**PART I GENERAL**

**STANDARDS**

* Timber framing and flooring: to AS1684.4 or AS1720.1 and Part 3.4.3 of the BCA
* Natural durability of timber: To AS5604
* Structural steel work including footing connectors, steel plates etc: To AS4100
* Timber grading: AS/NZS1748, AS2082, AS3519

**WORK INCLUDED**

* Structural design, fabrication and installation of heavy timber beams, columns, & trusses. Perform all work required to properly complete the heavy timber work as shown on the drawings and as specified herein. Include any and all modifications to the design that are structurally required.
* Provide all labour, materials, temporary bracing, crane, hoists, rigging, equipment, and services necessary to perform the Work of this Section. The work includes, but is not necessarily limited to the following:
* Timber components of every description, including beams, girts, plates, braces, ties, pegs, webs.
* Miscellaneous materials for heavy timber construction, including but not limited to: Plate connectors and bolts, direct glazing and related materials.
* The work does not include, unless otherwise specified, standard stud framing, gangnail trusses, or any other framing materials other than those included in the plans provided.

**RELATED WORK**

* Submit representative samples of wood species indicated, of the grade and finish specified, for Architect’s approval.
* Furnish complete Frame Plans at completion of frame design work.
* Frame plans shall be certified by a professional structural engineer registered with the governing body in the appropriate State.
* Truss design shall provide the required stability and resistance to gravity loads.
* No frame components shall be ordered or fabricated prior to the approval of the Frame Plans by the Architect.

**MEASUREMENTS**

* The Contractor shall obtain and verify all measurements and conditions at the building as required for the proper installation of the work. They shall be responsible for the accuracy and fit of the various parts of the work and the proper building-in of same.

**PROTECTION AND HANDLING**

* Protect frame components and keep under cover in transit and at the job site. Stack to ensure proper ventilation and drainage. Store under cover in a well ventilated area.

**PART 2 PRODUCTS**

**GENERAL**

* Trusses and all components for a complete installation to be supplied by:

Traditional Timber Frames Pty Ltd

PO Box 43 Marulan, NSW, 2579

02 4867 6000

**HEAVY TIMBER FRAMING**

* Timber shall be sized according to engineering requirements. Minimum size shall be 100mm x 100mm in all directions.
* Timber species:

F7 Seasoned Pine

F7 Green Oregon

F8 Green Hardwood

F8 Green White Cypress

F8 Seasoned Oregon

F11 Seasoned White Cypress

F17 Seasoned (KD) Hardwood

LVL Laminated Veneer Lumber

* Unless otherwise noted, all timber shall be per AS/NZS1748, AS2082, and/or AS3519

**PEGS**

* Peg material shall be straight grained, seasoned, and knot free, from Spotted Gum.

**MISCELLANEOUS HARDWARE**

* Furnish and install all necessary hardware and metal shapes required for assembly and erection of the framing.
* All steel shapes, plates, and tubes, unless otherwise specified, shall conform to AS4100
* All other steel shapes, plates, tubes, etc. shall be thoroughly cleaned and given one heavy shop coat of an approved primer (black), well worked into all joints and open spaces. After erection, touch-up as required. Surfaces which are not accessible for field painting shall have one shop coat of black paint before leaving the shop.
* Bolts shall be blackened/zinc/galvanized with blackened/zinc/galvanized washers and nuts.

**FINISH**

* All frame components shall be pre-finished on all surfaces and joints with one coat of Organoil Woodguard or equivalent natural oil.

**PART 3 EXECUTION**

**INSTALLATION**

* Installation of timber frames shall be in accordance with the details and notes on the Drawings, the approved Frame Plans, and the best trade practices.

**JOINERY**

* Joinery shall be in best of the early English tradition, designed for strength, shrinkage, checking, and twisting. \*\***OPTIONAL\*\*** Metal connections shall not be used unless required by the structural design, and, in those cases, must be concealed and held at an absolute minimum, meeting the Architect’s approval. All workmanship shall be of the very highest quality.
* Or steel as detailed on Structural Drawings.
* All joinery shall be accurately cut so as to make a neat, snug fit.

**ERECTION**

* Frame components and assemblies must be checked for dimensions and anchorage accuracy before erection.
* Temporary bracing shall be provided to adequately protect all persons and property and to insure proper alignment.
* Padding or non-marking slings shall be used during mechanical lifts.
* The assembled trusses shall be reasonably straight, plumb, level and square. Portions of the structure not adequately braced by design shall have temporary braces until the cladding is applied.
* All joints shall be reasonably tight.
* All joints that require pegging shall have pegs driven until snug. Pegs shall protrude 10mm on both sides of the joint except where they should be flush as directed above. Broken pegs shall be removed and replaced. Pegs with a mushroomed head shall be cut off below that portion
* Tools used to drive or pull joints together shall not permanently mar the finished surfaces of the trusses.