

Victorian Emergency Services Memorial

LANDSCAPE MATERIALS SCHEDULE

Design Development

Job No: 0565
Issue: For Approval
Date: 03.04.2018

Revision	Description	Date
02	Issue For Approval	03.04.2018
01	Design Development	28.02.2018

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REV: 02

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SURFACE TREATMENT

PV - PAVING

PV01	Insitu Concrete Paving
Description	Rock Salt and Exposed Aggregate Reinforced Coloured In-situ Concrete with exposed aggregate and rock salt finish
Indicative Location (s)	As shown
Profile	Concrete Paving Slab to Civil Engineer's Documentation
Concrete Colour	Cement: Off White cement Oxide: Abilox coloured oxide 4.15% or 8.3% dose by weight (depending on sample chosen)
Aggregate	TBC
Finish	Smooth float finish with surface seeded rock salt textured finish Rock salt aggregate to be 10-30mm graded – 30% 10mm and 70% 30mm No picture frames to slab edges. Diamond grind to reveal aggregates once rock salt process is complete
Installation	Immediately after concrete poured is poured achieve a smooth surface using wood float and evenly distribute the Finishing Salt to cover a minimum of 25% of the surface area. Salt aggregate to be grouped rather than evenly spread across the entire surface. As necessary, lightly press salt into the wet concrete as part of the float process. After the concrete has set, remove (dissolve) all of the Finishing Salt using a high pressure hose. Salt run-off to topsoil areas will effect plant performance. The contractor is to collect and dispose of all undissolved salt particles washed onto adjacent surfaces to minimise contamination of surrounding lawn and planting areas. After the desired finish is achieved and all salt is collected, the Contractor is to thoroughly saturate areas adjacent to in situ concrete to leach out salts before turf and or planting works commence. Once concrete has cured and rock salt removed, undertake light diamond grind of surface to reveal aggregate.
Slip Resistance	All walkways to have minimum slip resistance rating R10 Provide testing of the sample and constructed paths in accordance with AS 4663
Control Joints	All Control Joints to be saw cut (not trowelled)
Caulked Joints	All Expansion and Isolation joints to be caulked – colour to match paving colour
Concrete details	Refer to Civil Engineer's drawings and specification for concrete details including strength, thickness, reinforcing and jointing
Ground works	Refer to Engineers documentation for subgrade, fill and subbase preparation details
Samples	Allow to provide 2 sample panels of varying colour and finish for approval by the Landscape Architect. Colours to be confirmed prior to preparing samples. Each sample panel to be 2.2 x 3m.

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Include examples of sawn and caulked joints.

Include examples of rock salt at 5-10mm dia, and 10-25mm dia

Sample A – Abilox XX 4.15% in OWC

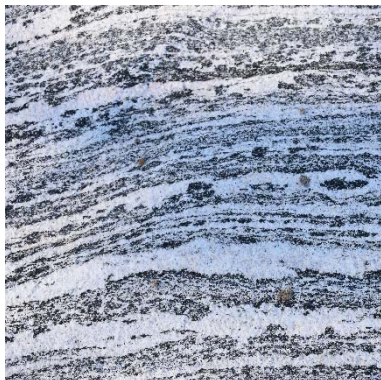
Sample B – Abilox xx 8.3% in in OWC

Supplier Provide supplier details for approval

PV02

Stone Paving Type 1 - Gneiss

Description Stone paver
 Material 60mm thick gneiss stone paver, sizes vary as documented
 Sub-base Refer civil engineer’s documentation for sub-base and subgrade information.
 Indicative Location (s) As shown.
 Finish Sawn to achieve Class W slip resistance
 Acceptable Supplier Pyrenees Quarries, (03) 5470 5288
<https://www.pyreneesquarries.com.au/contact.html>
 Samples 1 (no.) paver, min 300 x 300mm for approval by the Landscape Architect



Material Reference Image: Sawn Gneiss

PV03

Stone Paving Type 2 - Bluestone

Description Stone paver
 Material Bluestone paver 60mm thick, L X W dimensions vary as documented
 Sub-base Refer to Engineer’s Details and Specification for strength, reinforcement, and sub-surface preparation.
 Indicative Location (s) As shown.
 Finish Sawn to achieve Class W slip resistance
 Acceptable Supplier Bamstone or similar approved
<http://bamstone.com.au/contact/>
 Samples 1 (no.) paver, min 300 x 300mm for approval by the Landscape Architect
 Sample Colours for reference:

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Material Reference Image: Sawn Victorian bluestone

PV04	Stone Paving - Granite
Description	Stone paver
Material	Granite Harcourt Granite stone paver 60mm thick, L X W dimensions sizes vary as documented
Sub-base	Refer to Engineer's Details and Specification for strength, reinforcement, and sub-surface preparation.
Indicative Location (s)	As shown.
Finish	Sawn to achieve Class W slip resistance
Acceptable Supplier	Pyrenees Quarries, (03) 5470 5288 https://www.pyreneesquarries.com.au/contact.html
Samples	1 (no.) paver, min 300 x 300mm for approval by the Landscape Architect



Material Reference Image: Harcourt Granite

PV05	Stone Paving - Sandstone
Description	Stone paver
Material	Sandstone 60mm thick Grampians sandstone stone paver, sizes vary as documented
Colour	White
Sub-base	Refer to Engineer's Details and Specification for strength, reinforcement, and sub-surface preparation.
Indicative Location (s)	As shown.

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Finish	Sawn to achieve Class W slip resistance
Acceptable Supplier	Grampians Sandstone Pty Ltd Mobile: +61 (0)400 542 419
Samples	1 (no.) paver, min 300 x 300mm for approval by the Landscape Architect



Material Reference Image: Grampians white sandstone

PV12	Crazy Paving – To match existing
Description	Make good crazy Paving - Slate
Material	Random pavers to match existing
Finish	Sawn to achieve Class W slip resistance
Indicative Location (s)	As shown.
Acceptable Supplier	Local supplier preferred.
Samples	Provide 3(no.) pavers for approval by the Superintendent
Notes	Remove existing rocks and mortared pebbles as shown to determine extent of infill paving required. Refer to Engineer's Details and Specification for strength, reinforcement, and sub-surface preparation.

JO- JOINTS

JO01	Isolation Joint
Material	To Civil Engineers documentation
Sealant	Provide mastic sealant to all joints. Sealant colour to match adjoining pavements (colour). Refer detail on sheet L701 for finish.
Indicative Location (s)	To all insitu concrete pavements, walls and edges Refer engineer's documentation for joint locations.
Notes	Provide installed sample for approval by the Superintendent prior to commencing with the remainder. To be installed as per all relevant Australian Standards.
JO02	Expansion Joint
Material	To Civil Engineers documentation

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Sealant	Provide mastic sealant to all joints. Sealant colour to match adjoining pavements (colour). Refer detail on sheet L701 for finish.
Indicative Location (s)	Within PV01 Refer engineer's documentation for joint locations.
Notes	Provide installed sample for approval by the Superintendent prior to commencing with the remainder.

SOFT LANDSCAPE

VG- SOFT LANDSCAPING

VG01

Garden Bed

Description	Garden bed with organic timber mulch
Material profile	Trees & plants: Refer planting plan and schedule Mulch: Euca Mulch –particles to be maximum size of 15mm Topsoil: 600mm depth Premium native Mix Imported Topsoil (allow for 900mm depth beneath trees in a 2m radius) Cultivation: Rip existing subgrade to min 300mm depth and then cultivate with imported material except when within the TPZ of existing vegetation. Refer arborist report. Refer detail on sheet L801.
Indicative Location (s)	As shown.
Acceptable Supplier	Refer plant schedule for provenance and supplier requirements.
Samples	Submit 1.2kg bag sample of soil and 500g mulch to Superintendent for approval. Submit soil testing including: nutrient content, Ph, drainage rate and salinity.
Notes	Install to achieve a 25mm reveal of adjacent finish surface. Top of plant root ball is to finish flush with soil level. Plantings to be fertilised with an appropriate controlled release fertiliser suitable for the plant species nominated. Hand water in plants immediately on completion of planting.

VG02

Reinstatement of Grass

Description	Reinstate grass to areas affected by the works
Material profile	Topsoil: Cultivate soil to 100mm depth
Indicative Location (s)	To locations indicated on plan.
Notes	Apply hand seed grass to areas cultivated at 100mm depth. Include in maintenance period. Mix to be compatible with adjacent grass species.

VG03

Bark Mulch – Currently not shown in drawings. Locations to be confirmed.

Description	Organic mulch
Material	Euca Mulch –particles to be maximum size of 15mm
Depth	75mm thickness of approved mulch on all garden beds and 150mm thickness of mulch on all trees
Indicative Location (s)	Garden beds
Acceptable Supplier	Burdetts or approved equivalent, (03) 9789 8266

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Installation	Install mulch to achieve relative height adjacent to edging and finish surfaces, and to create watering bowls as per planting details on sheet xxx
Samples	Contractor is to submit a 5kg bag sample for approval by superintendent, prior to delivery to site.
VE01	Proposed Advanced Tree
Description	Advanced tree planting in garden bed. Refer to plant schedules for species and sizes
Material profile	Trees: Refer planting plan Mulch: Nom. 150mm depth. Refer soft landscape code for type. Topsoil: 900mm depth within nom, 2m radius Stakes: Install 3 no. hardwood stakes (2100mmx50mmx50mm) per tree painted black and tie with black webbing tree ties. Refer detail on sheet Det.5 L-821.
Tree Selection	Procured trees to be selected by superintendent.
Acceptable suppliers	Local supplier preferred.
Notes	Ensure base of planting hole is well drained. Tree to be planted vertically and top of rootball to match finish soil level. Backfill with imported approved topsoil. Trees to be fertilised and mulched at installation. Trees to be watered in immediately after planting. Trees to be thoroughly maintained during the establishment period, as per the specification.
VE02	Existing Tree to Be Retained
Description	Existing Poplar and Eucalyptus Tree to be retained
Tree Protection	All existing trees identified on the plan drawings are to be protected and retained as per AS 4970-2009
Tree Protection Zones (TPZ)	Generally no works are to occur within the tree protection zones Machinery and other items may not traverse or be stored in the TPZ Tree Protection Fencing All TPZs are to be clearly identified and marked out prior to works. Provide suitable tree protection fencing to TPZ prior to commencing works and limit extent of work in the TPZ.
Work in TPZ	When work is required inside a TPZ the following must be undertaken: Confirm work in TPZ with superintendent Existing tree roots to be water cut by qualified arborist prior to excavation. Maintain existing ground levels inside tree protection zone Water tree prior to, during and after excavation Use hand methods for excavation in root zones Any tree roots larger than 50mm to be cut and treated using approved methods.
WALLS & EDGES	
<u>WL – WALLS</u>	
WL01	Stone Memorial Wall - Gneiss
Description	Natural stone wall
Material	Gneiss rocks
Size	Size varies, height varies to maximum 950mm height above finished surface levels

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Finish	4 sawn edges including base, sides and 30 degree angle to face as detailed Retain natural surface to remainder of rock
Joints	Maximum 20mm, sand filled
Subbase and drainage	Refer to Civil Engineer's drawings and specification.
Indicative Location (s)	To locations shown on plan.
Samples	Provide 1000mm length sample for Superintendent and Landscape Architect's approval. Approved sample may be included as part of the finished works.
Acceptable Supplier	Pyrenees Quarries, (03) 5470 5288 https://www.pyreneesquarries.com.au/contact.html
Notes	Refer to Engineer's Details and Specification for strength, reinforcement, jointing details and sub-surface preparation. Total free fall height shall not exceed 950mm.



Material Reference Image: Gneiss rock

WL02	Stone Memorial Wall - Bluestone
Description	Natural stone wall
Material	Sawn Bluestone boulder sections
Size	Size varies, height varies to maximum 600mm height above finished surface levels
Finish	4 sawn edges including base, sides and face as detailed Retain natural surface to remainder of rock
Joints	Maximum 20mm, sand filled

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Subbase and drainage	Refer to Civil Engineer's drawings and specification.
Indicative Location (s)	To locations shown on plan.
Samples	Provide 1000mm length sample for Superintendent and Landscape Architect's approval. Approved sample may be included as part of the finished works.
Acceptable Supplier	Pyrenees Quarries, (03) 5470 5288 https://www.pyreneesquarries.com.au/contact.html Total free fall height shall not exceed 950mm.



Material Reference Image: Bluestone boulder sections

Refer WL02	Stone Memorial Wall – Granite
Description	Natural stone wall
Material	Sawn Harcourt Granite boulder sections
Size	Size varies, height varies to maximum 600mm height above finished surface levels
Finish	4 sawn edges including base, sides and face as detailed Retain natural surface to remainder of rock
Joints	Maximum 20mm, sand filled
Subbase and drainage	Refer to Civil Engineer's drawings and specification.
Indicative Location (s)	To locations shown on plan.
Samples	Provide 1000mm length sample for Superintendent and Landscape Architect's approval. Approved sample may be included as part of the finished works.

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Acceptable Supplier	Pyrenees Quarries, (03) 5470 5288 https://www.pyreneesquarries.com.au/contact.html
Notes	Refer to Engineer's Details and Specification for strength, reinforcement, jointing details and sub-surface preparation. Total free fall height shall not exceed 950mm.



Material Reference Image: Harcourt Granite slabs

Refer WL02	Stone Memorial Wall - Sandstone
Description	Natural stone wall
Material	Sawn Grampians Sandstone boulders
Colour	White
Size	Size varies, height varies to maximum 600mm height above finished surface levels
Finish	4 sawn edges including base, sides and face as detailed Retain natural surface to remainder of rock
Joints	Maximum 20mm, sand filled
Subbase and drainage	Refer to Civil Engineer's drawings and specification.
Indicative Location (s)	To locations shown on plan.
Samples	Provide 1000mm length sample for Superintendent and Landscape Architect's approval. Approved sample may be included as part of the finished works.
Acceptable Supplier	Pyrenees Quarries, (03) 5470 5288 https://www.pyreneesquarries.com.au/contact.html

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Notes Refer to Engineer's Details and Specification for strength, reinforcement, jointing details and sub-surface preparation.
Total free fall height shall not exceed 950mm.



Material Reference Image: Grampians Sandstone

ED – EDGES

ED01	Spade Edge
Description	Garden bed edging
Indicative Location (s)	At Garden bed and lawn interface
Notes	Cut a V channel to approximately 100mm depth as shown on sheet L-821
ED02	Steel Garden Edge – Currently not shown. Locations to be confirmed
Description	Proprietary flexible steel edge to delineate changes in surface material/ finish.
Material	3mm gauge Grade 316 stainless steel
Size	1000mm lengths of 150mm depth.
Fixings	
Finish	Linished
Indicative Location (s)	As shown. Refer landscape set-out.
Acceptable supplier	

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Samples Supply 2000mm length sample for approval on site by Superintendent and Landscape Architect prior to ordering and installation. Approved sample may be included as part of the finished works.

Notes Work steel evenly to achieve curves as documented. Install to achieve 25mm reveal above adjacent finish level or lawn and garden bed interfaces. Ensure top of the edge is level and firmly embedded within subgrade.

ED03

Existing Pool Edge

Description Existing edge to pond.

Material Stone random paving castlemaine slate or lilydale stone

Size Random unit sizes
Refer detail on sheet L-802

Fixings NA

Finish NA

Indicative Location (s) As shown. Refer landscape set-out.

Acceptable supplier

Samples Supply 2000mm length sample for approval on site by Superintendent and Landscape Architect prior to ordering and installation. Approved sample may be included as part of the finished works.

Notes Refer to Cardno site inspection SI01 Project No. V 171259 Structural inspection of existing Condition Dated 01.09.2017. Proceed with recommendations for remediation treatment to existing wall:

- Carry out cand blast pressure clean of the wall.
- Reapply mortar to loose stones above stormwater pipe.
- Repair missing stones above stormwater pit
- Trees and tree roots to be kept away from the retaining wall and its footing. Permeable root barriers should be considered

ED04

Gravel Edge

Description Gravel edge to memorial wall

Material Harcourt granite

Size 10mm aggregate
Refer to L-802

Fixings NA

Finish Loose

Indicative Location (s) As shown. Refer to landscape drawings

Acceptable supplier

Samples Supply 2000mm length sample for approval on site by Superintendent and Landscape Architect prior to ordering and installation. Approved sample may be included as part of the finished works.

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ELEMENTS

FF–FURNITURE AND FIXTURES

FF01	Concrete Chamber
Description	Concrete pit
Material, Size and finish	600 x 600 mm precast concrete pit – Final dimensions to be confirmed with client.
Indicative Location (s)	Underneath stone unit pavers as indicated on plans.
Acceptable Supplier	Suitably qualified fabricator to approval by superintendent.
Notes	Pit cover is to be inlaid with stone units paving as indicated on plans. Ensure drainage is accounted for.
Supplier	Rocla or approved equivalent

SE–SIGNAGE ELEMENTS

SE01	Entry Sign
Description	Entry sign mounted on WA01
Material, Size and finish	Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Indicative Location (s)	On top of WA01 (Stone wall) as indicated on plans.
Acceptable Supplier	Suitably qualified fabricator to approval by superintendent.
Notes	Digital file to be supplied to contractor as template.

SE02	Agency Sign
Description	Agency sign mounted on WA01
Material, Size and finish	Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Indicative Location (s)	On top of WA01 (Stone wall) as indicated on plans.
Acceptable Supplier	Suitably qualified fabricator to approval by superintendent.
Notes	Digital file to be supplied to contractor as template.

SE03	Commemorative Marker
Description	Individual commemorative marker
Material, Size and finish	Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Fixing	Pin mounting to be chemset into memorial wall
Indicative Location (s)	WL01- Refer elevations on sheet L-502 & L-502 for set out
Acceptable Supplier	Suitably qualified fabricator to approval by superintendent.
Sample	2 no. prototypes for approval by Landscape Architect
Notes	Digital file to be supplied to contractor as template.

SE04	Relocation of JFK Memorial Entry Plaque
Description	Relocate existing bronze plaque

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Material, Size and finish	Bronze plaque to be relocated. Remove small minimum area of large stone aggregates to position plaque and then replace neatly to surrounds.
Fixing	Bronze plaque is to be mounted to concrete haunch.
Indicative Location (s)	Refer to landscape drawings
Acceptable Supplier	Suitably qualified fabricator to approval by superintendent.
Set out	Set out to be approved on site.
Notes	Ensure no damage is caused to plaque in the process of removal and reinstatement

LI - LIGHTING

LI01

Entry Sign Lighting

Description	Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Indicative locations	Located in SE01. Refer to landscape drawings
Notes	Co-ordinate cored holes for conduits in WL01. Refer Electrical drawings for all lighting details, conduits and electrical connections.

LI02

Agency Sign Lighting

Description	Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Indicative locations	Located in SE01. Refer to landscape drawings
Notes	Co-ordinate cored holes for conduits in WL01. Refer Electrical drawings for all lighting details, conduits and electrical connections.

LI03

Garden Bed Lighting

Description	Linear LED strip lighting. Refer Buro North documentation or sign detail and dimensions, refer NDY documentation for lighting and electrical details and specification
Indicative locations	Located to edge of PV01 to both central garden beds
Notes	Refer Electrical drawings for all lighting details, conduits and electrical connections.

WF – WATER FEATURES

WF01	Water Outlet- Type 1
Description	Bronze jet mounted to stone
Indicative locations	Located in WL01. Refer to landscape drawings
Notes	Co-ordinate cored holes for conduits in WL01. Refer Hydraulic and Water Feature specialist drawings for details, conduit sizes and locations and connections.
WF02	Water Outlet- Type 2
Description	Mist sprays, located in ground mounted patinated brass collars
Indicative locations	Refer to landscape drawings
Notes	Refer Hydraulic and Water Feature specialist drawings for details, conduit sizes and locations and connections.
WF03	Water Balance Tank and Pump
Description	Inground pit with infill pit lid
Size	Nominal 600x600x1000mm
Indicative locations	Refer to landscape drawings
Notes	Continue adjacent paving seamlessly into infill lid Refer Electrical, Hydraulic and Water Feature specialist drawings for details, conduit sizes and locations and connections.
WF04	Plant and Filter Cabinet
Description	Semi-submerged cabinet to house water feature controllers, chemical treatment and filters
Size	Nominal 1800 length x 1100 width x1200mm height
Material and colour	Metal clad cabinet, colour to be Dulux 'Deep Brunswick Green' 6134G
Indicative locations	Refer to landscape drawings
Notes	Continue adjacent paving seamlessly into infill lid Refer Electrical, Hydraulic and Water Feature specialist drawings for details, conduit sizes and locations and connections.
WF05	Weather Station
Description	Control box linked to operation of water features
Indicative locations	Refer to landscape drawings
Notes	Attach to existing light pole Refer Water Feature specialist drawings for details.