RAFFI CARLOS GEBENIAN
DIRECTOR

Date : 08.10.25

RCG STUDIO

Standard specification

Project address 105 Ashworth Ave, Belrose 2085

Project Alterations &? Additions to two storey residential dwelling

Client Fiona Papadatos & Patrick Brennan

Date 08.10.25

RCG STUDIO

1.General

All dimensions shall be checked on site prior to commencement of any work.

All materials shall comply with relevant current Australian standards and unless otherwise stated on the plans shall be new and the best of their respective kind and suitable for their intended purposes.

All workmanship shall comply with relevant current Australian standards and to good trade practices.

All work shall be in accordance with requirements of the respective authority having jurisdiction over the works.

The architectural drawings should be read in conjunction with the specification, schedules and consultants drawings/reports that form part of the construction documents.

Do not scale from drawings. Notify of any errors or omissions before proceeding with any works

Ensure that substrates are suitable for the intended subsequent finishes. Commencement of work on the substrates implies acceptance by the subcontractor of the substrates on which
finishes are applied.

Contractor is to supply all equipment necessary for the completion of the respective works.

Contractor is responsible for the progressive clean up during and after the completion of respective works

A legible copy of all approved plans and specifications bearing the approval of the Municipal Authority and/or the Principal Certifying authority, must be maintained by the Supervisor/foreman on site at all times. It is the responsibility of the principal to verify plans and specifications as to their accuracy and suitability prior to construction

Where the Sub-contractor is required to supply documents such as shop drawings, Technical schedules or other written information, supply sufficient copies so that a copy may be retained by each interested party in time for examination and revision, if necessary, before the documents are required for use.
Where this specification requires notice of inspection to be given for any part of the

work, that part shall not have further work placed on it or be covered up without prior approval.

2.Demolition

Standard
Carry out demolition work in accordance with AS 2601 -2001.

Procedure
Do not use explosive in demolition works.
All demolition work shall be carried as per council regulations and conditions issued.

Bushfire Controls
At the commencement of works and in perpetuity all grounds within the subject site shall be maintained as an Inner Protection Area as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of Planning for Bush Fire Protection 2019.

3. Ground Works

Survey Marks
Before using survey marks placed on the site check that they are the marks shown on the drawings, that they have not been disturbed and that their levels agree with the levels of existing features on the site.

Discrepancies
Notify the Superintendent immediately if any discrepancies are discovered so that an instruction can be issued before work is continued.
A discrepancy means a difference between Contract information about the site and conditions encountered on the site and may include the nature or quantity of the material to be excavated or placed, existing site levels or services and other obstructions below ground.

Inspection
Give two working days‟ notice so that the following may be inspected:
- areas to be cleared
- trees to be retained identified and protected
- excavation completed to contract levels
- filling completed to contract levels

- services trenches excavated
- services laid and ready for backfilling

Give notice immediately should the following be encountered in the excavations:
- bad ground, including filling liable to subsidence, ground containing cavities, faults or fissures, ground contaminated by harmful substances or ground which becomes soft, wet or unstable.

Trees to be retained

Mark trees to be retained by suitable non-injurious, easily visible, removable means of identification, and remove the marks on completion.
Provide temporary protective enclosures around trees to be retained, consisting of four strands of fencing wire supported on star pickets.
If it is necessary to perform any work on trees, apply for permission from the relevant authorities and await instructions.
Perform repair work on any tree damaged during the work at no extra cost.
If repair work is considered impractical, or is attempted and is rejected. If so directed. remove the tree and root system, make good as necessary, and either replace the tree at no extra cost with a replacement tree of the same species and similar size, or pay damages.

Site clearing

Remove everything on or above the site surface, including rubbish, scrap, vegetable matter and organic debris, scrub, timber, stumps, boulders and rubble. Grub out stumps and roots over 75mm diameter to a minimum depth of 500mm below subgrade under buildings or paving, or 300mm below finished surface in unpaved areas. Remove the surface layer of the natural ground to a depth of 100mm Remove surplus excavated materials or site clearance material from the site. Stockpile site topsoil approved for re-use before placing.

Dewatering Keep groundwork‟s free of water. Place construction, including masonry, concrete and services on ground from which free water has been removed. Prevent water flow over freshly laid work.

Subgrade preparation

Subgrade under pier and beam slabs:- Ensure that subgrade provides stable formwork for the slab and beam concrete work over.

Site restoration

Upon completion of the Works, restore the natural ground surfaces of the site (ie. the surfaces which the Contract does not require to be altered) to the condition existing at the commencement of the work under the Contract.

Filling
Provide filling free from perishable matter, imported on to the site from an approved source unless the specified filling type can be provided from spoil recovered from the excavations. For general filling use graded material with a maximum particle size of 75mm and as nominated by structural engineer. For hardcore use inorganic hard material capable of being compacted to an even stable surface.

Excavations
Excavate over the site to give correct levels and profiles as the basis for construction, paving, filling and landscaping. Make allowance for compaction or settlement. Where excavation exceeds the required depth, or deteriorates, reinstate to the correct depth, level and bearing value.

Grading
Grade external areas to give falls away from the building, minimum1:100. Grade the ground surface under suspended floors to drain ground or surface water away from the building without ponding.

Bearing surfaces
Provide even plane bearing surfaces for load bearing elements including footings. Step as necessary to accommodate level changes. Make the steps to the appropriate courses if supporting masonry.

Service trenches
Excavate as required for underground services. Make the trenches straight between manholes, inspection points and junctions, with vertical sides and uniform grades. Backfill service trenches as soon as possible after approval of the laid and bedded service. Use general filling with no stones retained on a 25mm sieve occurring within 150mm of the service, or other materials as required for particular services.

Filling
Suitably prepare the ground surface to receive filling. Place and compact filling in layers to the required dimensions, levels and grades. *FILLING TYPES* Under pier and beam slabs and adjacent to buildings: - reasonably well compacted backfill, preferable non-reactive. Do not use clods of clay.

Termite barrier
Arrange for a licensed contractor to install a „termite barrier system to ground level walls and penetrations. Obtain a Certificate complying with the relevant Australian Standard from the subcontractor and give to the Principal. Termite protection in accordance with AS 3660 unless relevant authority regulations prohibit any such treatment. All termite barriers

shall be in compliance with BAL requirements AS 3959 if the proposed site is in Bushfire prone zone. The contractor shall furnish the Principal with all applicable certificates.

Landscaping
Complete Landscaping in accordance with documents prepared by landscape architect. Allow to co-ordinate relevant trades, as noted subsequently in this Specification, with landscape works as required for the completion of the works.

4. Concrete Inspection

Give two working days‟ notice prior to pouring concrete for inspection of underlays, formwork, reinforcement, cores and embedment‟s and as stipulated by engineer.

Testing
Ensure concrete has been tested for compliance with specified compressive strength in accordance with engineer‟s details and specifications. . Remove rejected concrete from the site. Complete the concrete works in accordance with the documents prepared by consulting Engineers

Formwork
Design and construct formwork to AS 3600 so that concrete, when cast in the forms, will have the dimensions, shape, location and surface finish required by the Contract. Construct formwork so that the finished concrete is within the tolerances stated in AS 3600 and engineers details and specifications.

Materials and construction
Perform concrete works in accordance with AS 3600 and engineer‟s details and specifications. Supply and fix reinforcement, including the necessary tie wires, support chairs, spacers and the like. Ensure cover complies with AS 3600 Place concrete in layers so that each succeeding layer is blended into the preceding one by the compaction process. Fully compact the concrete and remove entrapped air, but avoid over vibration that may cause segregation. During the curing period maintain the concrete at a reasonably constant temperature, not excessively hot or cold, with minimum moisture loss, by a suitable method.

Fixings and embedded items
Comply with AS 3600 Ensure the following maximum deviation from correct positions: Embedded items generally: Plus or minus 10 mm. Fixings and anchor bolts: Plus or minus 3mm. Galvanize ferrous fixings to AS 1650.

Slabs on ground
Construct slabs in accordance with AS 2870 and Engineers Details and specifications provide a vapor barrier in accordance with AS 2870

Construction joints
Construct movement joints in the locations and to the details shown on Engineering Drawings. Fill movement joints with jointing materials of the types shown and as recommended by the material manufacturers for the location and type of joint.

Applied finishes
Provide applied finishes as listed in the Exterior Schedule of Finish.

Paths finish
Provide an exposed aggregate finish to driveway and paths as shown on Landscaping Drawings and exterior schedule of finishes contained wholly within the subject site. Driveway crossover and any modification to driveway lay backs shall be in strict accordance with the Council requirements and approved conditions.

Falls and levels
Grade finish to even falls as necessary to drain the surface to drainage outlets without ponding and in accordance with hydraulic details and specifications.

Tanking membrane
Install a complete waterproofing system to: planter boxes, retaining walls and wall surfaces below grade Supply and install an approved reinforced membrane flexible sheet, reinforced PVC 1.5mm waterproofing membrane or equivalent by a licensed contractor in strict accordance with manufacturer‟s details and specifications. The licensed contractor shall furnish the proprietor with all necessary certificates of compliance. To external wall surfaces of building which are below grade and are to be backfilled, apply an approved and complete wall drainage cell membrane in accordance with engineer‟s details and specifications.

5. Masonry

Standard Materials, construction and detailing to AS 3700, AS 1619, AS 2350

Inspection
Give sufficient notice so that inspections can be made at the following stages: damp-proof courses bottoms of cavities after cleaning out. Control joints ready for insertion of joint filler.

Mortar
Provide mortar materials in accordance with AS 3700 provide a mortar mix in accordance with AS 3700. Do not use additives. Mortar Proportions Location
(cement: lime: sand) 1:1:16 All masonry
Mortar Colour Location
As selected All masonry

Brick schedule
Provide clay bricks in accordance with AS 1617 Provide concrete blocks in accordance with AS 4455

Workmanship
Lay bricks in accordance with AS 3700 Clean masonry progressively as the work proceeds. Clean face work to remove mortar smears, stains and discoloration.

Setting out
Set out masonry with bed joints and vertical joints of uniform width and with the minimum cutting of masonry units. Rod: 76 mm high units (brickwork) 190mm high units (block work) Bond: Stretcher bond in single leaf construction Joint Profiles Exterior Visible Flush Finish

Corrosion protection
Provide suitable corrosion protection for metal items built into or in contact with masonry in accordance with AS 3700

Wall ties
Install Medium Duty wall ties to AS 3700 Fix masonry veneer ties at abutments to AS2699 and as follows: To timber frames: Galvanized clouts or integral spikes. To concrete: Non-corrosive masonry anchors. Ties or anchors required to extend across control joints shall transfer the forces necessary to maintain the stability of the masonry without impairing the effectiveness of the joint.

Plate fixing
Fix timber wall plates to masonry as required by AS 1684, by either straps or bolts.

Bed joint reinforcement
Install in accordance with AS 3700. Place in bed joints in the course below the top and above the bottom of walls, below and above openings, and at vertical intervals not exceeding 500 mm.

Steel lintels

Build in galvanized mild steel flat or angle lintels in accordance with engineer‟s details and specifications.

Cavity walls
Construct to as 3700 clause Minimum cavity width: 50mm. Openings: do not close the cavity at the jambs of external openings Cavity fill: fill the cavity to one course above finished ground level with mortar weathered towards the outer leaf.

Weep holes
Provide weep holes at maximum spacing of 1200mm in the form of open perpends to external leaves of cavity walls in the course above damp-proof courses, flashings, and cavity fill, and at the bottoms of unfilled cavities. Weep holes shall be in accordance with requirements set out in AS 3959

Damp-proof course
Provide a continuous run of LC approved damp course material to full width of wall thickness in accordance with AS 2904 into the following locations:
Walls adjoining infill floor slabs on membranes: In the course above the underside of the slab.

In internal walls and inner leaves of cavity walls. Project 40 mm and dress down over the membrane turned up against the wall.

Cavity walls built off slabs on ground: In the bottom course of the outer leaf, continuous across the cavity and up the inner face, turned 30 mm into the first course of the inner leaf above the slab; or, in masonry veneer construction, fastened to the inner frame above floor level. Project 10 mm beyond the external slab edge and turn down at 45□. Internal walls built off slabs on ground: In the first course above floor level.

Lay in long lengths. Step as necessary, but not exceeding 2 courses per step. Preserve continuity of damp proofing at junctions of damp proof courses and waterproof membranes.

Flashings
Build in approved flashings to AS 2904 in the following locations:

Under sills: 50mm into the first joint below the sill, extending up across the cavity and under the sill.

Over lintels to openings: Full width of outer leaf immediately above the lintel, continuous across cavity, 50 mm into the inner leaf, two courses above; or, in masonry veneer construction, turned up against the inner frame and fastened to it.

Over roofs: Full width of external masonry, stepped to roof slope. Turn down not less than 50 mm over base flashing. Turn up within cavity, sloping inward across the cavity and fixed to or built in to the inner leaf at least 75 mm above.

At abutments with structural frames or supports: Vertical flashing in the cavity from 150 mm wide material, wedged and grouted into a groove in the frame opposite the cavity. At stiles where cavities are closed: Full height flashing extending 75 mm beyond the closure into the cavity, interleaved with the sill and head flashing at each end. Fix to frame stiles.

Control joints
Provide control joints to AS 3700 and as directed by the Structural Engineer. Use sealant and bond breaking back-up material compatible when used together and non-staining to masonry. The depth shall be not greater than the joint width, nor less than two-thirds the joint width.

Ventilation
Subfloor area shall be ventilated and cross ventilated by means of evenly distributed openings in the external walls having an unobstructed area of not less that 2100mm per square meter of external wall and not less than 200mm in depth in every part. Vents to be immediately below bearers or structural slab. Provide sufficient cross ventilation through still air in accordance with Engineers details, specifications and in compliance with AS 3959.

Bushfire controls
New construction facing northeast and southeast shall comply with Section 3 and Section 8 (BAL 40) of the Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant BAL-40 requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas 2021*.

6. Metal work

Shop drawings
Supply shop drawings of the following, where applicable: structural steel assemblies, showing the details necessary for site assembly, metal items fabricated to detail: gates, awnings, and balustrades.

Inspection
Give two days‟ notice so that inspection may be made of: Structural steel assemblies shop fabricated and ready for site delivery. Structural steel assemblies erected on site, prior to encasing or cladding. Metal items fabricated to detail and ready for site delivery.

Materials
Use metals suited to their required function, finish and method of fabrication, in sections of adequate strength and stiffness for their purpose. Structural steel: To AS 4100 and structural engineers details and specifications

Workmanship
Keep edges clean, neat and free from burrs and indentations. Remove sharp edges without excessive radiusing. Fit joints accurately to a fine hairline. Form bends in tube without unduly deforming the true cross section.

Match colours of sheets, extrusions and heads of fastenings in colour finished work. Separate incompatible metals by concealed interlayers of suitable materials and thickness‟. Make provision, sufficient to prevent harmful effects, for thermal movement in joints and fastenings.

Structural steel – metalwork
Steel structures are to comply with AS 4100 and in accordance with engineering details and specifications.

Fastenings
Use fastenings of a type appropriate to the work, capable of transmitting the loads and stresses imposed, and sufficient to ensure the rigidity of the assembly.

Hot dip coatings
Complete welding, cutting, drilling and other fabrication before coating. Unless otherwise specified, zinc coatings shall be by the dip method in accordance with engineer‟s details and specifications.

Protection
Protect metalwork during the Works as necessary to prevent damage or defacement.

Suspended ceiling system
Fix plasterboard ceilings with screw fixings to a lightweight galvanized steel suspended ceiling system as indicated on interior suspended ceiling layouts an in accordance with manufacturers details and specifications.

Balustrades
All balustrades shall be supplied and install, to comply AS 1170, AS 3566.

Letter boxes
Supply and install custom made single letter box as indicated on drawings. Letterbox to have key lock and rear retrieval set in accordance with Australia Post letter box requirements AS 4253. Letter box shall be prepared to receive a painted finish as nominated in the exterior schedule of finishes unless otherwise specified.

Meter boxes
Supply and install galvanized steel boxes as housing for electrical meters. Exact size, doors and locks are to be in accordance with the requirements of each respective authority. Visible surfaces to have painted finish matching adjacent wall colour, unless otherwise specified.

Structural steelwork
Construct galvanized steel posts in accordance with Structural Engineer‟s documents details and specifications. Apply painted finish in selected colour as nominated in exterior schedule of finishes.

Privacy screens
Supply and install Exterior aluminum fixed blade to openings as indicated on architectural drawings. Blades shall be fixed within extruded aluminum section in strict accordance with manufacturer‟s details and specifications. Blades, frames and accessories shall be prepared to receive nominated powder coat finish as nominated in the exterior schedule of finishes.

Lintels
All lintels, beams and support members shall be in strict accordance with Engineers details and specifications.

7. Wood work

Inspection
Give two working days‟ notice so that erected structural woodwork may be inspected before it is covered up by sheeting, lining and roofing.

Timber identification
Be able to provide written evidence that the timber used in the Works complies with the Contract requirements regarding species, grade, stress grade and preservative or water-repellent treatment.

Seasoning
Make milled or dressed products in accordance with AS 1080.1

Timber grades
Grades, as defined in Australian standards where applicable, shall be those normally used in the type of work for which the timber is intended.

Visible work
Where timber, including sawn timber, is required for work having clear or stained finishes, keep the visible faces, edges and corners clean and free from blemishes and marks which will be visible in the finished work.

Dimensions
Actual cross-sectional dimensions of timbers may vary from the dimensions stated on the Drawings by the tolerances (if any) permitted in the relevant Australian standards.

The actual dimensions of dressed or milled timbers shall be not less than the stated dimensions, except where qualified by a term such as " nominal" or "out of" or equivalent,

to which a machining tolerance of – 3 mm maximum per dressed face (-5 mm maximum for North American softwoods) shall apply.

Workmanship
Perform the operations and provide the accessories necessary for the satisfactory completion of woodwork items. Ease and adjust moving parts, lubricate hardware, and leave the completed work in a sound clean working condition.

For joinery scribe internal and mitered external joints. Where joinery is specified to have clear or tinted finishes, match adjacent pieces.

Where fastenings are unavoidable on visible joinery faces, sink them below the surface and fill the sinking flush with a suitable material which, in surfaces specified to have clear or tinted finishes, shall be matching wood plugs showing face grain (not end grain). Cover the visible edges of built-up joinery panels with edge strips of material matching the panel face.

Fastenings
Provide fastenings of types appropriate to their purposes, sufficient to transmit the loads and stresses imposed and ensure the rigidity of the assembly, and install them without splitting or otherwise damaging the timber. Galvanize steel fastenings in accordance with

AS 1650, where: exposed to weather; in external timbers such as weatherboards or decking; in contact with chemically treated timber.

Adhesives
Provide adhesives of types appropriate to their purpose, and apply them so that they transmit the loads and stresses imposed and ensure the rigidity of the assembly, without causing discoloration of finished surfaces.

Framed timber structures
Build in accordance with AS 1684, AS 1720 and AS 3959 Build all timber walls framing in accordance with Architectural layouts and engineering details and specifications. Build exterior single skin wall to receive: QT Eco series fire rated wall cladding system 50mm thick (or equivalent), finished with novatex 3 coat acrylic texture coating 6-8mm thick render system. James Hardies Sycon Matrix wall cladding system.

Thermal insulation
Provide thermal insulation to walls as follows and in accordance with BASIX commitments certificate no **A1796564**

Roof framing
Supply and fix timber roof structure in accordance with Engineers details and specifications. Provide all necessary accessories and fixtures.

Eaves & soffits
Supply and fix villa board fibrous cement sheets to eaves & soffit lining to exterior covered areas. All joints shall be set, sanded and set ready to receive nominated paint finish. Work shall be in accordance with AS 3959

Timber trim
Provide timber trim such as beads, mouldings and stops where necessary to make neat junctions between components and finishes specified in this Section. All fixing details shall be in strict accordance with manufacturer‟s details and specifications.

Joinery
Supply and install joinery units as detailed, including kitchen cupboards, wardrobes, vanity units – refer to interior schedule of finishes and interior joinery drawings.

8. Glazing

Workmanship
Install glazing in accordance with AS 1288 and in accordance, current BASIX commitments certificate no **A1796564**

Use methods such that building movements are not transferred to the glass.

Marking
Ensure safety glass is permanently marked by the manufacturer to AS 2208 Mark any pieces not already marked to AS 1288 Do not cut, work or permanently mark toughened safety glass after manufacture.

Cleaning and replacement
On completion replace damaged glass. Leave the whole of the work clean, polished and in good condition.

Mirrors
Supply and install mirrors to Bathrooms, WCs and Ensuite as selected.

9. Hardware

Approved manufacturer
Obtain specified proprietary items from approved manufacturers.

Installation
Match exposed fixings to the material fixed. Give to the Principal the manufacturers‟ recommendations for maintenance of the hardware items installed.

Hinges
All hinges to timber doors are to be stainless plated steel butt hinges appropriate to the specific application.

Locks and latches
Install locks and latches free from flaws and defects, with parts firmly joined, and working parts accurately fitted to smooth close bearings, free from rattle or excessive play, appropriately lubricated.

Door furniture
All door hardware installation and provisions shall be in strict accordance with manufacturers details and specifications.

10. Roofing

Framing
Timber framing to AS 1684/AS 4600 standards. Design and constructed to engineers and manufaturers standards and specifications.
That the new roofing and new construction facing northwest and southwest shall comply with Section 3 and Section 9 (BAL FZ) of the Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant BAL-FZ requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas 2021*.

Samples & material
Supply and install tiled roofing in nominated colour as selected Ensure all roofing; fixing and accessories are in strict accordance with supplier‟s details and specifications.

Inspection
Give two working days‟ notice so that inspection may be made of those parts of the roofing, sarking, insulation and roof plumbing installations which will be covered up or concealed.

Warranties
Give to the Proprietor the warranties offered by the manufacturers of specified roofing materials.

Protection
Keep the roofing and rainwater systems free of debris and loose material during construction, and leave them clean and unobstructed on completion.

Metal separation
Prevent direct contact between incompatible metals, and between green hardwood or chemically treated timber and aluminum or coated steel, by either: applying a suitable anti-corrosion, low moisture transmission coating to contact surfaces, *or* inserting a suitable separation layer.

Sarking
Provide Fletchers Permastop 55mm general builder‟s blanket R Value 1.3 or *equivalent* To comply with AS 4200 .1 for materials and pliable sarking, AS 4200.2 for installation, AS 3999 for reflective foil.

Thermal insulation
Provide bulk thermal insulation in accordance BASIX commitments certificate no **A1796564**

Rainwater goods
Provide the flashings, cappings, gutters, outlets and downpipes necessary to complete the roof system in accordance with AS 2179 and engineers details and specifications. Use only purpose made fixings and accessories as supplied by the manufacturer. Box Gutters to engineers details Downpipes to be 90mm round, painted finish *(as selected finish)* Rainwater heads to engineers details Painted finish as selected.

Flashings
Flash roof junctions, up stands, abutments and projections through the roof. Preform to required shapes where possible. Notch, scribe, flute or dress down as necessary to follow the profile of adjacent surfaces. Flash projections above or through the roof with two part flashings, consisting of a base flashing and a cover flashing, with not less than 100mm vertical overlap.

Bushfire Controls
Additional elements to be adhered to as per the Bushfire Assessment report No. **250941**

11. Windows and doors

Fabrication
Make junctions so that no fixings such as pins and screws are visible on exposed surfaces. Moving parts shall operate freely and smoothly, without binding or sticking, at correct tensions or operating forces. Where automated opening sashes are proposed allow for power supply to those sashes.

Installation
Use methods such that building loads and building movement are not transferred to the window frames.

Glazing
Supply and installations for windows as per the Bushfire Assessment report No. **250941** in accordance with manufacturers details and specifications. All glazing type and allocation shall be read also in conjunction with current BASIX commitments *Certificate No* **A1796564** and in accordance with manufacturers details and specifications.

Hardware
Provide the windows with standard hardware purpose-made or as recommended by the window manufacturer for the window system.

Window assemblies
Supply and install Aluminium or steel framed windows and doors as indicated on drawings and in accordance with current AS 2047 & AS 1288 , Bushfire requirements, council regulations, current BASIX commitments *Certificate* ***No*** **A1796564.**
Additional elements to be adhered to as per the Bushfire Assessment report No. **250941**

Junction with building
Install flashings, weather bars, drips, storm moulds, caulking and pointing so that water is prevented from penetrating the building between the window frame and the building structure under the prevailing service conditions, including normal structural movement of the building. Provide flashings and weathering‟s compatible with the other materials in the installation, and coat with a non-staining compound where necessary. Additional elements to be non combustable and to be adhered to as per the Bushfire Assessment report No. **250941**

Door assemblies
Supply and install timber doors and frames in accordance with AS 2689, AS 2688 and as for the Door Schedule. Supply and install cavity sliding doors and surface sliding doors in accordance with manufacturer‟s details and specifications as identified in floor plans. Additional elements to be non combustable and to be adhered to as per the Bushfire Assessment report No. **250941**

12. Tiling

Materials
Use materials compatible with the tiles and surfaces to be adhered and in accordance with relevant manufacturer‟s recommendations for the conditions of use.

Samples
Submit samples of the specified tiles, including accessories, illustrating the range of variation in colour and finish.

Tiles
Ensure tile types, sizes, colours, surfaces and general appearance conform to approved samples. Cement mortar & other adhesives shall comply with AS 3958.1 or manufacturer‟s detail.

Accessories
Provide tile accessories as required, matching the surround tiles in composition, colour and finish.
Provide glazed edges (round edge where available) in visible edges of glazed tiles and purpose-made step tread nosing‟s to floor tiles on stairs, landings and thresholds.

Workmanship
Fix wall tiles generally before floor tiles and in accordance with manufacturers details and specifications.

Cut tiles neatly to fit around fixtures and fittings, and at margins, where necessary. Drill holes without damaging tile faces. Rub edges smooth without chipping. Return tiles into sills, reveals and openings. Butt up to returns, frames, fittings and other finishes. Strike and point up edges where exposed. Cut recesses where necessary for soap holders and the like. If necessary, distribute variations in colour or pattern uniformly, by mixing tiles before laying.

Falls and levels
grade floor tiling to even and correct falls to floor wastes and elsewhere as required. Make level junctions with walls. Where walls are not required lay level. Ensure a maximum deviation of 1:300 of the finished floor from its true form. Maintain finished floor level across changes of floor finish including carpet.

Substrates Suitably prepare substrates to receive the bedded finish. Where the substrate changes (e.g. From concrete to brick) form a movement joint.

Setting out
Set out tiling with joints accurately aligned in both directions. Level and plumb wall tiling joints. Use whole or purpose-made tiles at margins where practicable, otherwise set out to give equal margins of cut tiles. Continue tiling fully behind fixtures, such as WC pedestals and cisterns and hand basins, which are not built into the tiling surface. Set out tiles to give

uniform joint widths within the following limits: Internal wall tiling: minimum 1.6 mm – maximum 3.0 mm. Floor tiling nominal 1.6 mm or as dictated by the pattern.

Preparation of tiles
Fix tiles dry; do not soak. Soak porous tiles in water for half an hour and then drain until the surface water has disappeared.

Bedding
Thin bed: Minimum thickness 1.5 mm, maximum 3 mm. May be used when the background deviation does not exceed 3 mm when tested with a 2 m straight edge. The entire tile back shall be covered with adhesive when the tile is bedded.

Thick bed: Minimum thickness 3 mm, maximum 12 mm, except that mortar beds for floor tiles may be up to 20 mm thick. Use on backgrounds with deviations up to 6mm when tested with a 2 m straight edge, and with tiles having deep keys or frogs. Mortar beds for floor tiles: Lightly dust the screeded bed surface with dry cement and trowel until the cement is damp. Alternatively spread thin slurry of neat cement, or cement based thin adhesive, on the tile back.

Grouting
Commence grouting as soon as practicable after bedding has set. Clean out joints as necessary before grouting. Fill the joints solid and tool flush. Clean off surplus grout. Wash down when grout has set. When grout is dry polish the tile surface with a clean cloth.

Cleaning and protection
Keep the work clean as it proceeds and protect finished work from damage. Keep traffic off floors until the bedding has attained its working strength. On Completion clean the tiles surface with an appropriate tile cleaning agent, and polish.

Movement joints
Provide movement joints as follows:- over structural movement joints; at junctions between different background materials; to divide large tiled areas into bays, maximum 5 m wide. Width: Not less than 6 mm or more than 10 mm. Depth: Joints shall extend right through the tile and bed to the background. Material: A resilient sealant applied over compressible filler or backing rod.

Caulked joints
Provide caulked joints as follows: - where tiling is specified to be cut around sanitary fixtures; - around fixtures interrupting the tile surface; - at junctions with windows, door

frames and built-in cupboards. Make joints 5 mm wide and equal to tile thickness. Fill with silicone sealant and finish flush with tile surface.

Floor finish dividers
Finish tiled floors at junctions with differing floor finishes with a 4 mm clear anodised angle dividing strip suitably fixed to the substrate, with top edge flush with the finished floor. Where changes of floor finish occur at doorways make the junction directly below the closed door.

Waterproofing wet areas
Prior to tiling of floors and walls to wet areas, entire areas shall be completely waterproofed by a licensed applicator using and approved proprietry system designed for wet area in accordance with BCA-F1.7 or as amended. Membrane shall be waterproof not water resistant. System must include upstands, angles and a turn shall be provided at door thresholds. Membrane shall be dressed into floor waste outlets. Contractor shall supply certificates showing membrane type , installation date, name and license number of approved installer and shall be presented to the principal upon completion of works. **13.**

Plastering Extent
Supply and install Gypsum Plasterboard in accordance with AS 2588 and AS 2589 to ceilings and walls. Supply and install Wet Area Plasterboard/Villa board to all bathroom, ensuite and laundry walls. Prepare surface for tiling and painting *(as indicated on interior drawings).* Surface preparation and fixing shall be in strict accordance to manufacturers details and specifications.

Materials
Use materials in accordance with the relevant Australian Standards.

Application Square set all junctions between window/doors reveals, and all edges of bulkheads/suspended ceilings.

Cornice Provide nominated cornices generally to wall/ceilings junctions. Where bulkheads, dropped ceilings or pelmets are proposed provide square set finish to exposed edges as detailed in suspended ceiling layouts.

Inspection
Give two working days‟ notice to allow inspection of: the background immediately prior to commencement of sheeted lining the completed work prior to painting.

Preparing backgrounds
Before applying sheeted linings make good any defects in the background. Remove deleterious and loose material and leave the surface clean. Ensure that water pipes and the like are sheathed to permit thermal movement. Where ungalvanised steel items are to be embedded in gypsum plaster, provide rust protection treatment not inferior to prime painting with zinc rich primer. If chases or recesses are more than 50 mm wide, cover with metal lath extending not less than 75 mm beyond each side of the recess.

Joints
Provide movement joints in the finish to coincide with movement joints in the background. Rule the joint edges straight, and bevel. Provide vee joints at abutments with other finishes, changes of plane and with timber and metal door frames.

Terminations
Finish re-entrant corners square.

14. Painting

Samples
Before commencement provide 1m2 samples of each paint system on each particular background. Samples shall be approved by the owner and the Designer prior to total application.

Inspection
Give at least two working days‟ notice so that the following may be inspected: substrate prior to commencement prior to application of final coat

Materials
Use paints in accordance with AS 3730 do not combine paints from different manufacturers. Deliver paints to site in the manufacturer‟s labeled and unopened containers.

Colour selection & schedule
Selection shall be in accordance with approved interior/exterior finishes selected.

Workmanship
All paint application and surface preparation shall be in accordance with manufactures details and specifications.

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15. Plumbing & drainage

Drawings and dimensions
Drawings showing pipework layouts are diagrammatic only. Before commencing work, verify the exact positions of fixtures, plant and appliances to which the pipework is to be connected.

Pipework testing
Test pipework in accordance with the requirements of the relevant authority.

Standards
All materials and workmanship to comply with the relevant Australian Standards and in accordance with hydraulic engineers details and specifications. All work carried out shall be in strict accordance with NSW code of Practice (Plumbing and Drainage) and AS 3500.5 National Plumbing and Drainage – domestic Code

Inspection
Give at least two working days‟ notice for inspection of work to be concealed.

Workmanship generally
Lay pipelines to uniform gradients falling to the outlets, straight between required changes of directions, with watertight joints aligned flush at internal surfaces, and with the spigot ends in the direction of flow. Keep the number of joints to a minimum.

Lay drains to gradients complying with the relevant authority‟s requirement.

Provide inspection openings so that each straight length of sewer line can be inspected in at least one direction. Seal the openings with purpose-made covers.

During construction provide temporary covers to openings and keep the pipeline free of debris. On completion flush the pipeline with water and leave it cleans.

Locate fittings requiring maintenance or servicing in accessible positions.

Install pipework so that it is accessible within ducts or non-habitable enclosed spaces and does not appear on external walls.

Provide all pipework and accessories for the correct installation of all selected fixtures and fittings in accordance to manufacturer‟s details and specifications.

Underground installations
Provide not less than the following cover to underground pipelines external to the building: Generally: 300 mm. Pipes subject to vehicular loading: 600 mm. Where the required minimum cover cannot be provided, encase the pipeline with 20 Mpa concrete not less than 150 mm thick all round.

Supports
Provide supports including hangers, saddles and bolted clips sufficient to secure above ground pipework to adjacent surfaces and to support it at joints, at changes of direction, and at intervals necessary to prevent sagging of the pipework. Make provision for adjustment of gradient as required and for thermal movement in the pipeline.

Pit construction
Provide pits/grates in accordance to hydraulic engineer‟s details and specifications.

Soil and waste system
Provide sanitary plumbing and sewer pipelines to connect the outlets of sanitary fixtures to the sewer main. Pipes to be UPVC with solvent welded joints except where otherwise required by the relevant statutory authority.

Storm water system
Lay storm water drains as necessary to connect downpipes, floor waste and planter drains, surface drains, agricultural drains and drainage pits to the existing storm water system and in accordance with hydraulic engineers details and specifications and council regulations.

Interior floor drains
Supply and install chrome floor wastes to wet areas as shown on interior drawings and interior schedule of finishes.

Water supply system
Install hot and cold water supply systems as necessary to connect all new fittings as shown on architectural and interior drawings and in accordance with AS3500. Provide approved pipes from authority mains to boundary, install water meter and connect to all nominated services. Pipe work to be copper, sized by the Sub-contractor to suit the requirements of the supply authority. All sizing shall be correct to avoid water hammer and poor water pressure/flow.

Hot water service
Confirm all equipment placement, provisions , fixing and collector panels on site prior to construction. All equipment shall be located remotely and not visible from street frontages.
Service to kitchen, laundry Service to Ensuite, Bathrooms & Powder Rooms.

Sanitary ware, taps & fittings
Supply and install sanitary ware, taps, spouts and shower roses, and bathrooms fittings scheduled in the Interior Schedule Of finishes. Allow for the installation of these items as well as the supply and installation of all other valves and outlets, including external hose cocks as shown, for the proper functioning of the plumbing works. All sanitary ware, taps and fittings shall be in accordance with BASIX commitments Certificate *No* **A1796564**

Gas service
Provide gas in accordance with Local Supply Authority. The plumber shall be responsible for the gas service from property alignment, including fixing of meter and meter cover. Provide gas provisions to include but not limited to; Nominated gas cook top. Nominated Hot water Nominated Exterior bayonet for BBQ

Setting out
The drawings show the locations of major items but the general layout is diagrammatic only. Set out each item in its optimum location for efficiency and appearance. Allow to vary the location of each fitting by 3m from the position shown on the drawings at no extra cost. The plumber shall furnish themselves with all necessary provisions required for the installation and correct service supply for operation of the nominated appliance and or equipment.

16. Electrical services

Installation
Supply, install, test and commission electrical services shown on Electrical Layouts. Install wiring to AS 3006 and the Insurance Council of Australia. Installation to be done in accordance with AS 3000. Concealed wiring as and where practicable. Arrange with Supply Authority for connection from mains to meter boards or connect to existing metering and distribution system, extended as required.

Inspection
Give 2 working days‟ notice so that inspection may be made of concealed cabling prior to covering.

Mains supply
Connect the new installation to the mains supply in accordance with the requirements of the local electricity supply authority.

Accessories
Install flush mounted accessories in wall boxes in masonry and in mounting brackets in stud walls.

Appliances
The following appliances are permanently wired:

Location	*Item*
Kitchens	*Oven*
	Induction Cook top

Confirm location of GPOs and switches for kitchen and laundry appliances with client before proceeding.

Telephone
Supply a telephone serving to locations as shown on Electrical Layout. Arrange with supply authority *(Telstra)* for all connections and cabling requirements and provisions.

Television – electrical services
Connect television outlet points as shown on Electrical layouts. Provide conduit for installation of Foxtel/Foxtel iQ. Arrange with supply authority connections and cabling requirements and provisions.

Light fittings
Supply and install light fittings listed in the Lighting Schedule and as located on the drawings. Lighting selection shall be in accordance with BASIX Certificate ***No*** **A1796564**

17. Mechanical systems

Mechanical systems include a complete system of exhaust ventilation for bathrooms, ensuite, laundry and ducting of kitchen range hood. The works are to be carried out on a design and construct basis, with final design details being submitted for approval by the Principal before work proceeds.

Other trades should allow to co-ordinate with mechanical works, including cutting penetrations, chasing and ancillary electrical systems necessary to complete the work.

18. Bushfire requirements

Note: Refer to Bushfire Assessment Report **No. 250941**

Asset Protection Zones

1. At the commencement of works and in perpetuity all grounds within the subject site shall be maintained as an Inner Protection Area as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of Planning for Bush Fire Protection 2019.

Construction

2. That the new roofing and new construction facing northwest and southwest shall comply with Section 3 and Section 9 (BAL FZ) of the Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant BAL-FZ requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas 2021*.
3. That new construction facing northeast and southeast shall comply with Section 3 and Section 8 (BAL 40) of the Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant BAL-40 requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas 2021*.
4. The new works comply with the construction requirements in Section 7.5 of *Planning for Bush Fire Protection 2019.*
5. All new fencing shall be non-combustible.

Landscaping

6. That any new landscaping is to comply with table 7.4a under *Planning for Bush Fire Protection* 2019.

Gas (where applicable)

7. That any new gas services are to comply with Table 7.4a of *Planning for Bush Fire Protection* 2019 as follows:
- reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
- all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
- connections to and from gas cylinders are metal;
- polymer-sheathed flexible gas supply lines are not used; and
- above-ground gas service pipes are metal, including and up to any outlets.

As the subject site is bushfire prone in accordance with section 4.14 of the *Environmental Planning and Assessment Act* 1979 development consent cannot be granted unless the proposal satisfies the relevant specifications and requirements of *Planning for Bush Fire Protection* 2019 (PBP) or the consent authority has consulted with NSW RFS.
As the proposal relates to the alterations and additions to an existing dwelling the proposal must comply with the bushfire protection measures detailed within Chapter 7 'Residential Infill Development' of PBP. The proposed works will be constructed to sections 3 & 9 (BAL FZ) under AS 3959 – 2018 and the additional construction requirements detailed in section 7.5 of PBP or the relevant BAL-FZ requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas 2021*. The northeastern and southeastern elevations have been downgraded in accordance with section A1.8 of PBP and *Application of Shielding Provisions* document issued by Development Planning & Policy (NSW RFS) dated October 2022.

Note: Some clauses in this specification may not be relevant to this project.