

PERSPECTIVE VIEW

DESIGN TYPE 400
CONTENT:
01 - COVER
02 - SITE PLAN
03 - GROUND FLOOR PLAN
04 - FIRST FLOOR PLAN
05 - ELEVATIONS
06 - SECTIONS
07 - WALL DETAILS
08 - WINDOW SCHEDULE
09 - ELECTRICAL PLAN
10 - GENERAL NOTES

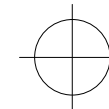


Australian Government



NatHERS Example 4
No 17, Lot 400 Banksia
Drive, Townsville, 4810, QLD

© Copyright 2022 Commonwealth of Australia.
Worked examples. For training purposes only. Not to be used for construction.



Date	27-Aug-2021	DESIGN 400	
Version	v5	PAGE TITLE: COVER	
Drawn by	AH		
Checked by	MG	SCALE: A3 @	SHEET: 01 of 10

LEVELS ARE TO AUSTRALIAN HEIGHT DATUM

DIMENSIONS & LEVELS TO BE VERIFIED BY CERTIFIED COPY OF TITLE, APPROVED PLAN OF SUB-DIVISION OR RE-ESTABLISHMENT SURVEY

NOTE: DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERING DRAWINGS & SOIL REPORTS

BUILDER TO CONFIRM ALL SETBACKS & DIMENSIONS PRIOR TO COMMENCEMENT OF WORKS. NOTIFY THE DESIGN OFFICE IMMEDIATELY OF ANY DISCREPANCIES FOR CLARIFICATION AND INSTRUCTION

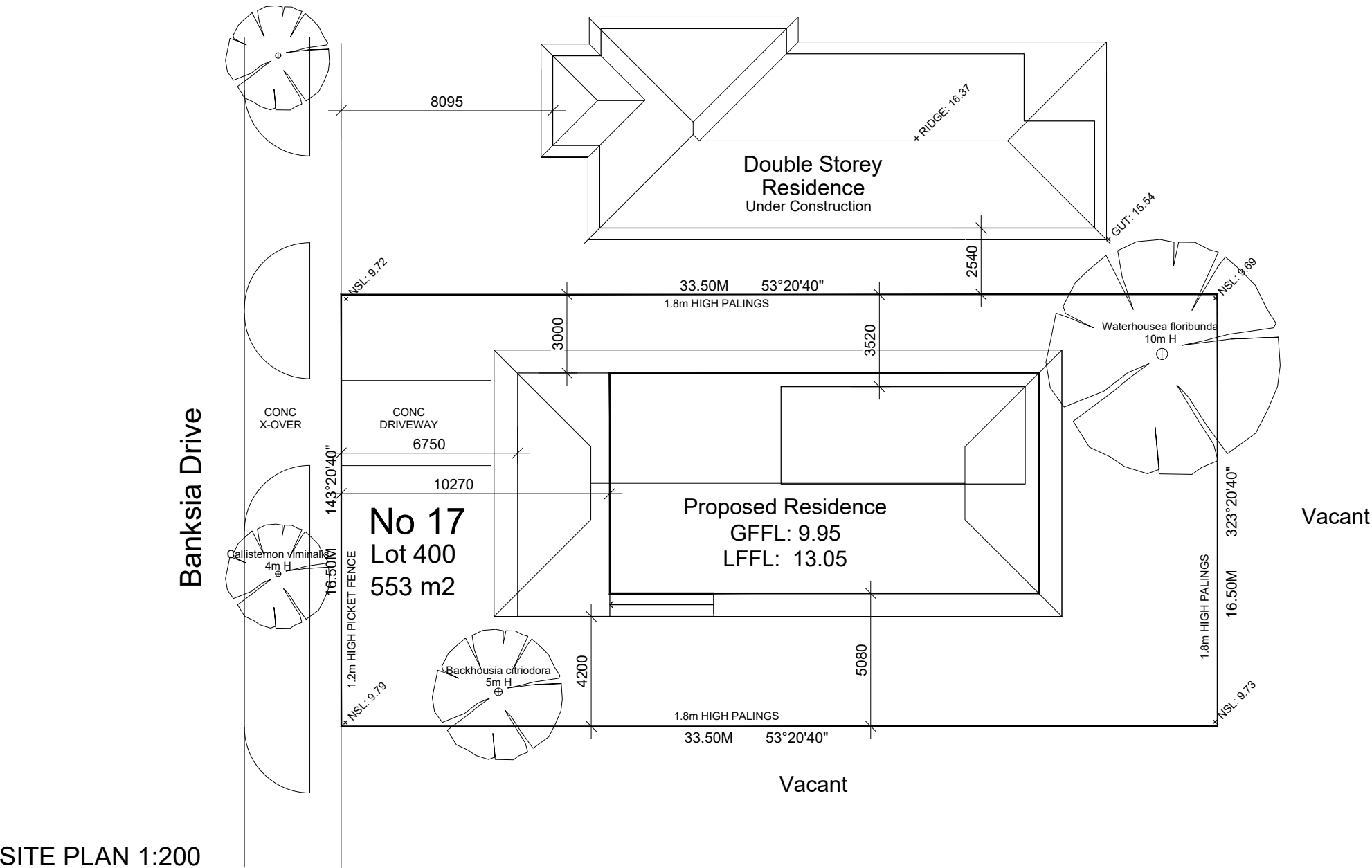
ALL EXISTING BOUNDARY FENCES ARE TO BE RETAINED. PATCH AND REPAIR FENCES AS REQUIRED

ALL PROPOSED STORMWATER DOWNPIPES TO BE DIRECTED TO EXISTING STORMWATER DRAINAGE SYSTEM TO SATISFACTION OF LOCAL AUTHORITY

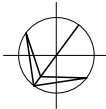
PROVIDE 90mm DIAMETER PVC STORMWATER PIPE WITH MINIMUM FALL OF 1:100 AND CONNECT TO EXISTING SWD SYSTEM (VERIFY LOCATION OF SW POINT ON SITE PRIOR TO WORKS COMMENCING

PROVIDE 100mm DIAMETER SEWER GRADE STORMWATER PIPE UNDER GARAGE (AND DRIVEWAYS)

PROVIDE 100 x 50 DOWNPIPES AT 12000mm CRS. (MAX.)

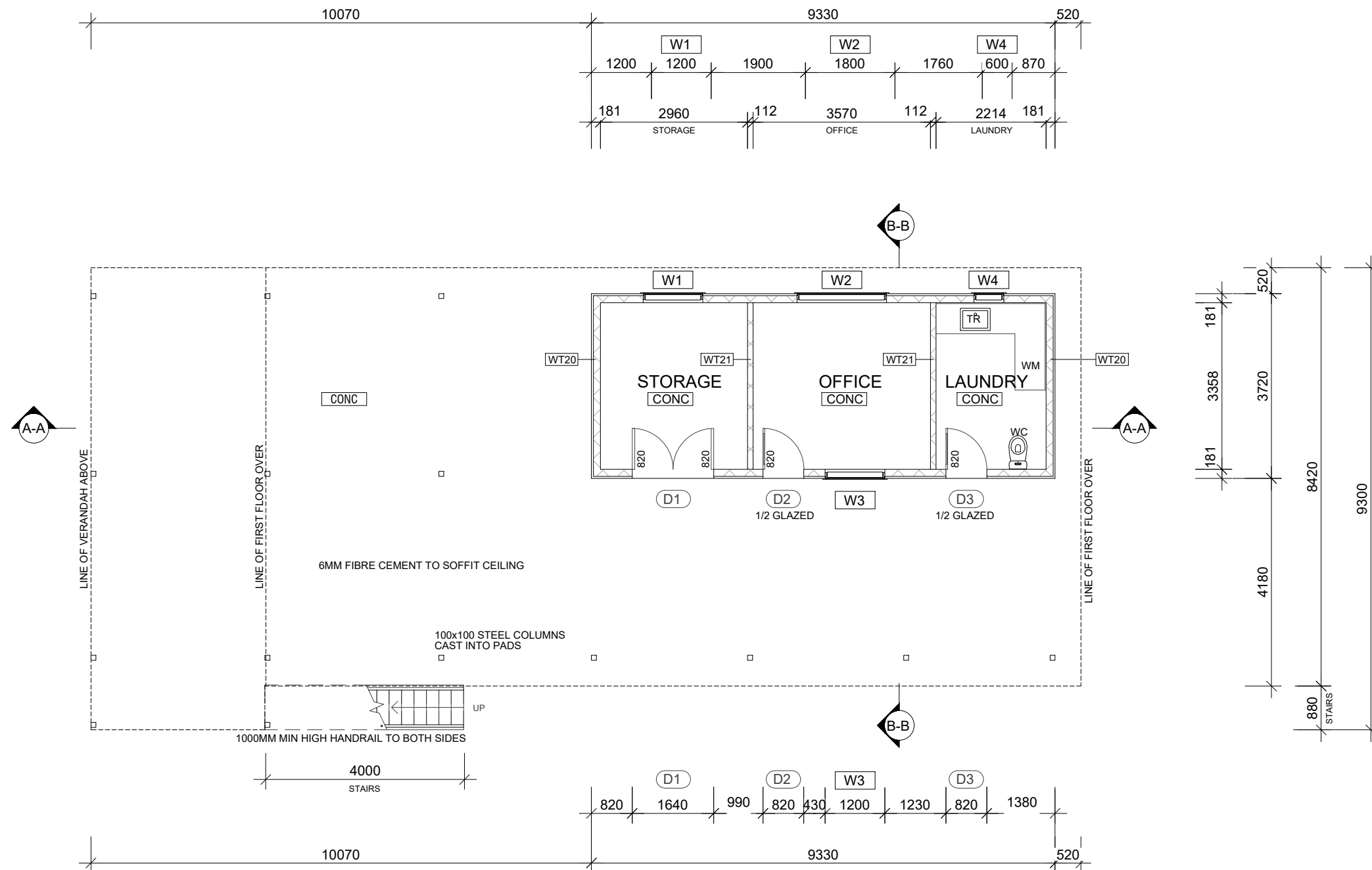


SITE AREA:	748.0 M ²
LOWER GROUND FLOOR:	46.6 M ²
UPPER GROUND FLOOR:	179.7 M ²
GARAGE:	36.5 M ²
FRONT PORCH:	8.0 M ²
REAR PORCH:	9.7 M ²
TOTAL ROOF AREA:	267.6 M ²
BUILDING COVERAGE:	35.8%



Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 400	
PAGE TITLE: SITE PLAN	
SCALE: A3 @ 1:200	SHEET: 02 of 10

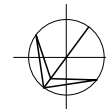


GROUND FLOOR PLAN 1:100

RATING NOTES:
INTERNAL DOORS - 2040 HIGH BY NOMINATED WIDTH.
FIRST FLOOR - WT10 INTERNAL WALLS

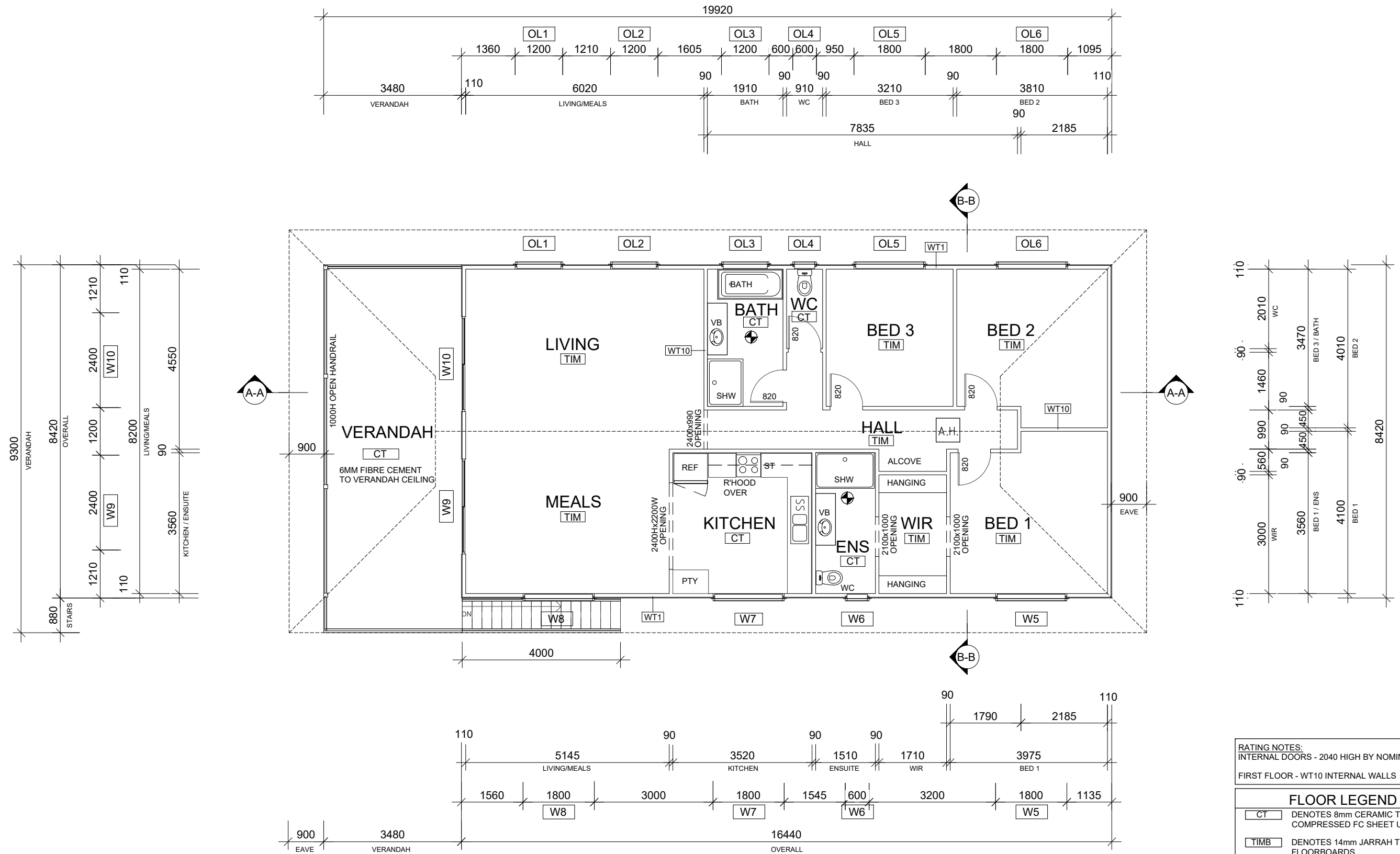
FLOOR LEGEND

CT	DENOTES 8mm CERAMIC TILES ON 6mm COMPRESSED FC SHEET UNDERLAY
TIMB	DENOTES 14mm JARRAH TIMBER FLOORBOARDS
CPT	SELECTED 10mm CARPET LAID OVER 8mm RUBBER UNDERLAY
CONC	DENOTES NATURAL FINISH CONCRETE SURFACE



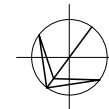
Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 400	
PAGE TITLE: GROUND FLOOR PLAN	
SCALE: A3 @ 1:100	SHEET: 03 of 10



FIRST FLOOR PLAN 1:100

RATING NOTES:	
INTERNAL DOORS - 2040 HIGH BY NOMINATED WIDTH.	
FIRST FLOOR - WT10 INTERNAL WALLS	
FLOOR LEGEND	
CT	DENOTES 8mm CERAMIC TILES ON 6mm COMPRESSED FC SHEET UNDERLAY
TIMB	DENOTES 14mm JARRAH TIMBER FLOORBOARDS
CPT	SELECTED 10mm CARPET LAID OVER 8mm RUBBER UNDERLAY
CONC	DENOTES NATURAL FINISH CONCRETE SURFACE



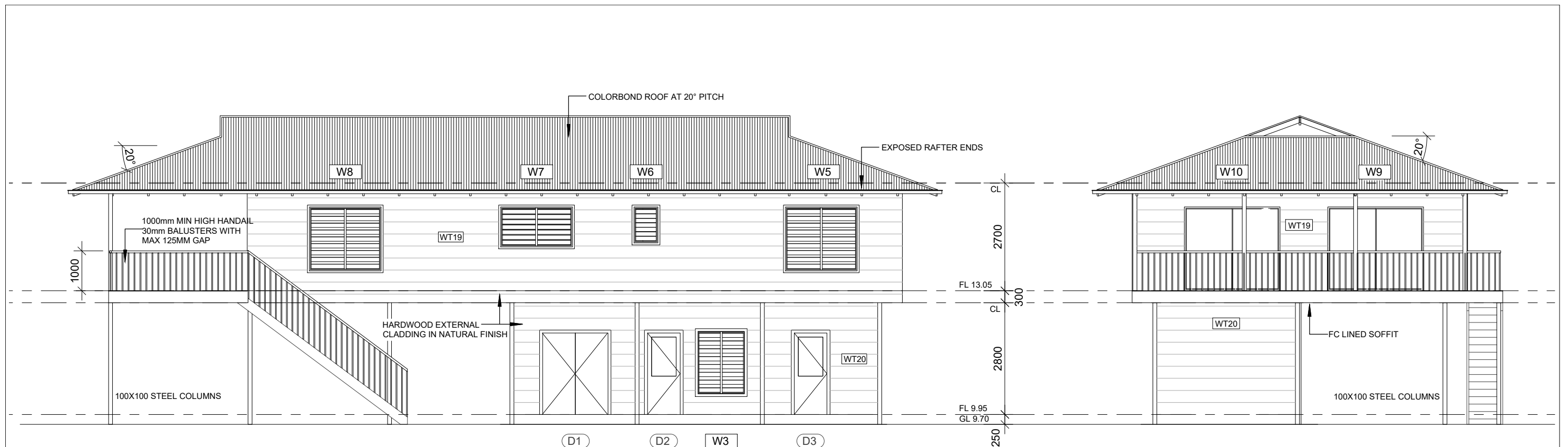
Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 400

PAGE TITLE: FIRST FLOOR PLAN

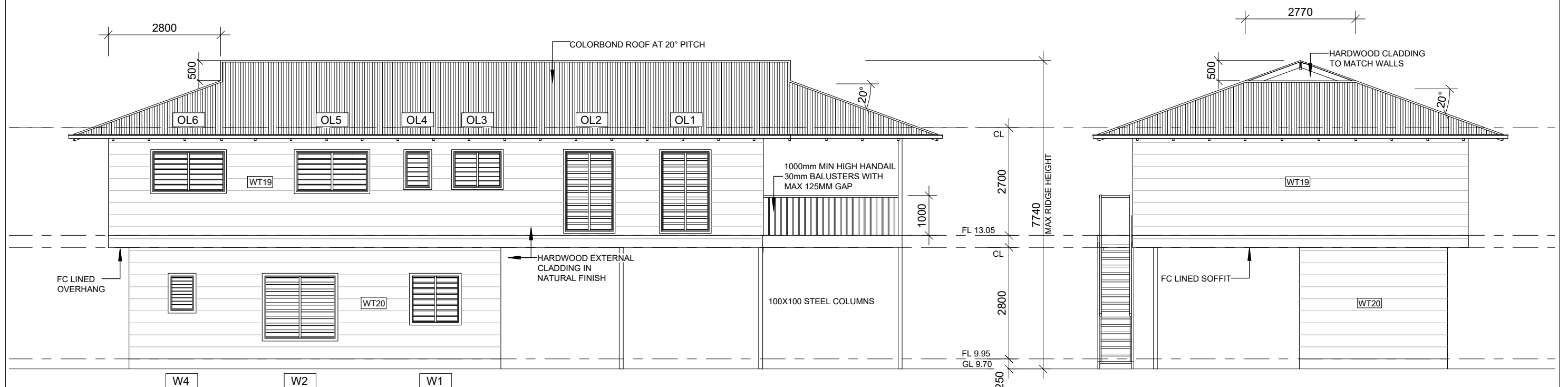
SCALE: A3 @ 1:100

SHEET: 04 of 10



NORTH WEST ELEVATION
1 : 100

NORTH EAST ELEVATION
1 : 100



SOUTH EAST ELEVATION
1 : 100

SOUTH WEST ELEVATION
1 : 100

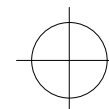


Australian Government



NatHERS Example 4
No 17, Lot 400 Banksia
Drive, Townsville, 4810, QLD

© Copyright 2022 Commonwealth of Australia.
Worked examples. For training purposes only. Not to be used for construction.



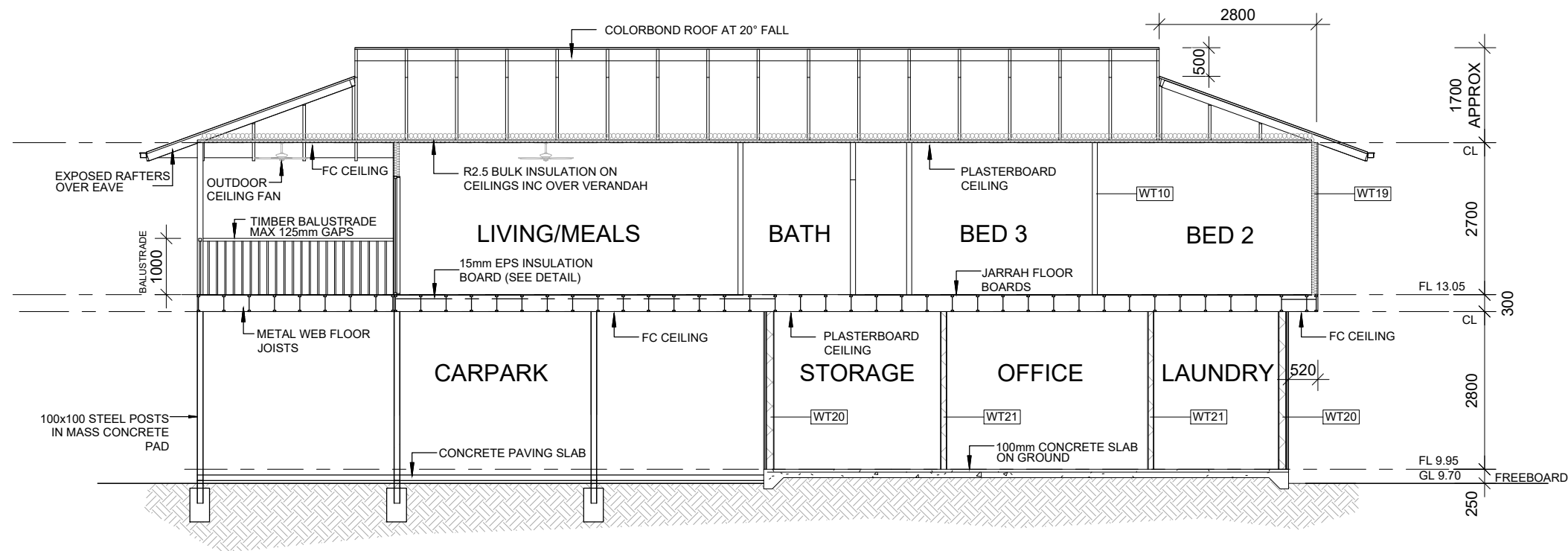
Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 400

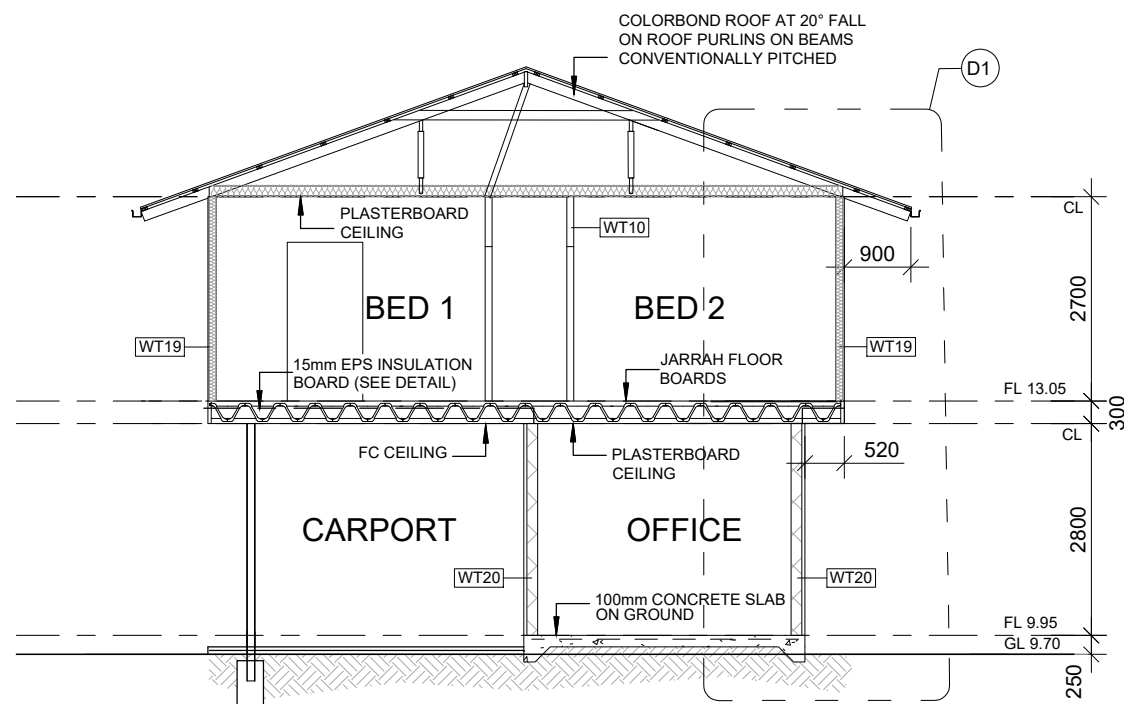
PAGE TITLE: ELEVATIONS

SCALE: A3 @ 1:100

SHEET: 05 of 10



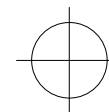
SECTION A-A
1 : 100

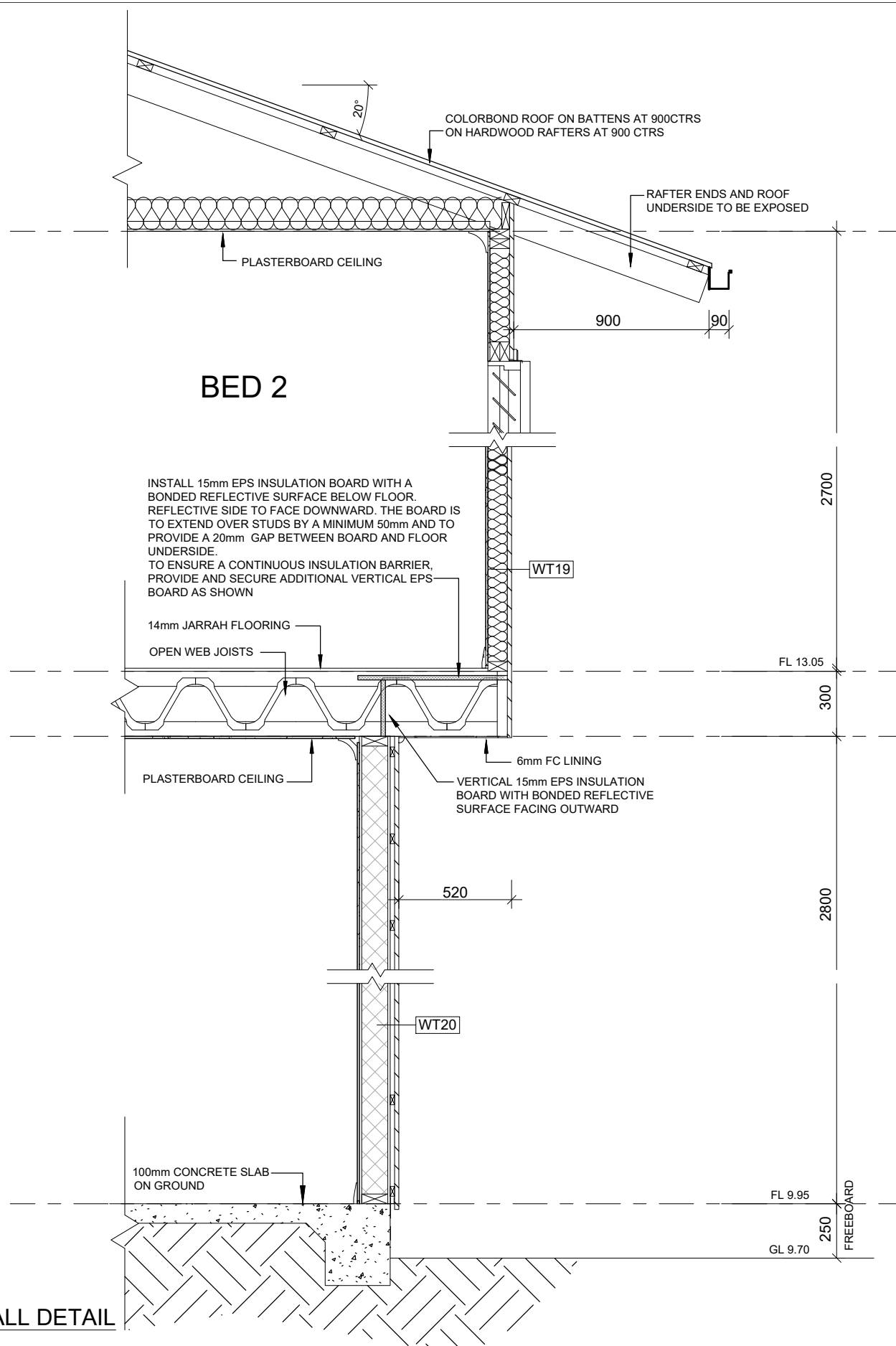


SECTION B-B
1 : 100

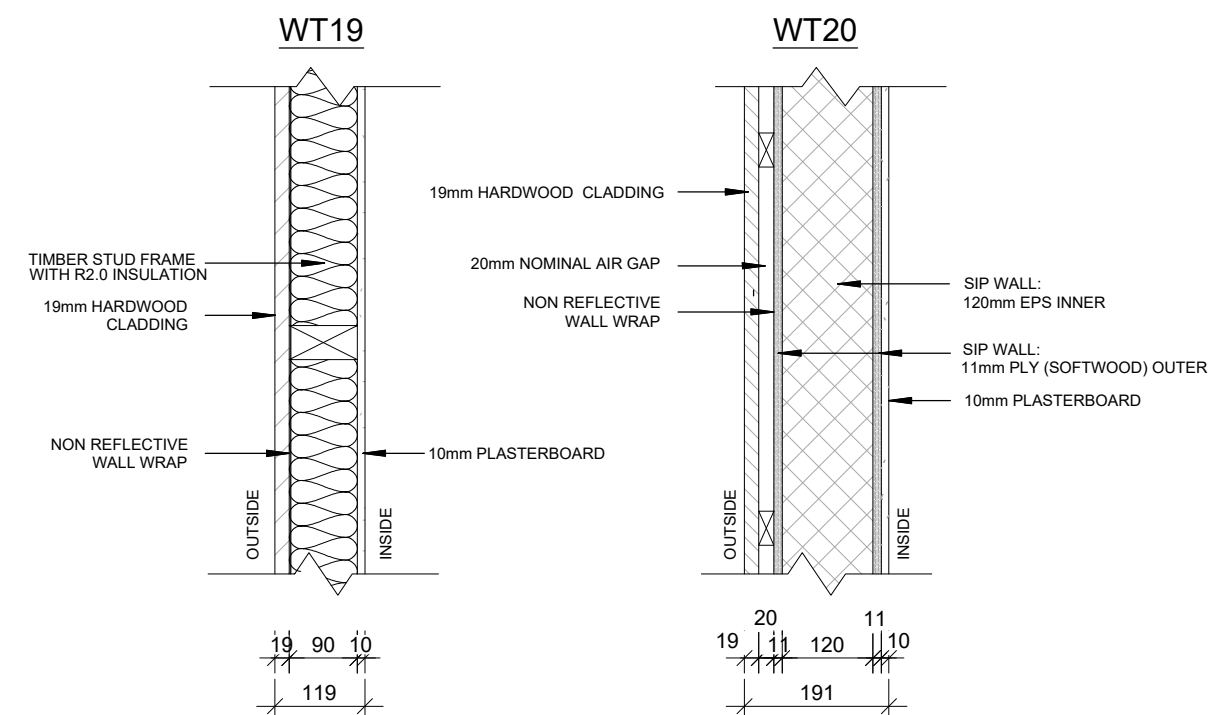
Materials and Colour scheme

	Roof:	Colorbond 'Dune'
	Fascias/Barges:	Colorbond 'Dune'
	Gutters/Downpipes:	Colorbond 'Dune'
	Eave linings & trims:	Painted 'classic white'.
	Fibre Cement sheet	
	Timber cladding:	Blackbutt natural finish
	Exposed timber (beams/handrials etc):	Hardwood natural finish
	Windows:	Colorbond 'Dune'
	Aluminium framed	
	Louvres:	Western Red Cedar natural finish
	External hinged doors:	Colorbond 'cottage Green' external
	Timber leaf/Alum. frame	Colorbond 'dune' internal
	Internal walls:	To client selection
	Floors:	To client selection
	Ceilings:	To client selection

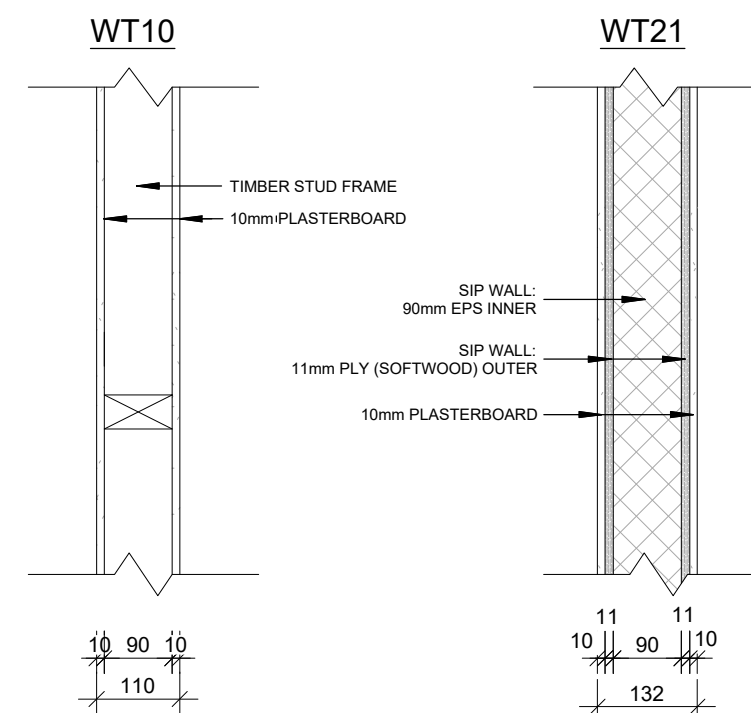




EXTERNAL WALLS



INTERNAL WALLS



WALL TYPES
1:10

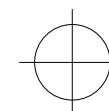


Australian Government



NatHERS Example 4
No 17, Lot 400 Banksia
Drive, Townsville, 4810, QLD

© Copyright 2022 Commonwealth of Australia.
Worked examples. For training purposes only. Not to be used for construction.



Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 400

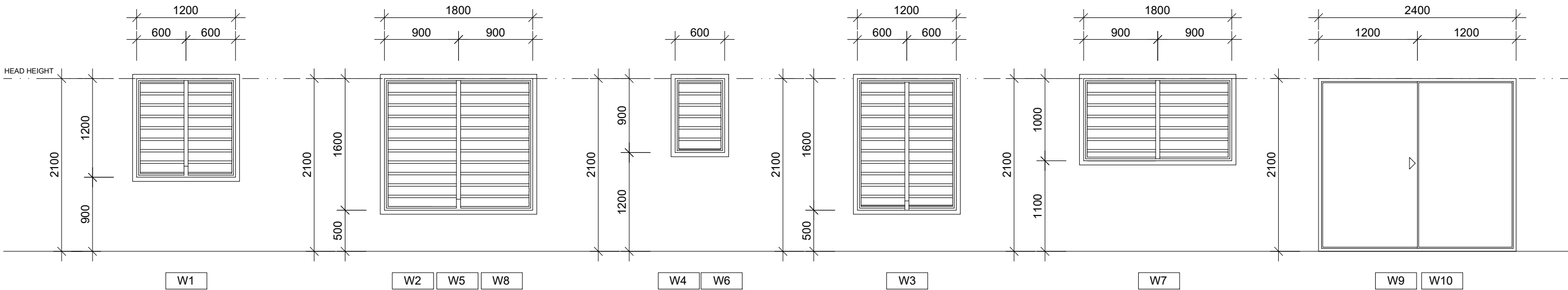
PAGE TITLE: WALL DETAIL

SCALE: A3 @ 1:25, 1:10

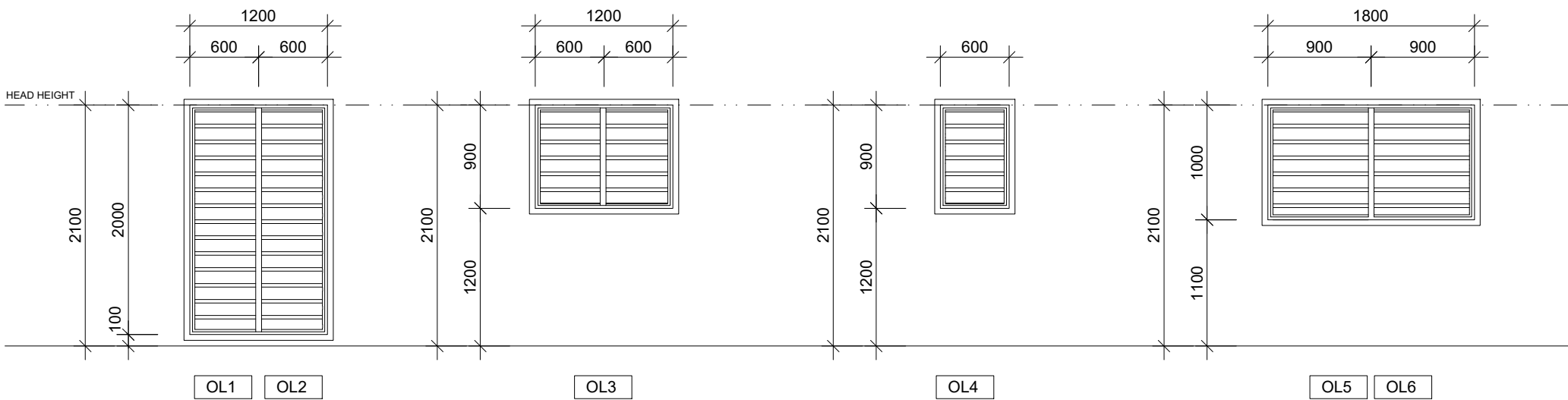
SHEET: 07 of 10

GLAZED WINDOWS AND DOORS

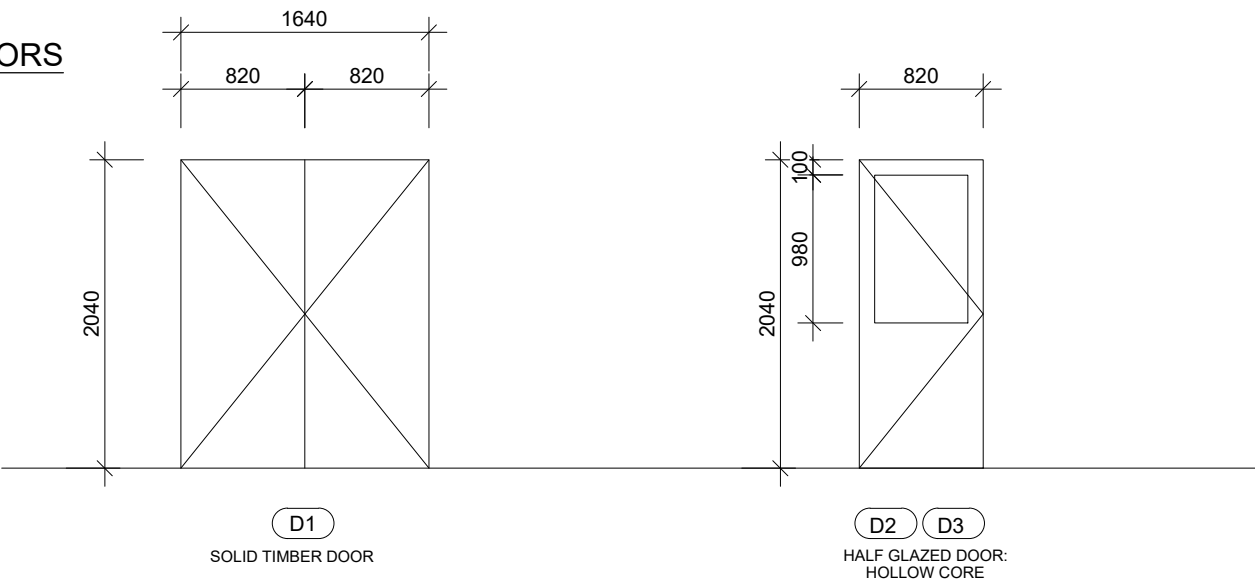
SINGLE GLAZED LOW E (LOW SOLAR GAIN)
ALUMINIUM FRAME



OPAQUE LOUVRES WITH 16mm WRC BLADES

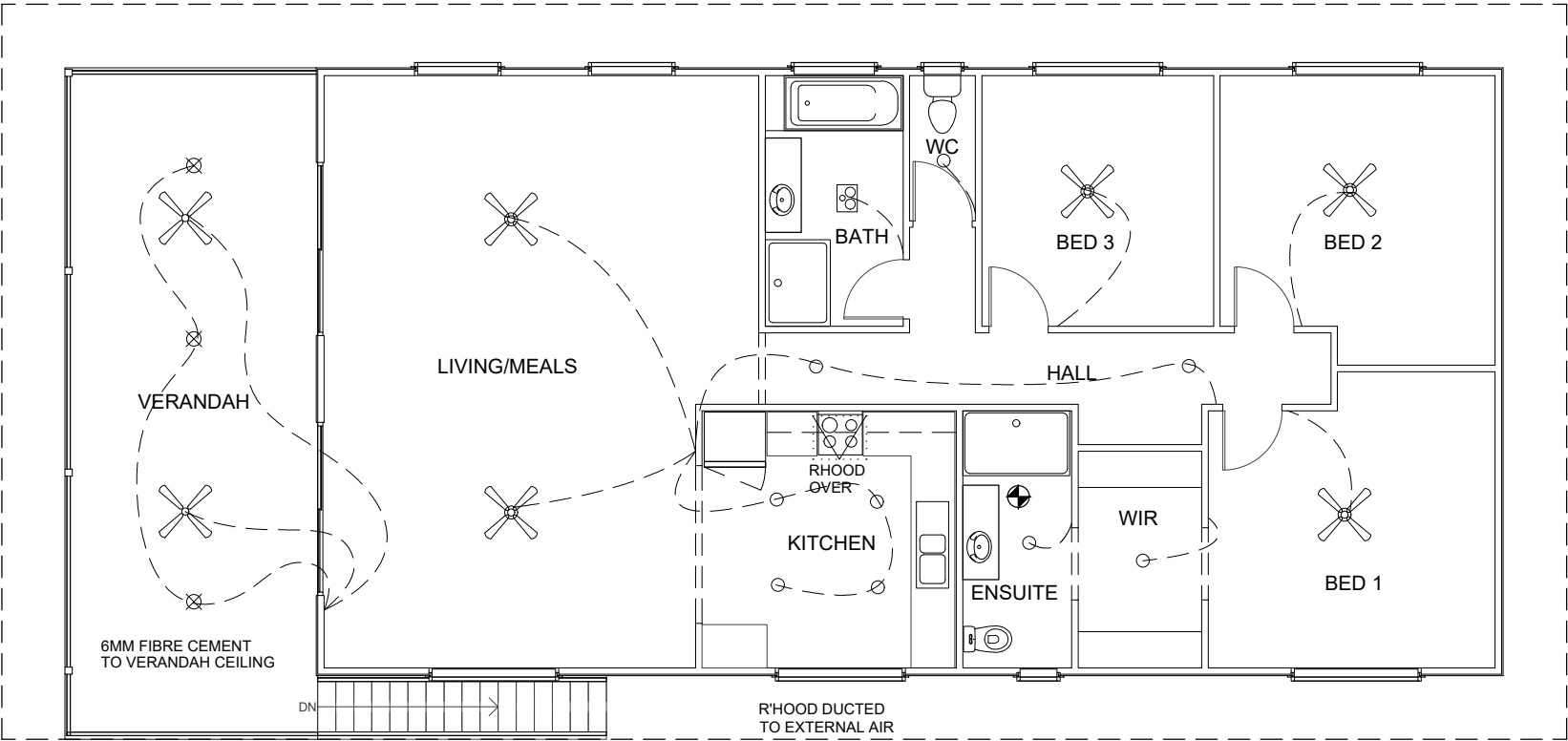


HINGED DOORS

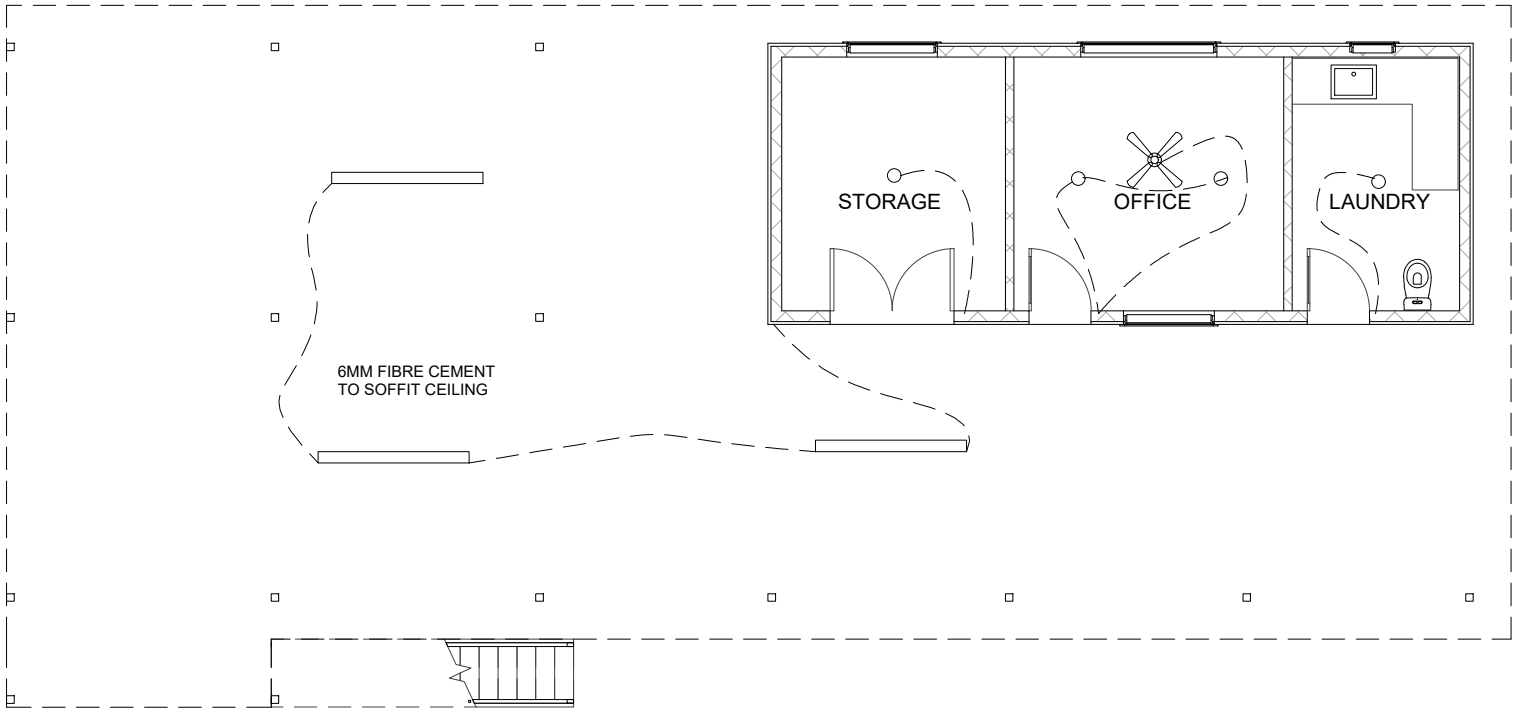


RATING NOTE:
ALL WINDOWS AND DOORS INCLUDE
WEATHER STRIPS AND FLYWIRE SCREENS.

ALL WINDOWS HAVE EXTERNAL ARCHITRAVES,
THE DIMENSIONS GIVEN ARE THE ACTUAL
WINDOW SIZES.



FIRST FLOOR



GROUND FLOOR

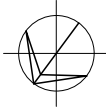
ELECTRICAL FIXTURES LEGEND		
13		Ø90mm IC-4 RATED RECESSED LED DOWNLIGHT 9W (INSTALL INSULATION CONTINUOUSLY OVER)
3		Ø90mm SURFACE MOUNTED LED DOWNLIGHT 9W
3		FLUORESCENT TUBE LIGHT 18W
1		IXL TASTICH TRIUMPH (CLASSIC) 375 3-IN-1 UNIT
1		Ø250mm CEILING EXHAUST FAN,
1		RANGEHOOD EXHAUST FAN 160mmØ DUCT TO EXTERNAL EAVE VENT
6		1200mm CEILING FAN WITH 9 Watt OYSTER LIGHT
2		1200mm CEILING FAN (EXTERNAL)

THE LAMP POWER DENSITY OR ILLUMINATION POWER DENSITY OF ARTIFICIAL LIGHTING IS NOT TO EXCEED 5W/m2 FOR THE RESIDENCE, 3W/m2 FOR THE GARAGE AND 4W/m2 FOR PORCH/VERANDAHs.

RECESSED DOWNLIGHTS ARE TO BE SEALED UNITS TO PREVENT AIR LEAKAGE.

ALL EXHAUST FANS TO BE FITTED WITH A SEALING DEVICE SUCH AS A SELF-CLOSING DAMPER, FILTER OF THE LIKE, AND DUCTED TO EXTERNAL AIR

RANGEHOODS ARE TO HAVE A FILTER INSTALLED, AND DUCTED TO EXTERNAL ENVIRONMENT.



Date	27-Aug-2021
Version	v5
Drawn by	AH
Checked by	MG

DESIGN 600	
PAGE TITLE: REFLECTED CEILING PLAN	
SCALE: A3 @ 1:100	SHEET: 09 of 10

General Notes

1. All materials and work practices shall comply with, but not limited to the Building Regulations 2018, National Construction Code Series 2022 Building Code of Australia and all relevant current Australian Standards (as amended) referred to therein.
2. Unless otherwise specified, the term BCA shall refer to National Construction Code Series 2022 Building Code of Australia Volume 2.
3. All materials and construction practice shall meet the Performance Requirements of the BCA. Where a performance solution is proposed then, prior to implementation or installation, it first must be assessed and approved by the Relevant Building Surveyor as meeting the Performance Requirements of the BCA.
4. Glazing, including safety glazing, shall be installed to a size, type and thickness so as to comply with:
 - BCA Part 8 for Class 1 and 10 Buildings within a design wind speed of not more than N3; and
 - BCA Vol 1 Part B1.4 for Class 2 and 9 Buildings.
5. Waterproofing and water resistance of wet areas, being bathrooms, showers, shower rooms, laundries, sanitary compartments and the like shall be provided in accordance with AS 3740-2010: Waterproofing of Domestic Wet Areas.
6. These Drawings shall be read in conjunction with any House Energy Rating (HERS) report and shall be constructed in accordance with the stamped plans endorsed by the accredited Thermal Performance Assessor without alteration.
7. Step sizes (other than for spiral stairs) to be:
 - Risers (R) 190mm maximum and 115mm minimum
 - Going (G) 355mm maximum and 240mm minimum
 - $2R + 1G = 700\text{mm}$ maximum and 550mm minimum
 - with less than 125mm gap between open treads.
8. All treads, landings and the like to have a slip-resistance classification of P4 or R10 for dry surface conditions and P4 or R11 for wet surface conditions, or a nosing strip with a slip-resistance classification of P3 for dry surface conditions and P4 for wet surface conditions.
9. Provide barriers where change in level exceeds 1000mm above the surface beneath landings, ramps and/or treads. Barriers (other than tensioned wire barriers) to be:
 - 1000mm min. above finished surface level of balconies, landings or the like, and
 - 865mm min. above finished surface level of stair nosing or ramp, and
 - vertical with less than 125mm gap between, and
 - any horizontal element within the barrier between 150mm and 760mm above the floor must not facilitate climbing where changes in level exceeds 4000mm above the surface beneath landings, ramps and/or treads.
10. Wire barrier construction to comply with NCC 2022 BCA Part 11.3.6 for Class 1 and 10 Buildings and NCC 2022 BCA Volume 1 Part D3.D21 for other Classes of Buildings.
11. Top of hand rails to be minimum 865mm vertically above stair nosing and floor surface of ramps.
12. Window sizes nominated are nominal only. Actual size may vary according to manufacturer. Windows to be flashed all around.
13. Where the building (excludes a detached Class 10) is located in a termite prone area the building is to be provided with a termite management system.
14. Concrete stumps:
 - up to 1400mm long to be 100mm x 100mm (1 No.H.D. Wire)
 - 1401mm to 1800mm long to be 100mm x 100mm (2 No. H.D. Wires)
 - 1801mm to 3000mm long to be 125mm x 125mm (2 No. H.D. Wires)
15. 100mm x 100mm stumps exceeding 1200mm above ground level to be braced where no perimeter base brickwork provided.
16. Buildings in marine or other exposure environments shall have masonry units, mortar and all built in components and the like complying with the durability requirements of Table 4.1 of AS 4773.1-2015 'Masonry in small buildings' Part 1: Design.
17. All stormwater to be taken to the legal point of discharge to the Relevant Authorities approval.

General Notes

18. These drawings shall be read in conjunction with all relevant structural and all other consultants' drawings/details and with any other written instructions issued in the course of the contract.
19. Site plan measurements in metres – all other measurements in millimetres unless noted otherwise.
20. Figured dimensions take precedence over scaled dimensions.
21. The Builder shall take all steps necessary to ensure the stability and general water tightness of all new and/or existing structures during all works.
22. The Builder and Subcontractors shall check and verify all dimensions, setbacks, levels and specifications and all other relevant documentation prior to the commencement of any works. Report all discrepancies to this office for clarification.
23. Installation of all services shall comply with the respective supply authority requirements.
24. The Builder and Subcontractor shall ensure that all stormwater drains, sewer pipes and the like are located at a sufficient distance from any buildings footing and/or slab edge beams so as to prevent general moisture penetration, dampness, weakening and undermining of any building and its footing system.
25. These plans have been prepared for the exclusive use by the Client of [Insert Drafting Service] ('The Designer') for the purpose expressly notified to the Designer. Any other person who uses or relies on these plans without the Designer's written consent does so at their own risk and no responsibility is accepted by the Designer for such use and/or reliance.
26. A building Permit is required prior to the commencement of these works. The release of these documents is conditional to the Owner obtaining the required Building Permit.
27. The Client and/or the Client's Builder shall not modify or amend the plans without the knowledge and consent of [building designer's name] except where a Registered Building Surveyor makes minor necessary changes to facilitate the Building Permit application and that such changes are promptly reported back to [building designer's name].
28. The approval by this office of a substitute material, work practice, variation or the like is not an authorisation for its use or a contract variation. All variations must be accepted by all parties to the agreement and where applicable the Relevant Building Surveyor prior to implementing any variation.

Stormwater

1. All storm water to be taken to the legal point of discharge to the Relevant Authorities approval.
2. The Builder and Subcontractor shall ensure that all storm water drains, sewer pipes and the like are located at a sufficient distance from any buildings footing and/ or slab edge beams so as to prevent general moisture penetration, dampness, weakening and undermining of any building and its footing system.
3. All pipes shall be 100MM dia min. Class 6 UPVC storm water line laid to a minimum grade of 1:100 and connected to the legal point of discharge. Provide inspection openings at 9000 C/C and at change in direction. The storm water drainage system must be installed so that any overflow during heavy rain periods is prevented from flow back into the Building. The Builder is to ensure that adequate DP's are provided. The builder is NOT allowed to nominate. The cover to underground storm water drains shall be not less than:
 - 100mm under soil.
 - 50mm under paved or concrete areas
 - 100mm under unreinforced concrete or paved driveways
 - 75mm under reinforced concrete driveways
4. All exposed flashings and valleys colour to match roof colour to owners approval. DP denotes min. 90mm dia down pipes, fix to brickwork at 3 points min. (2400mm H. wall).
5. Roof spouting to be Colorbond quad spouting with concealed support brackets (colour T.B.A) if not specified. All roofing battens to be laid true to string line to eliminate bows and waves.

Site Environment Design Information

Site Classification

- Site classification as Class:
- Refer to soil report No:
- By:

(All footings to be founded at the minimum depths indicated by this soil report)

Design Gust Wind Speed / Wind Classification

- Building tie-downs to be provided in accordance with AS1684-2010 for an assumed design gust wind speed / wind classification of [Insert wind speed or wind classification] (subject to confirmation on site by Relevant Building Surveyor at first inspection) refer to AS1684 for construction requirements.

Corrosion protection of built-in structural members

- Provide corrosion protection of built-in structural steel members such as steel lintels, shelf angles, connectors, accessories (other than wall ties) in accordance with Table 4.1 of AS4773.1-2015 Masonry in Small Buildings, Part 1: Design suitable for an Environment Classification of [Insert environment classification]

Corrosion protection for sheet roofing

- Provide corrosion protection for sheet roofing in accordance with BCA Table 3.5.1.1a suitable for an Environment Classification of [Insert environment classification].

Climate Zone

- Climate zone for thermal design / thermal performance assessment: Zone 5 Townsville.

Energy Efficiency Notes

- R2.5 insulation batts typical to all ceilings.
- Refer to wall schedule sheets for specific wall insulation
- 15mm EPS board insulation with reflective face to exposed upper floor
- Refer to window schedule sheets for all specific glazing requirements
- All recessed downlights to be sealed to prevent air leakage
- All ducts for exhaust fans to have self sealing dampers when not in use

Property Information

FLOOD PRONE LAND: Yes

DESIGNATED BUSHFIRE AREA: NO BAL-LOW

TERMITE AREA: Yes

SNOW LOADS: No

WIND CLASSIFICATION: 29m/s

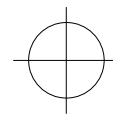


Australian Government



NatHERS Example 4
No 17, Lot 400 Banksia
Drive, Townsville, 4810, QLD

© Copyright 2022 Commonwealth of Australia.
Worked examples. For training purposes only. Not to be used for construction.



Date	27-Aug-2021	DESIGN 400	
Version	v5		
Drawn by	AH	PAGE TITLE: GENERAL NOTES	
Checked by	MG	SCALE: A3 @ N/A	SHEET: 10 of 10