

1. ENTRY WALLS

- Timber feature wall-Recycled oak stained with Sikken's transparent protective coating.

TIMBER DECKING

- Plantation Spotted Gum

2. MAIN BEDROOM WINDOWS

- Casement windows
- Minimal west windows
- Double glazing

COOLING/AIRFLOW

- State of the art reverse cycle ceiling fan

3. WALK IN ROBE

- 5 star rated double glazed Velux skylight

4. ENSUITE BATHROOM

- 5 star rated basin mixers
- Reduced flow showerheads fitted

5. KITCHEN APPLIANCES

- Fischer and Paykel cooktop and oven
- Laminex benchtops

6. DINING/LIVING SPACE

THERMAL MASS

- Concrete slab for thermal mass
- Ceramic tiles to enhance thermal properties

LIGHTING

- Compact fluorescent light globes and down lights

CEILING FANS

- Australian designed. Low energy use.
- Mercury free fluorescent globes

WINDOWS

- North facing double glazed
- Luxaflex 'Duette' Architella Shades 10 mm fabric blinds donated by Robinsons
- Casement windows for effective breeze control and cross flow ventilation

SURFACES

- Dulux Low Sheen low VOC* Paint low toxicity rating.
- Australian Made.
- Company has good environmental manufacture and disposal policies
- White to reflect more light

HEATING

- 5 star BV5-30 Bonaire gas ducted heating system

7. TV/SITTING ROOM

- Door for closing to zone off spaces for heating during winter months.
- Windows placed opposite to each other to allow for cooling breezes
- Casement style windows

8. BEDROOM 2

LIGHTING

- Compact fluorescent light globes and down lights

CEILING FANS

- Australian designed. Low energy use.
- Mercury free fluorescent globes

BLINDS

- Louise Moysey quilt blinds - natural and wool fibre provide extra window insulation

9. BATHROOM

WATER SAVING

- Shower Heads - Reduced flow showerheads fitted to minimize shower water used
- Chilli Pepper Smart Water System - Smart water system recycles all cold water cutting time waited for hot water
- Taps - Dorf Avanti range - 5 Star rated basin mixers run at 6-8 litres minute compared to usual 15-18 litres.
- Toilets - Caroma Smart flush - Most dual flush toilets are 6/3 litre. These are 4.5/3 litres

10. OUTDOOR LIVING AREAS

- For food production
- For outdoor living
- For cooling/shade provision

11. EXTRA FEATURES

INSULATION AND HEBEL CLADDING

- Ceiling R6.0 'Gold' glass wool batts in all ceiling space
- Hebel Wall Panels - Aerated concrete has greater "R" insulation properties than brick so excellent thermal performance. 75mm thickness
- Bradford R2.5 glasswool batts to all exterior walls

ON SITE WATER COLLECTION

- 13,500 litres Aquaplate Rainwater Tank can supply house or switched to supply toilets or Garden only

GREYWATER RECYCLING TREATMENT

- Watt Works grey water recycling system

SOLAR PANELS

- 1kw solar system - Sunni boy Inverter, Schott PV Panel, Installed by Click Control

PERGOLA/ DECKING /EAVES

- Plantation spotted gum decking from renewable source
- Eaves designed for summer shading/winter solar access as sun moves its position
- Easily accessed indoor/outdoor living spaces
- Grow a deciduous vine or food plant such as a grape vine to provide extra shade and to be able to harvest for food production.



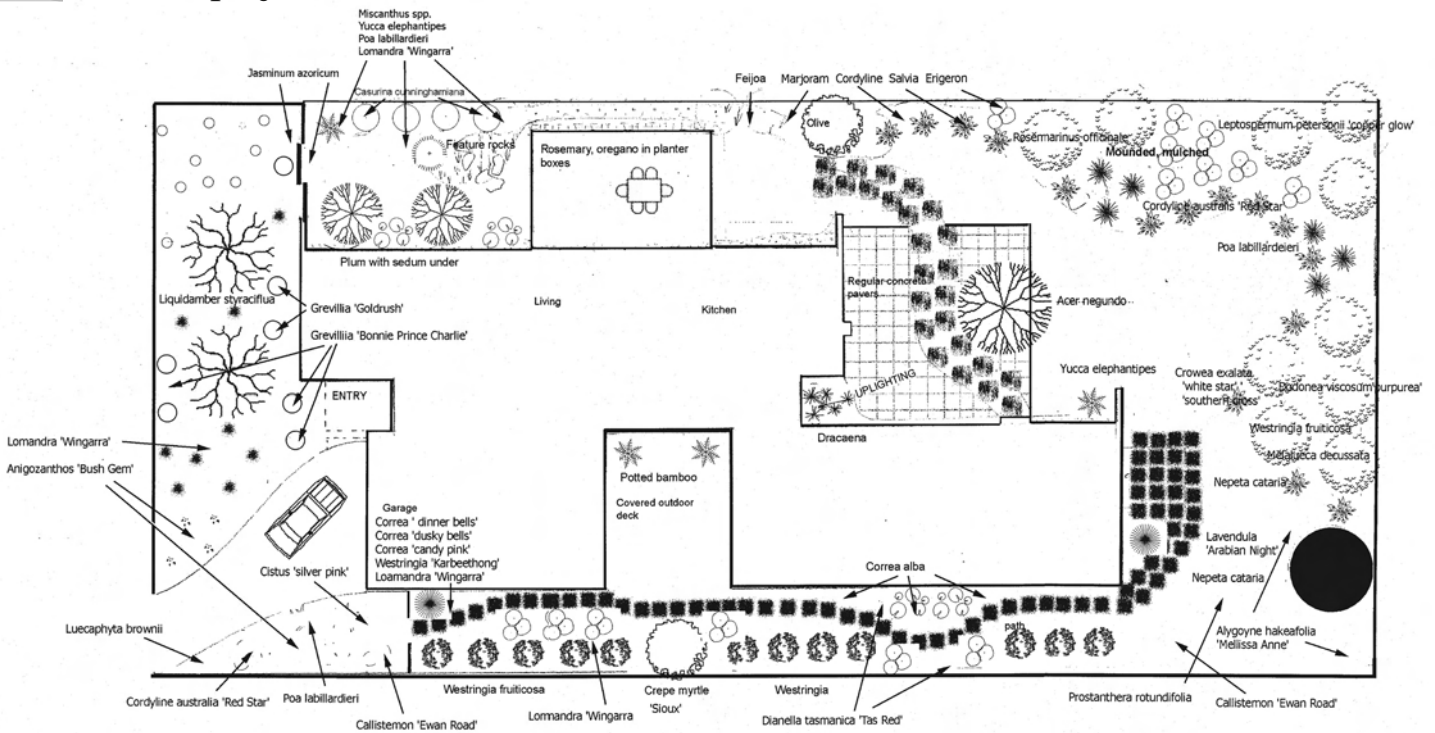
MOUNT ALEXANDER SUSTAINABILITY GROUP INC

233 Barker Street, Castlemaine 3450
ph: (03) 5470 6978

www.masg.org.au

mount alexander low energy solar display home

planting scheme



SURFACES

The key surfaces used are:

Local sandstone paving

Dunolly gravel

- All hard surfaces were chosen for their local availability (less transport)
- Visual appeal
- Natural colours and tones (ie. local products fit with local environment)
- Hard wearing, low maintenance
- Softens the building

Organic mulch

- Prevents evaporation
- Suppresses weeds
- Breaks down slowly, adding organic matter to soil profile
- Local availability
- By-product of sawmills

PLANTING

All plants were chosen for their adaptability to local climate and drought tolerance.

Key plant features:

- Deciduous trees and vines to allow winter light and summer shade
- Assists solar performance of the building (may reduce energy by 20%)

- Dual/triple functions – food/shade/light/wind
- Indigenous species attract birds and butterflies

FOOD PRODUCTION

- Food producing varieties included with secondary functions (fruit trees/vines)
- Specified veggie growing boxes
- Border planting to be herbs and veggies
- Reduces food miles, chance for local trade

DESIGN

Key design elements:

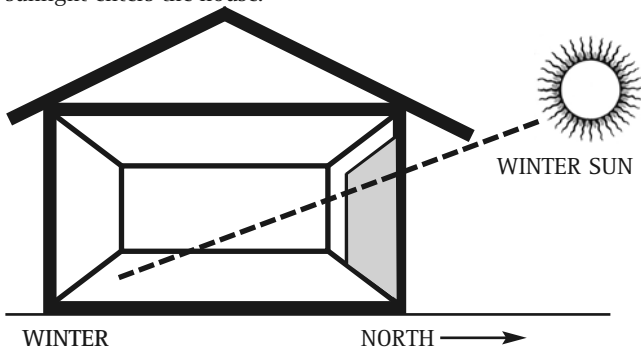
- Overall design layout to assist/harmonise with architecture
- Uses solar passive landscape design principles
- Simple soft lines
- Local/recycled materials
- Climate responsible species selection
- Extensive use of natural materials
- Family friendly
- Low maintenance

PHIL HANSEN LAND PLANNING AND DESIGN

M: 0425 856 833

EAVES and SHADING

Low 'sun angle' so lots of direct sunlight enters the house.



High 'sun angle' so NO direct sunlight enters the house.

