TRADES HALL STAGE THREE

MENU OF METHODS FOR REPAIR

54 Victoria Street, Carlton VIC 3054

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Prepared for

VICTORIAN TRADES HALL COUNCIL

Prepared by



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GENERAL WORKS REPAIRS

CODE WORKS

G1 Remove redundant fixtures and fittings

Demolish redundant services, fixtures and fittings from substrate, including brackets, lighting, lighting cables, mounting plates, bolts, nails, pipes, conduits, sealants, timber and the like.

Where holes are to masonry substrate and less than 30mm in diameter carry out mortar repair with approved colour matched mortar mix, provide samples of colour matched mortar for review and approval. Where holes are larger than 30mm in diameter to brickwork, cut out and replace the brick with salvaged brick to match existing.

Where holes are to render / plaster finished surface, carry out mortar repair to substrate with approved mortar mix. Repair render / plaster in accordance with appropriate methodology below to match original condition including reinstatement of moulded profiles.

G2 Façade cleaning

Wash down all façade surfaces to remove organic growth, lichen, moss, vegetation, guano and debris using a nylon stiff bristle brush, low pressure warm water and disinfectant.

Apply *Peerless Jal Quatramine 50* in diluted solution of 1:100 and wash down facades with pressure water from 300PSI to 600PSI max. at 60°C to 90°C max scrubbing with a nylon brush to remove debris. Capture all waste and water runoff for disposal in accordance with relevant authorities' guidelines.

Remove all organic growth, guano, dirt, mortar and cement residue, calcimine finishes, industrial carbon residues and the like to all masonry and rendered/ concrete surfaces. Cleaning of existing surfaces is to be undertaken prior to commencement of all other works. Cleaning is to be undertaken by approved sub-contractor experienced in the façade cleaning. Do not cause damage to existing material or structure.

Industrial build-ups and deposits are to be removed using a solution of 3% ammonium dichloride applied to masonry and to be washed using a low-pressure water to a maximum of 600 PSI. Undertake spot test with PH strips to confirm the substrate is neutralised to PH7.

Apply to trees and plant growth weed killer that does not contain glyphosate. Once plant has died remove plant along with root stock

Undertake samples of cleaning in-situ to the satisfaction of the Architect to determine the approved method of cleaning. The agreed sample shall be the method for which cleaning shall be undertaken and assessed. Undertake testing from lower temperature/pressure to higher.

BRICKWORK REPAIRS

CODE WORKS

BO1 Repoint brickwork

Rake out existing degraded mortar to a minimum depth of 20mm by hand or using an ArborTech saw. Do not use grinders to cut existing mortar. Clean out open joints with compressed air.

Repoint joints in specified mortar mix to match existing adjacent mortar in colour, texture and finish. Contractor is to undertake samples in situ to the approval of the Architect prior to the commencement of the works.

Allow to pre-wet joists the day before re-pointing and prior to re-pointing, ensuring the surface is damp. Re-point joints in new lime mortar colour match to adjacent existing mortar with Abilox pigment with finish to match adjacent.

BO2 Rebuild/replace brickwork

Cut out existing decayed or damaged brick by hand, do not damage adjacent bricks.

Clean out area with compressed air or water. Install salvaged brick to match existing adjacent bedded in with mortar as specified to match existing bond. Repoint in accordance with repair code B01.

Where possible use salvaged bricks from demolition works. Where additional bricks are required source new salvaged brick to match existing, providing sample for approval by the Architect prior to undertaking works.

BO3 Remove embedded item

Remove embedded metal or timber item, where required cut out surrounding brickwork to allow embedded items to be removed. Clean with compressed air or water.

Where holes measure less than 30mm diameter from existing or previous fixtures carry out mortar repair with approved colour matched mortar mix to match existing brick colour to provide a flush surface. Do not fill existing brick sockets. Prior to commencing the works undertake in situ samples of mortar repair to colour match the brick to the satisfaction of the conservation architect.

Where holes are greater than 30mm dia., cut out the existing brick and install a new salvaged brick to location ensuring in accordance with repair code B02.

HARD PLASTER REPAIRS

CODE WORKS

HP01 Crack repair (minor)

Clean out crack with compressed air to remove all dust and debris. Cut out unstable plaster back to sound substrate, allow to cut enough surrounding plaster to provide a sound key for new plasterwork to crack line. Remove loose plaster from laths. Re-plaster cut-out area, forming new plaster ceiling / moulded cornice with render coat, set coat and finish coat, keying into laths. Where applicable, re-run mouldings, make pattern from original undamaged moulding. Finish surface to blend in with retained plasterwork.

HPO2 Crack repair (major)

Clean out cracked plaster back to sound substrate to a minimum of 300mm wide (150mm on each side of the crack). Clean with compressed air to remove all dust and debris. Install grade 316 stainless steel mesh over cracked area to be fixed with stainless steel screws and washers. Re-plaster cut-out area, forming new plaster ceiling / moulded cornice with render coat, set coat and finish coat, keying into mesh. Where applicable, re-run mouldings, make pattern from original undamaged moulding. Finish surface to blend in with retained plasterwork.

HPO3 Cut out and re-plaster plain/flat surfaces

Cut away defective plaster back to sound substrate. Clean area with compressed air to remove all dust and debris. Form new plaster surface with render coat, set coat and finish coat as specified. Create adequate adhesion between existing and new plaster to ensure firm bonding, including damping masonry substrate prior to commencing works. Where to timber laths ensure new plaster is keyed into laths.

Finish to an even surface free from irregularities and consistent in finish to existing plaster. Finish new plaster to blend in with retained surrounding plasterwork.

HPO4 Cut out and re-run hard plaster moulded surfaces

Carefully remove existing unstable / damage plaster moulding back to sound substrate. Allow to cut enough surrounding plaster to provide a sound key for new plasterwork to perimeter. Clean air with compressed air and brush away any dust debris.

Re-run mouldings with render coat, set coat and finish coat as specified. Make pattern from original undamaged moulding. Finish to an even surface free from irregularities and consistent in texture and finish to existing plaster.

HP05 Remove embedded metal

Remove embedded metal item, where required cut out surrounding plaster work to allow embedded metal items to be removed. Clean with compressed air.

Patch repair plaster to match original existing adjacent in accordance with repair code HP03 and HP04 to reinstate original condition including mouldings.

HP06 Repair timber lath and hard plaster ceiling

Cut away defective plaster back to sound substrate taking care not to damage existing lathes. Replace damaged laths with new timber laths to match original detail and profile. Clean out opening to remove dust and debris.

Form new plaster ceiling with render coat, set coat and finish coat as specified, keying into lath and blended in with retained plasterwork. Finish to an even surface free from irregularities and consistent in texture and finish to existing plaster.

HP07 Repair fibrous plaster ceiling

Cut away defective and damaged fibrous plaster ceiling, taking care not to damage existing battens. Cast and install new section of fibrous plaster ceiling to match thickness of existing. Fix in place with cornice cement to cement to existing battens.

Fill gaps between new fibrous plaster sheet and existing fibrous plaster providing an even finish free from irregularities and consistent in texture and finish to existing plaster.

HP08 Pin flat/ fibrous moulded plaster ceiling

Where detached hard plaster flat ceiling to be retained, supply and fix 50 mm long grade 316 stainless steel screws with 30mm grade 316 stainless steel washers into joists. Pin on a square grid 400mmx400mm or less to suit existing joist.

Confirm location of joists and carefully mark out grid with pencil / chalk for review and approval by Architect. Contractor is to fix through ceiling into joist above and countersink into plaster to enable patch repair of plaster work. Patch repair plaster work and finish to an even surface, prepare and paint in accordance with the specification.

Where ceiling has detached moulded cornice and strapping to be retained install screws every 400mm fixed into sound substrate.

HPO9 Cast and install decorative fibrous plaster item

Measure profile of damaged item / section on site to allow creation of a cast. Produce cast and fibrous plaster sample for approval.

Cut out damaged section of plaster or remove plaster item taking care not to damage the adjacent plaster. Cast fibrous plaster section / item to match details of original. Install new plaster section / item, prepare and paint in accordance with the specification.

HP10 Poultice Efflorescence

Brush off surface salts with non-ferrous stiff bristle brush. Do not rub too vigorously so as not to remove the surface or damage substrate. Capture all salt and dispose off site. Apply Westox Cocoon poultice to draw out salts. Apply poultice in accordance with manufacturer's specification and guideline to give sufficient time to dry (anticipate **4 weeks** drying time per application).

HP11 Finish coat to plain/flat plaster

Scrape back all loose, flaking or detaching paint and plaster. Clean area with compressed air to remove all dust and debris. Fill deep cavities / voids with set coat to provide a level textured surface ready for finish coat.

Prepare existing plaster surface with scratcher to ensure sufficient key for setting coat. Dampen existing plaster and apply new plaster setting coat, trowelled to provide a finish to match adjacent plaster. Ensure new plaster surface is levelled / blended to align with adjacent plaster and is not to be feathered at junction with existing plaster. Finish to an even surface free from irregularities and consistent in finish to existing plaster.

Ensure curing process is managed to prevent plaster from drying rapidly, allow to for water mist spraying to maintain satisfactory moisture levels particularly to upper areas.

STONE PANELLING REPAIRS

CODE WORKS

S1 Clean stone and remove residue

Prior to commencement of cleaning works, undertake a photographic record of the existing stone panelling for the purposes of post cleaning comparison.

Undertake 500mm square cleaning samples at an agreed location for review and approval by the Architect. Samples to be undertaken using a soft microfiber cloth dampened with warm water and a soft microfiber cloth dampened with dish soap diluted with warm water.

Following approval of sample complete cleaning to nominated area. Rinse surface with clean water, dry with a soft cloth and gently buff with a soft dry microfibre cloth.

Ensure adjacent surfaces / materials are protected from moisture damage.

S2 Crack inject stone

Gently clean out crack with compressed air. Apply clear tape over the length of the crack ensuring no bubbles, folds, bulges or the like. Ensure tape is well adhered to substrate and free of any air pockets.

Prepare sample of epoxy and natural pigment mix for review and approval by the Architect.

Using a hypodermic needle pierce the tape and fill crack with the approved mix of liquid epoxy and natural pigment, filling the crack to the surface of the tape. Once dried remove the tape and using a handheld polishing mat, polish the filled crack. By brush apply a layer of gloss clear acrylic over the crack.

Clean up any tape residue from the surrounding surface.

S3 Remove embedded metal / item

Carefully remove embedded item including all plugs. If drilling out of item is required ensure stone is not damaged and drill bit diameter is smaller than hole in stone

Following removal of embedded item undertake filling of hole in accordance with repair code S4

S4 Fill tile hole

Undertake grout mix samples to match stone colour to the satisfaction of the Architect. Grout mix is assumed to incorporate natural pigments to achieve colour.

Clean out hole with compressed water and dry with compressed air. Fill hole with approved coloured grout, recessed 1-2mm back from the face of the stone to allow for epoxy filling of front section.

Prepare sample of epoxy and natural pigment mix for review and approval by the Architect.

Apply tape over hole ensuring tape is well adhered to the surrounding stone and free of any air pockets. Using a hypodermic needle pierce the tape and fill void with the approved

mix of liquid epoxy and natural pigment, filling to the surface of the tape. Once dried remove the tape and using a handheld polishing mat, polish the filled hole. By brush, apply a layer of gloss clear acrylic over the crack.

Clean up any tape residue from the surrounding tile work.

JOINERY REPAIRS

CODE WORKS

JO1 Repair window sash, sill, or frame

Undertake repairs to existing window sash, sill and / or sash. Carefully remove existing glazing as required to enable repairs. Provide temporary protection in the form of plywood hoarding to opening. Prepare shop drawings setting out the size and profiles of members, joint details, fixings and the like for approval by the Conservation Architect prior to commencement of works.

Where sash is to be removed to undertake works, remove timber bead, sash cords and the like to allow sash to be removed. Remove facings to access weights and ensure window is functioning correctly when reinstated. Reinstate all sash cords, hinges, hardware, beads and the like at the completion of works. Fill all dints, knots, grains and joints and the like with putty and sand back.

Cut out sections of decayed, damaged or detached timber work and splice in new section of timber with profile and dimension to match. Install glazing to window in accordance with specification. Where possible reinstate existing glazing or provide protection to glazing to enable the works.

JO2 Replace window sash, sill or frame

Carefully remove existing window and / or sash. Provide temporary protection in the form of plywood hoarding to opening. Prepare shop drawings setting out the size and profiles of members, joint details, fixings and the like for approval by the Conservation Architect prior to commencement of works.

Fabricate new window frame and / or sash to match existing profiles, dimensions and details. Install to location and glaze window in accordance with specification.

JO3 Repair doors

Undertake repairs to existing doors. Carefully remove existing glazing to enable repairs. Provide temporary protection in the form of plywood hoarding to opening. Prepare shop drawings setting out the size and profiles of members, joint details, fixings and the like for approval by the Conservation Architect prior to commencement of works.

Dismantle door and reset, re-gluing all framing back together with new timber dowels. Cut out sections of decayed, damaged or detached timber works and splice in new section of timber with profile and dimension to match. Fill all dints, knots, grains and joints and the like with putty and sand back. Install glazing to window in accordance with specification. Where possible reinstate existing glazing or provide protection to glazing to enable the works.

Where doors are hinged, remove existing hinges and install new hinges with size to match existing except where indicated on drawing or specified.

J04 Not in use

J05 Not in use

J06 Remove embedded item

Remove embedded item from timber joinery. Where possible carefully draw out or unscrew, if not possible drill out embedded item. Clean out hole/cavity following removal with compressed air.

Fill hole/cavity with putty to match timber colour and sand back to provide a flush finish with surround surfaces.

JO7 Repair timber moulding (skirting, picture rail, architrave)

Cut out sections of decayed, damaged, or detached timber moulding and splice in new section of timber with profile and dimension to match. Fill all dints, knots, grains, joints etc. with putty and sand back.

Where fixings to substrate are required, ensure they are counter sunk below surface and filled with putty to match timber colour, sand back putty to provide a flush finish with surrounding surface.

TIMBER FLOOR REPAIRS

CODE WORKS

FLO1 Repair Parquetry Flooring

Precise location of parquetry repair to be confirmed on site with Architect prior to commencing works.

Carefully dismantle parquetry to remove damaged or decay section of floor, removing full length parquetry pieces. Do not cut adjacent boards.

Install new timber sections to match original species, profile and dimension. New timber section to be glued into position, allow to glue surround sections removed during dismantling works. If nailing fixing is required, nails are to be secret fixed. Ensure edges of new section are flush with the surface of surrounding sections. Clear of any excess adhesive with a damp cloth.

Allow to install protection to repair area and weight it down for the entire curing time of the adhesive.