

Peter Howman
Managing Director



15 April 2014

copy

Submission No 01.5
DHA Tindal
Date: 15/04/2014

Mrs Karen Andrews MP
Chairperson
Parliamentary Standing Committee on Public Works
Parliament House
Canberra ACT 2600

Dear Mrs Andrews

**PROPOSED DEVELOPMENT OF HOUSING FOR DEFENCE at
RAAF BASE TINDAL, NT – AMENDED PROPOSAL**

We refer your advice dated 20 March 2014 requesting an additional hearing in this matter and advise that we have amended the original proposal submitted to PWC on 3 December 2013 to reflect issues raised during and subsequent to the first hearing held in Katherine.

Defence and DHA have revised the housing product to be provided at RAAF Base Tindal and now intend provisioning the 50 dwellings using the DHA Business as Usual (BAU) 'design and construct' delivery model in lieu of bespoke architecturally-designed houses. These proposed houses are our standard tropical-design dwellings, based on the 'DHA Construction Specification', which we are constructing across northern Australia. This revision of housing product has resulted in the total project cost reducing to \$47,143,115.

We look forward to briefing you and the committee on this amended proposal at the upcoming hearing.

Yours sincerely

Peter Howman
Managing Director

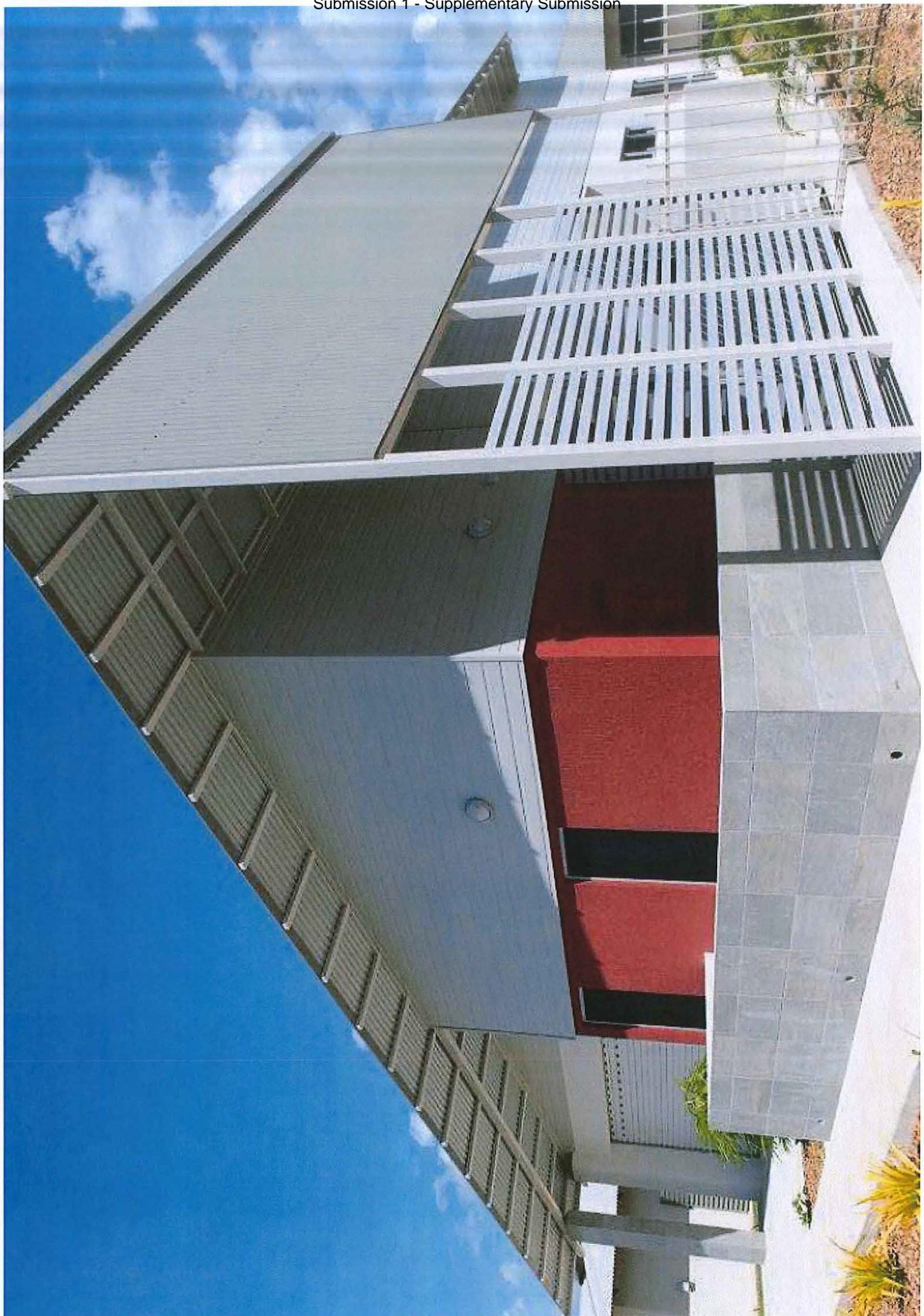
Attachments:

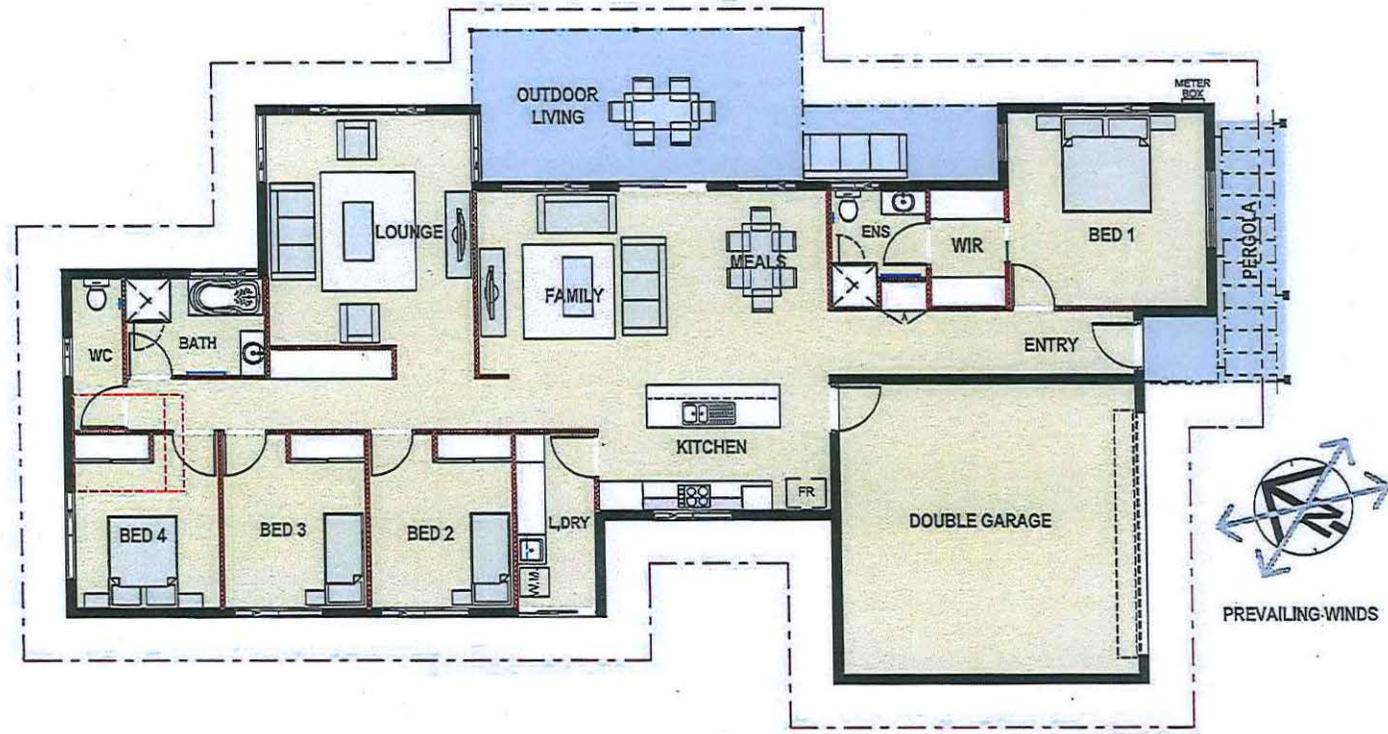
1. Floor plans and elevations of typical BAU houses
2. Proposed Layout Plan
3. Confidential Information
 - I. Revised breakdown of cost estimates
 - II. Detailed cost breakdown











highlights

- 1 Breezeway
- 2 Crossflow
- 3 Island kitchen
- 4 Vented garage door
- 5 Separate living area
- 6 Meals area close to external living
- 7 Skillion roof, ventilated & insulated
- 8 Tropical entry statement
- 9 Large overhangs, shade to walls & tropical feel with exposed rafters
- 10 Front pergola



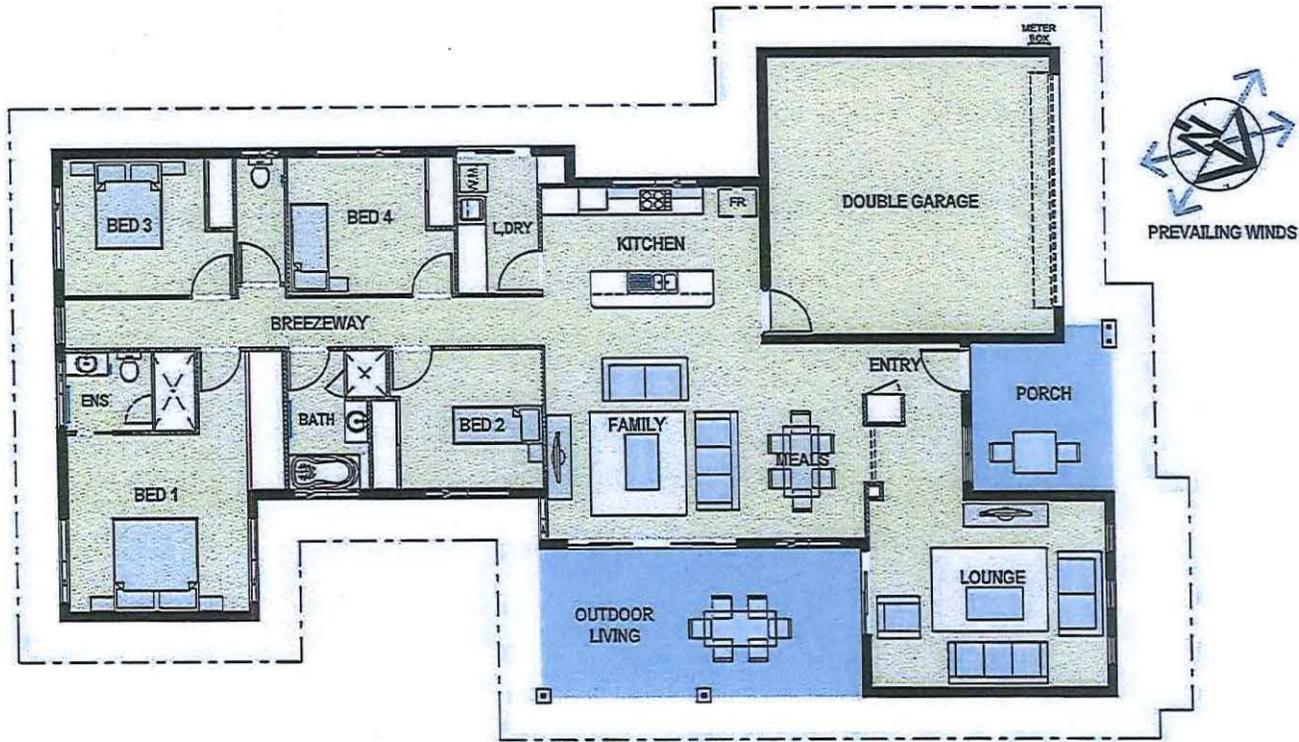
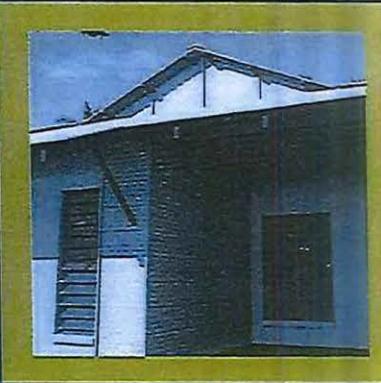
25 (A) House Tender
 Muirhead, N.T.

HO-14-39

Glenferrie 2 Facade 2
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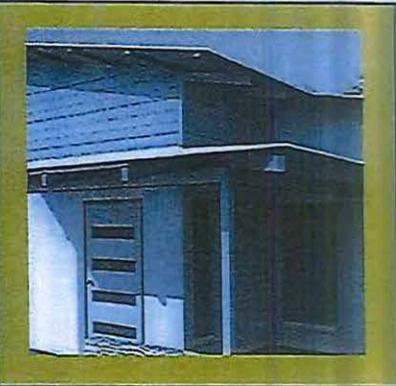
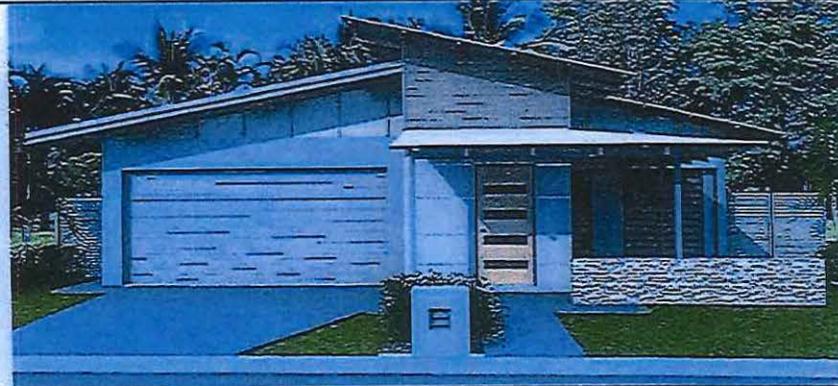
11248 Dreier Street, Muirhead. N.T.





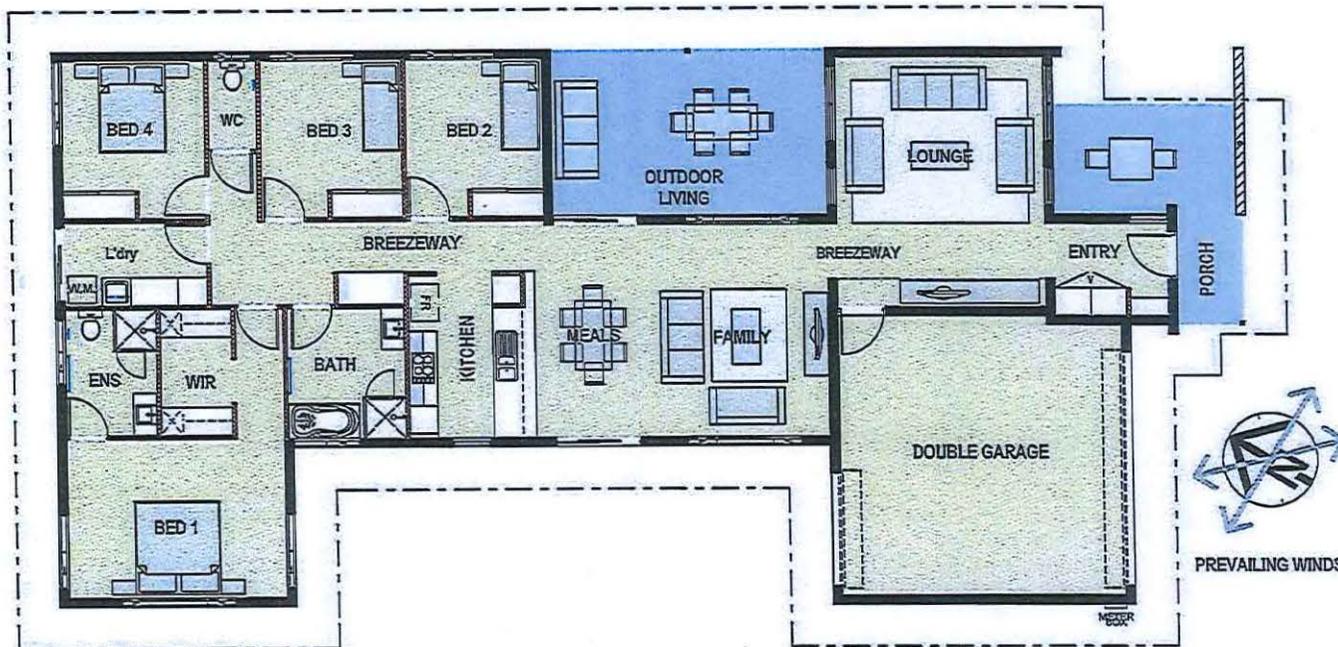
highlites

- 1 Breezeway
- 2 Crossflow
- 3 Island kitchen
- 4 Screening
- 5 Ventilation slots to garage door
- 6 Seperate living area
- 7 Meals area close to external living
- 8 Hip Roof, high pitch insulated & ventilated
- 9 Deep front porch with maximum protection
- 10 Large overhangs, shade to walls & tropical feel with exposed rafters



highlights

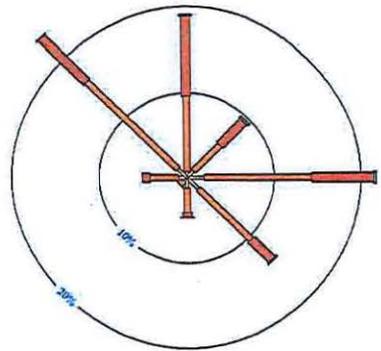
- 1 Breezeway
- 2 Crossflow
- 3 Island kitchen
- 4 Screening
- 5 Vented garage door
- 6 Seperate living area
- 7 Meals area close to external living
- 8 Skillion roof, ventilated & insulated
- 9 Shady front porch
- 10 Large overhangs, shade to walls & tropical feel with exposed rafters



WIND FREQUENCY ANALYSIS (in km/h)
 DARWIN AIRPORT STATION NUMBER 014015
 Latitude: -12.42 ° Longitude: 130.59 °

3 pm May to Sep
 7580 Total Observations (1954 to 2003)

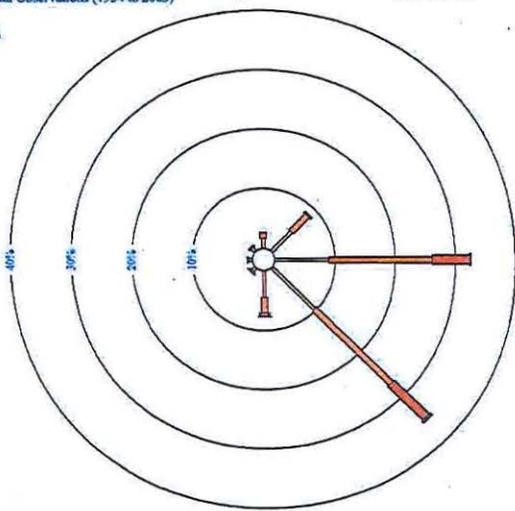
Calm 1%



WIND FREQUENCY ANALYSIS (in km/h)
 DARWIN AIRPORT STATION NUMBER 014015
 Latitude: -12.42 ° Longitude: 130.59 °

9 am May to Sep
 7581 Total Observations (1954 to 2003)

Calm 9%



DRY SEASON

WET SEASON

Wind directions are divided into eight compass directions. Calm has no direction.
 An asterisk (*) indicates that calm is less than 1%.
 An observed wind speed which falls precisely on the boundary between two divisions (eg 10 km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.

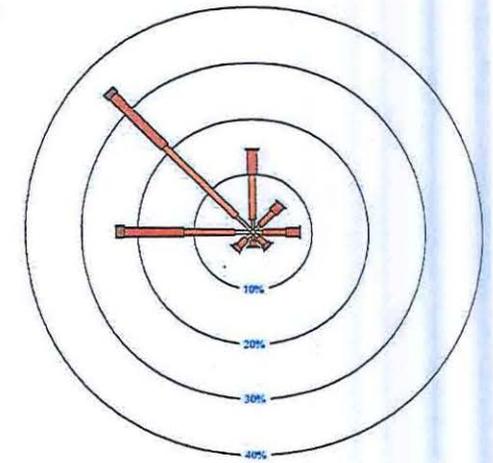


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WIND FREQUENCY ANALYSIS (in km/h)
 DARWIN AIRPORT STATION NUMBER 014015
 Latitude: -12.42 ° Longitude: 130.59 °

3 pm Oct to Apr
 10847 Total Observations (1942 to 2004)

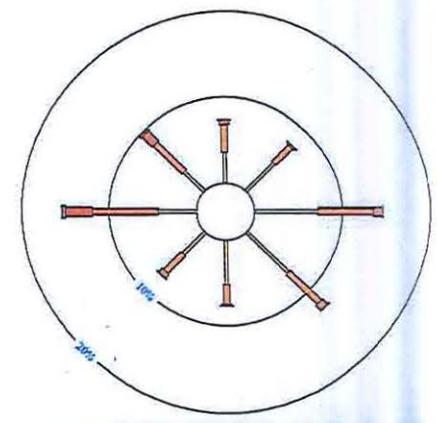
Calm 2%



WIND FREQUENCY ANALYSIS (in km/h)
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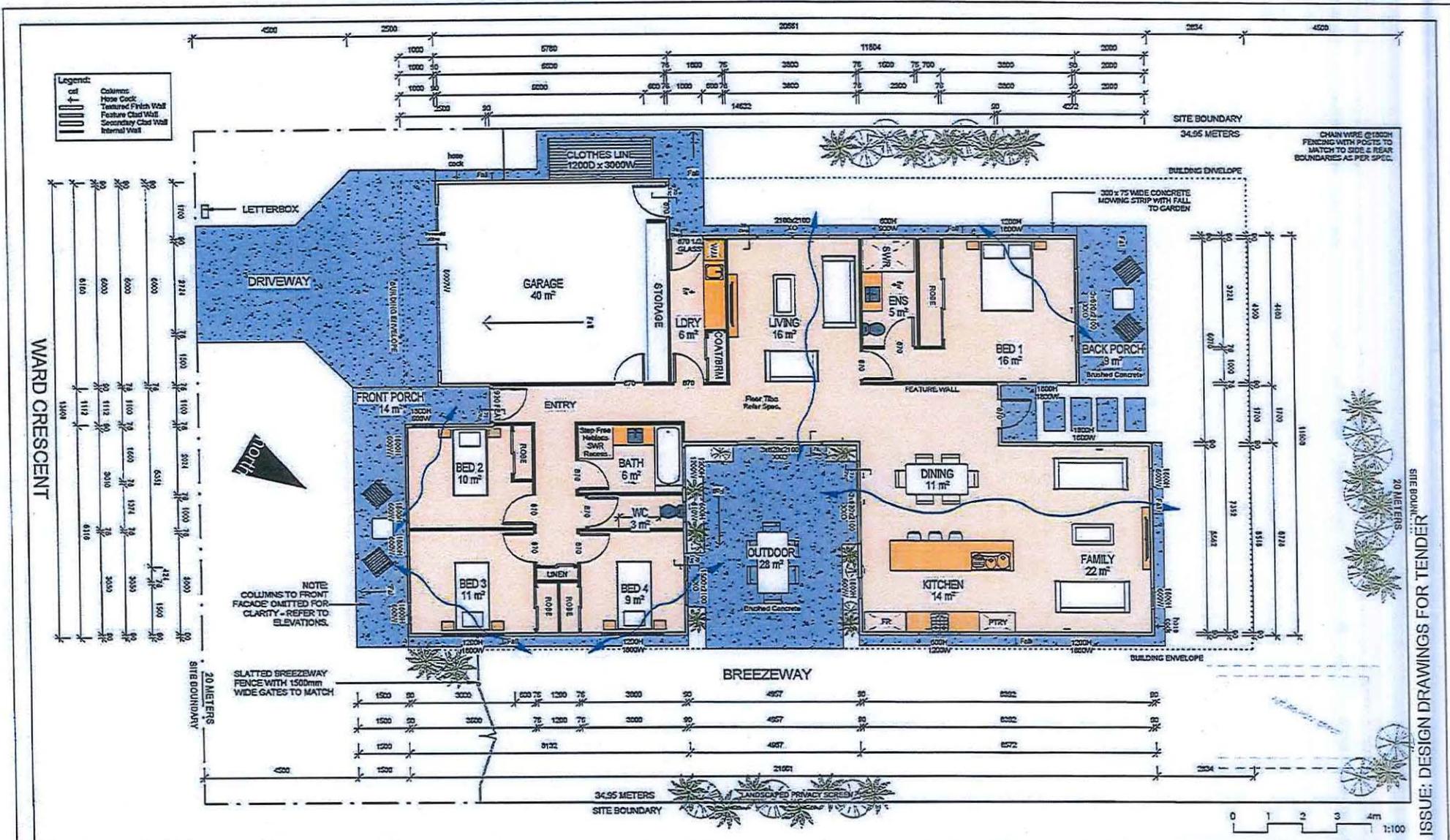
9 am Oct to Apr
 10830 Total Observations (1942 to 2004)

Calm 17%



DARWIN ANNUAL WIND DIRECTIONS





ISSUE: DESIGN DRAWINGS FOR TENDER

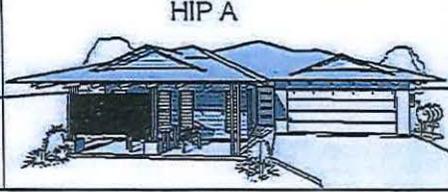
5/ Design
 PO Box 230
 Papanora Beach QLD 4573

 SSA No. 1066003
 Contact: Michael Broeren
 T: 07 5471 2721
 F: 0422 969 645

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GENERAL NOTES TO BUILDER
 1. Read all drawings and specifications carefully before commencing work.
 2. All work to be done in accordance with the specifications and standards of the relevant authorities.
 3. All work to be done in accordance with the specifications and standards of the relevant authorities.
 4. All work to be done in accordance with the specifications and standards of the relevant authorities.

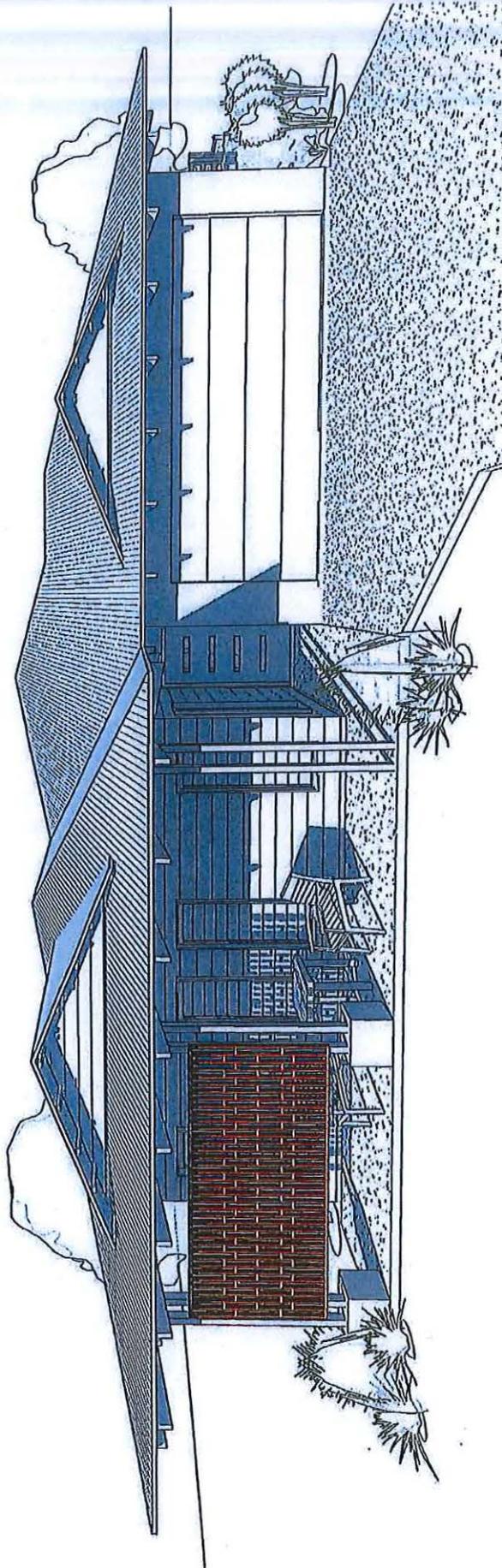
Proposed New Housing:
 For:
DEFENCE HOUSING AUSTRALIA
 Project Address:
**"BREEZES ESTATE" MUIRHEAD,
 DARWIN, NT**



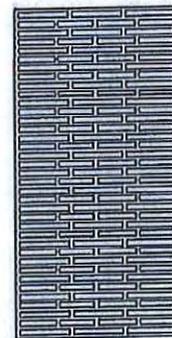
LOT 11181
4 BED
TYPE 3
 AREAS:
 LIVING: 176 sqm
 GARAGE: 40 sqm
 OUTDOOR: 28 sqm
 BACK PORCH: 9 sqm
 FRONT PORCH: 15 sqm

sheet title: FLOOR PLAN LOT 11181	
job no: 1351	drawn by: JM
date: 05.12.13	
scale (A3): 1:100	drawing no: 04

ISSUE: DESIGN DRAWINGS FOR TENDER



FACADE TYPE: HIP A
 ARTISTS IMPRESSION ONLY



EXAMPLE OF SCREENING PATTERN



11 Doolan
 PO Box 200
 Pungah Beach QLD 475
 building
 design
 michael
 broeren
 BSA No. 1032823
 Contact: Michael Broeren
 t 67 5571 2724
 f 6422 383 545



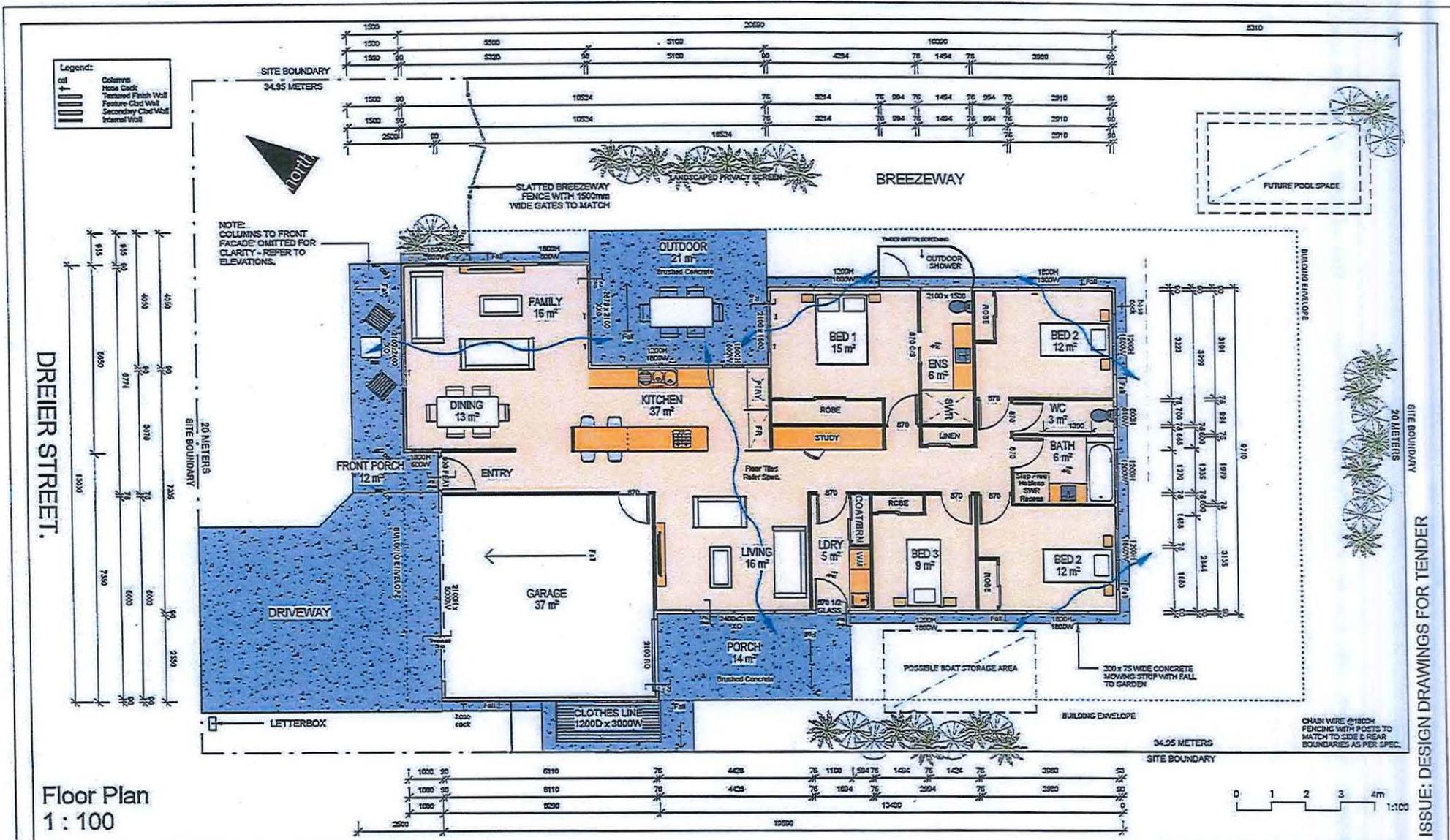
CONCRETEWORK AS SUPPLIER
 OF ALL CONCRETE PRODUCTS FOR THE
 BUILDING AND CONSTRUCTION INDUSTRY
 WITH A SPECIALIST SERVICE IN THE
 PRODUCTION AND SUPPLY OF REINFORCING

GENERAL NOTES TO BUILDER:
 1. All dimensions are to be taken from the face of the work unless otherwise stated.
 2. All work is to be in accordance with the relevant Australian Standards.
 3. All work is to be in accordance with the relevant Australian Standards.
 4. All work is to be in accordance with the relevant Australian Standards.
 5. All work is to be in accordance with the relevant Australian Standards.

Proposed New Housing:
 For:
DEFENCE HOUSING AUSTRALIA
 Project Address:
**"BREEZES ESTATE" MUIRHEAD,
 DARWIN, NT**



sheet (of):	FACADES		
job no:	1351	drawn by:	JM
date:	05.12.13	checked by:	00
scale (A3):		drawing no:	00



Floor Plan
1 : 100

ISSUE: DESIGN DRAWINGS FOR TENDER

M Design
PO Box 290
Perth Beach QLD 453

building design by michael broeren

BSA No. 1066053
Contact: Michael Broeren
1. 07 5471 2721
1. 0422 359 645

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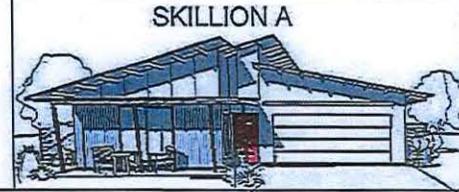
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9. All dimensions are to be taken from the face of the work unless otherwise stated.
10. All dimensions are to be taken from the face of the work unless otherwise stated.

Proposed New Housing:
For:
DEFENCE HOUSING AUSTRALIA

Project Address:
**"BREEZES ESTATE" MUIRHEAD,
DARWIN, NT.**



LOT 11246
4 BED
TYPE 1

AREAS:
LIVING: 170.5 sqm
GARAGE: 37 sqm
OUTDOOR: 20 sqm
PORCH: 14 sqm
FRONT PORCH: 12 sqm

sheet title: FLOOR PLAN LOT 11246	
job no: 1351	drawn by: JM
date: 06.12.13	
scale (A3): 1:100	drawing no: 03

