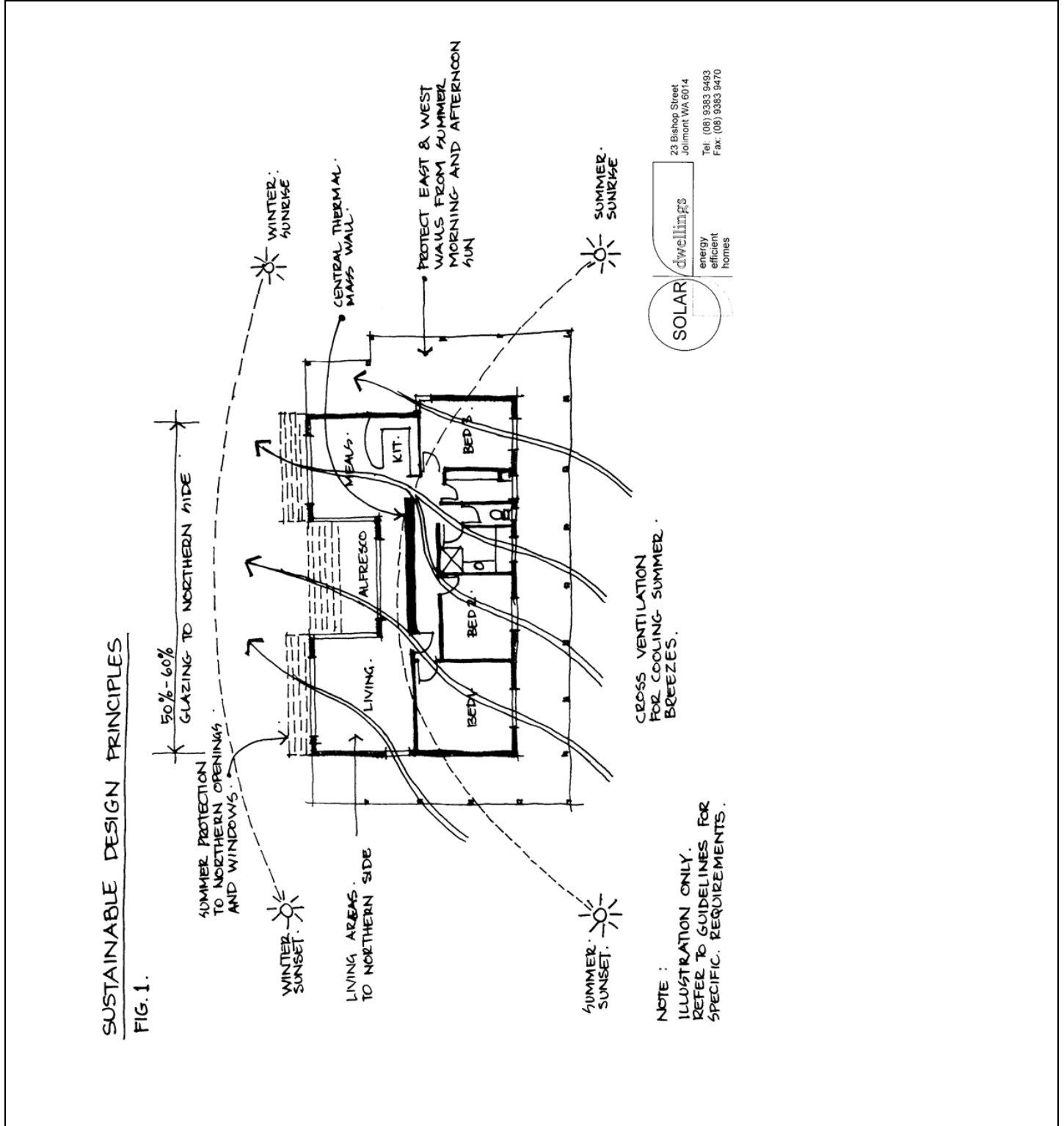


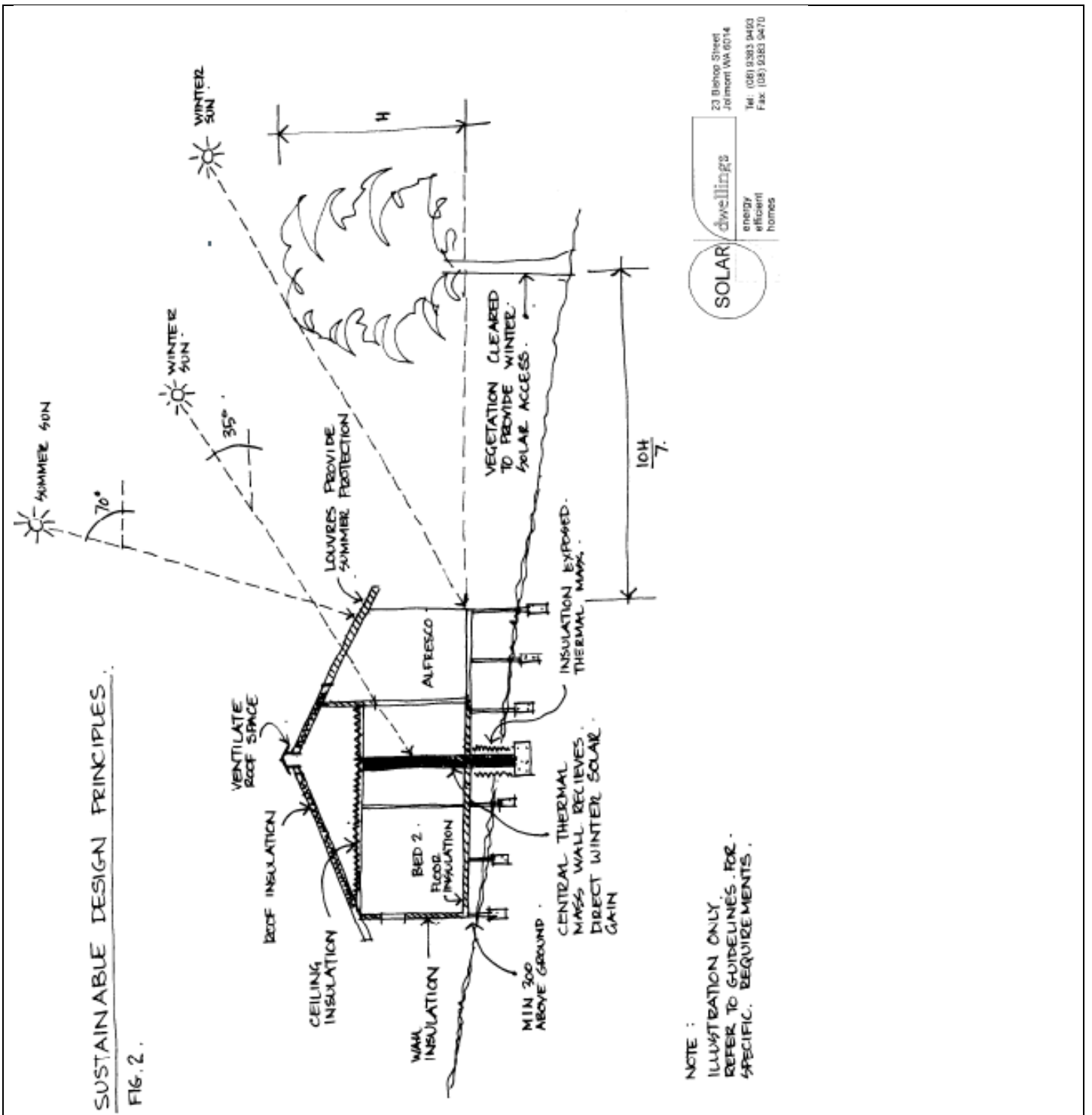
**WOODLOT BUILDING DESIGN GUIDELINES  
ASSESSMENT FRAMEWORK**

	MANDATORY	SCORING	SHOWN APPLICABLE	IMPLEMENTED	IN	NOTES
<b>Materials Storage</b>						
Materials Storage location						
<b>Tree Protection</b>						
Site Construction Fencing to Trees						
<b>Construction Waste</b>						
Construction waste sorted						
Waste Management Plan		1				
<b>SCORE</b>						
Total Score Possible					21	(16 initiatives given)
Total Score Required					7	
Total Score Achieved						

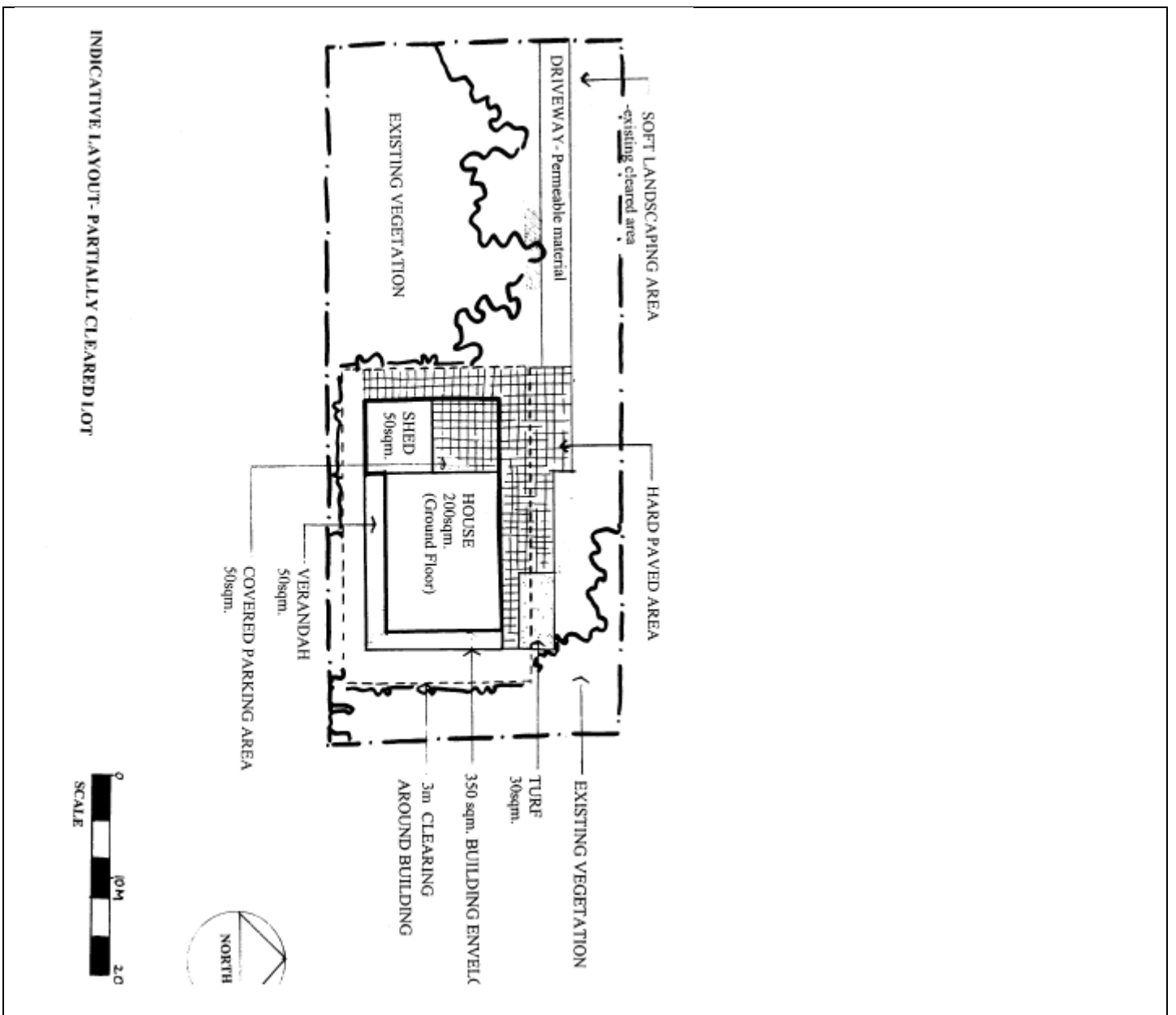


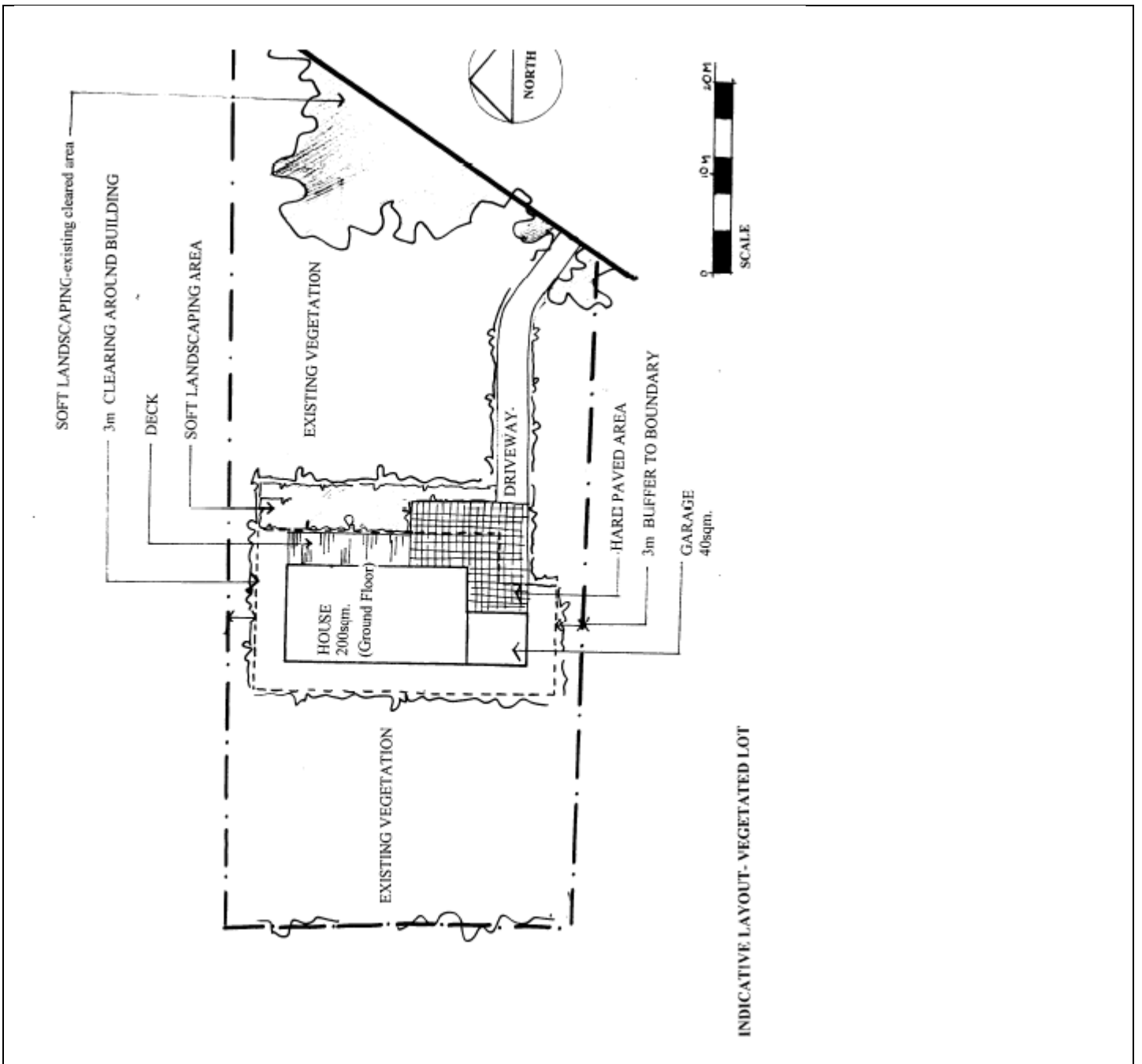
## APPENDIX B: DESIGN INFORMATION SKETCHES













### References

<b>Name of Policy</b>	Local Planning Policy 3.2: Woodlot Subdivision Jarrahdale Design Guidelines
<b>Previous Policy</b>	Local Planning Policy 13: Woodlot Subdivision Jarrahdale Design Guidelines
<b>Date of Adoption and Resolution Number</b>	23 July 2018 - OCM063/07/18 15 May 2023 – OCM100/05/23
<b>Review dates and Resolution Numbers</b>	
<b>Next review date</b>	
<b>Related documents</b>	<p><b>Acts/Regulations</b>  <i>Local Government Act 1995</i>  <i>Planning and Development Act 2005</i>  <i>Planning and Development (Local Planning Schemes) Regulations 2015</i></p> <p><b>Plans/Strategies</b>  Strategic Community Plan 2017 - 2027</p> <p><b>Policies</b></p> <p><b>References</b></p> <p><b>Delegations</b></p> <p><b>Work Procedures</b></p>

Note: changes to references may be made without the need to take the Policy to Council for review.