

Birdwood High School

Year 9-Global Warming unit

Information for consideration in sustainable house design project

Adelaide Hills Council development and building assessment

- House to be set back minimum 6m from front boundary to allow for landscaping
- House to be set back a minimum of 1m from side boundaries
- External appearance should not detract from the character and amenity of the locality
- Building should be no more than 6 meters in height (one storey only)
- Driveways should follow the contours of the land so as to reduce their visual impact and erosion from water run-off
- House should have at least one rainwater tank (minimum of 1000 litres) and this should be connected to the house and another for fire-fighting purposes located away from the house
- North facing roof to allow for solar panels and improve energy efficiency
- Removal of any vegetation on site requires a further assessment process

Further information if required:

<http://www.ahc.sa.gov.au/Resident/planning-and-building>

Any existing trees on site check:

http://www.sa.gov.au/_data/assets/pdf_file/0003/17571/Protecting_Reg_and_Sig_Trees_Comm_Info.pdf

Any existing native vegetation on site check:

<https://www.legislation.sa.gov.au/LZ/C/A/NATIVE%20VEGETATION%20ACT%201991.aspx>

Native Vegetation Act 1991

Sustainable landscapes

- native vegetation or Mediterranean species require less water
- re-create habitat with local native species to attract animals and insects into the garden-consider insect and bee hotels
- small pond for habitat and frogs could be fed naturally from rainwater runoff
- concentrate plants with similar water requirements in the one location
- green grass is cooling but use low water use grass species eg kikuyu and keep grassed areas to a minimum
- keep hard surfaces to a minimum to reduce the heat island effect
- trees on the west aspect to shade the windows and house (could also be a vertical green vegetated wall depending on space)

- allow northern sun into house especially during winter so deciduous trees on northern aspect but ensure solar panels are not in shade
- vegetable garden to allow for own produce
- rainwater can be plumbed to the toilet and washing machine etc
- grey water (showers etc)and also black water (sewer, kitchen sink etc) can be used in garden but needs to be treated and purple pipes used
- before construction stockpile existing topsoil to ensure re spreading after building
- incorporate organic material into topsoil on site
- mulch required on planted areas to reduce loss of soil moisture
- re-use any available materials eg re-claimed bricks for paving
- consider where any materials come from eg less transport forest stewardship
- if using any timber avoid rainforest timber and use plantation from a sustainable source

Further information if required

<http://www.yourhome.gov.au/housing/landscaping-and-garden-design>

In addition

Site planning considerations

<http://www.yourhome.gov.au/house-designs/design-principles>

<http://www.yourhome.gov.au/passive-design/orientation>

<http://yourhome.gov.au/water/wastewater-reuse>