

Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111, Ph.(02) 4965 Islington NSW 2296 www.moirla admin@moirla.com.au ACN: 097 55

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229

OVERALL MASTER PLAN LP01 REVF 03.06.2016

CESSNOCK COUNCIL





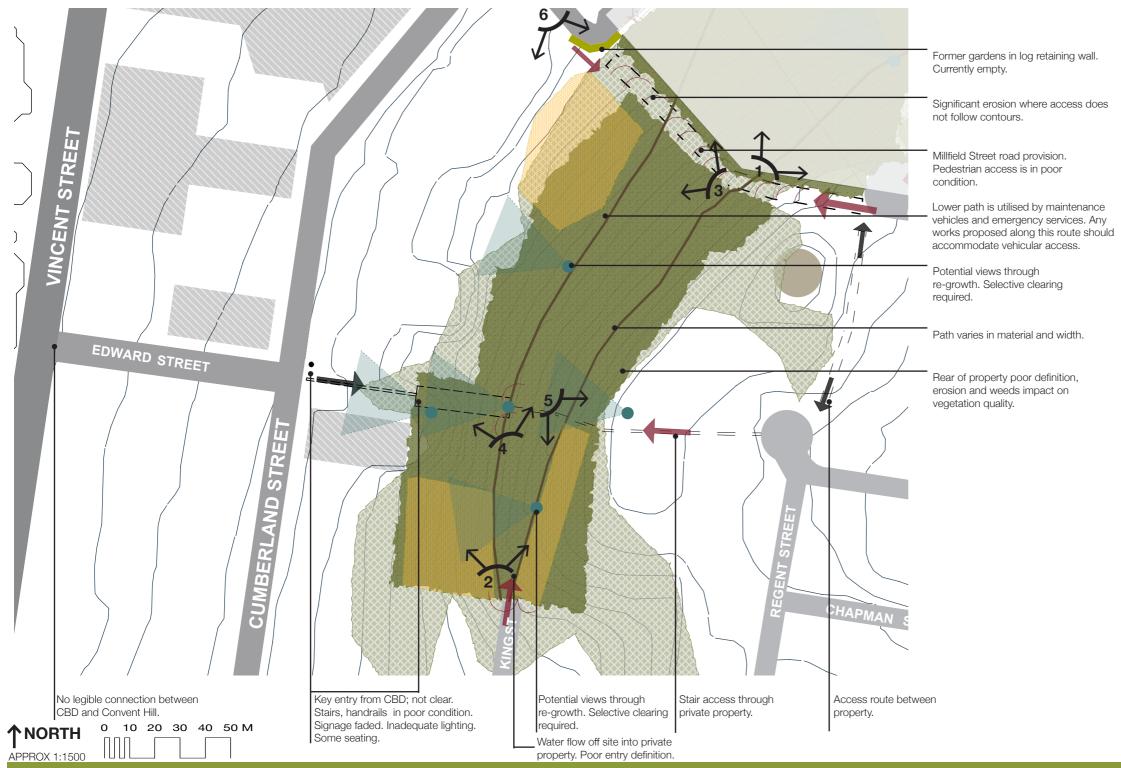
Concrete footpath upper route.



Gravel track from King Street lower route.



Millfield Street road reservation. Unformed, eroding. Existing stairs and handrails to CBD.



Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street,

PO Box 111, Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908

## Convent Hill, Bridges Hill and East End Oval Master Plan 1229

CONVENT HILL SITE ANALYSIS **LP02** REVF 03.06.2016

CESSNOCK COUNCIL







Stair access to private property.

Former garden beds- Yango Street.



Spotted Gum and Ironbark EEC

Structured vegetation

Degraded woodland. Good canopy. Poor shrub layer Heritage buildings



Water tank

Unsealed path. Width varies Informal path

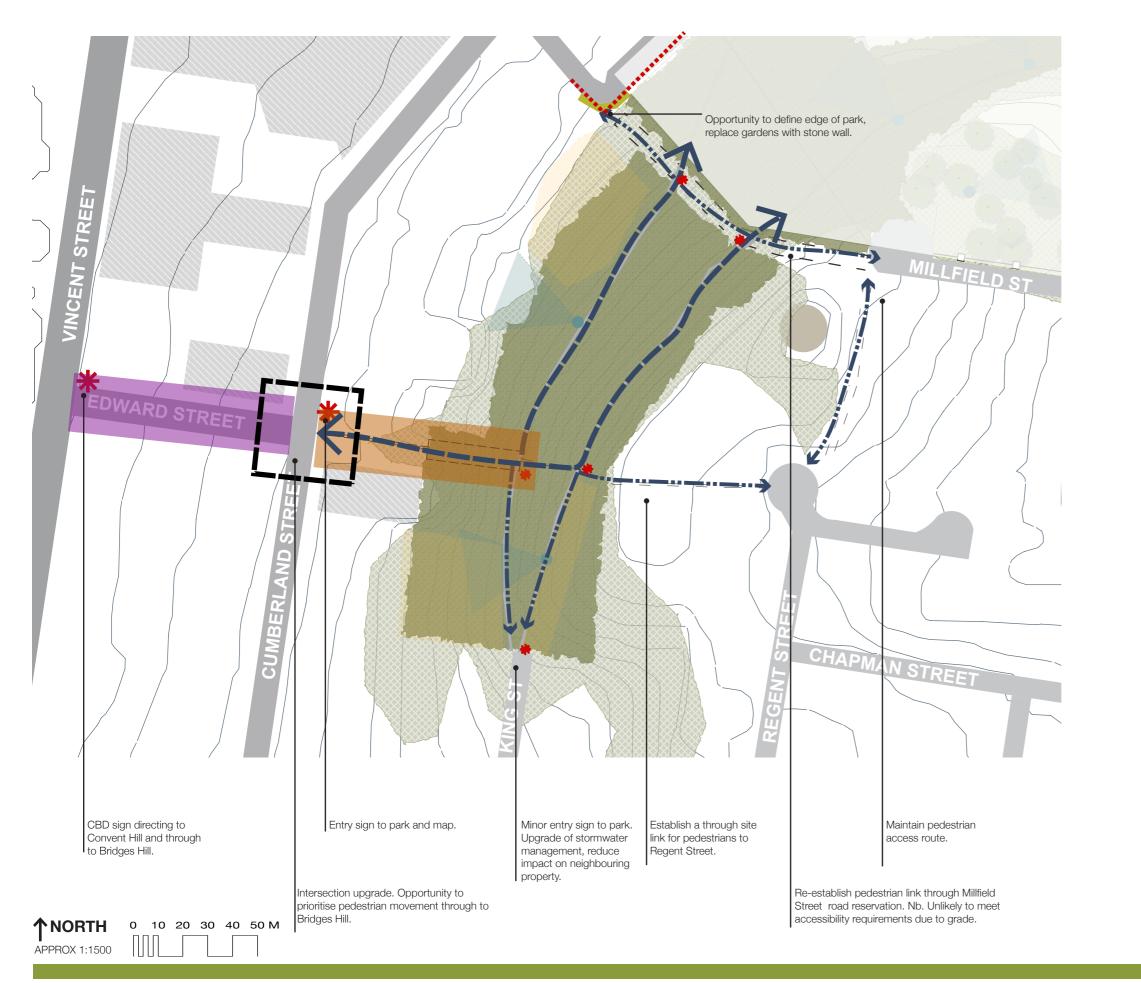


Erosion

Existing pedestrian access route

Informal entry Key Views

landscape architectur



Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111, Ph.(02) Islington NSW 2296 www.m

admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229 CONVENT HILL OPPORTUNITIES

CESSNOCK COUNCIL

LP03

# **CONVENT HILL OPPORTUNITIES**



.....

Major access route.

Minor access route.

Access route to initiate.

Wayfinding and/or Interpretive Signage

Edge to be defined through planting and stabilisation using sandstone block wall. East-West Street upgrade in line with the Cessnock CBD Master Plan.

Upgrade stairs, handrails, ramps to achieve an inviting main entry to the park. Include uplighting and selective removal of planting to highlight views.

Targeted areas for weed removal and bush regeneration. Good canopy. Poor shrub and groundcover layer.

Selected area for defined viewing points. Allowance for resting area, seating and interpretive signage. Interpretive signage to reflect both the

Indigenous and European heritage of the site and surrounding area.





Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111. Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229

CONVENT HILL MASTER PLAN LP04 REVF 03.06.2016

CESSNOCK COUNCIL











CESSNOCK COUNCIL



Concrete footpath towards playground from Yango St. Concrete footpath towards Yango St.

Victoria Street edge condition.

Existing Playground.

View towards Yango Street and Carpark.



Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street,

PO Box 111, Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229

BRIDGES HILL SITE ANALYSIS **LP05** REVF 03.06.2016

# **BRIDGES HILL SITE ANALYSIS**

View to upper Bridges Hill, from playground.

 $\square$ 

Existing trees

Existing turf

Structured vegetation

Car park.

Identified Endangered Ecological Community.

Distinct vegetation condition.

Water Tank

Formal concrete path 1.2m wide. Informal path.

Treated pine low perimeter fence.

Erosion.

Existing pedestrian access route.

Informal entry

Views





# **BRIDGES HILL OPPORTUNITIES**



Kerb and gutter, kerb side parking where space permits along Victoria Street. Stormwater management to reduce erosion; swales/ rain gardens on street edge.

Entry signage. Opportunity to incorporate public art. Low wall or fence to define park edge.







Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229

CESSNOCK COUNCIL

BRIDGES HILL MASTER PLAN **LP07** REVF 03.06.2016

# **BRIDGES HILL MASTERPLAN**

### (1) Centrally located playground

Provide integrated range of opportunities with a gradation of challenges which utilises the unique topography of the site. Centrally located with no paths intersecting the play space. Offers three types of play.

(2) **Toilet block -** Facilities building to be located in a visible and accessible location.

(3) Free play space - Free play space to be located on flattest part of site.

#### (4) Perimeter route - 2.5m wide

Shared pathway catering for pedestrian and cycling traffic of varving speeds

#### Lower route

Route assumes pedestrian movement and provides all-ability access to terracing and picnic areas.

#### Upper route

Connects back to Convent Hill and surrounding residents, generally of limited width to deter cyclists/skateboarders.

#### (7) Hardcourt multi-use space

All purpose hardcourt to be co-located with Playground and fitness equipment.

#### Victoria Street raised crossing

Provide an extended raised crossing across Victoria Street to East End Oval.

#### (9) Formalise route to Millfield Street.

Provide all-ability access from car park to terracing, picnic areas and varning circle

#### Informal amphitheater

Terracing for bank stabilisation, viewing opportunities and greater connectivity to upper Bridges Hill. Opportunity for shelters, play elements such as slides, provision of deciduous trees for shade. Stairs to upper Bridges Hill

(12) Fitness stations

Fitness stations to be located on accessible paths in a loop or linked arrangement. Inclusion of Water Filter Station.

#### Signage and low fence

Entry sign and low wall to define entry to park. Gateway opportunity between East End and Bridges Hill.

#### Entry feature - public art

Key location for interpretive design element responding to the Indigenous and European use and of the site and the surrounding area.

#### (15) Picnic shelters

Strategically located shelters for supervision of playground and for amenity.

#### **BBQ** facilities

BBQs and picnic tables.

#### **Off street parking Millfield Street**

10 parking spaces including all-ability parking. Planted garden beds surrounding car park.

#### Weed management

Removal of weeds and revegetation using endemic species to improve integrity of remnant and re-growth vegetation.

#### Yarning Circle

Sandstone seating area, additional planting and re-grading. **Green Corridor** 

Planting to support connectivity between EEC vegetation at East End oval and Convent Hill





Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229

CESSNOCK COUNCIL

**LP08** REVF 03.06.2016



Existing Car park.

Existing vegetation



Existing turf Structured vegetation Irrigated oval Car park. Identified Endangered Ecological Community.





Informal carparking.

Sporting Amenities.

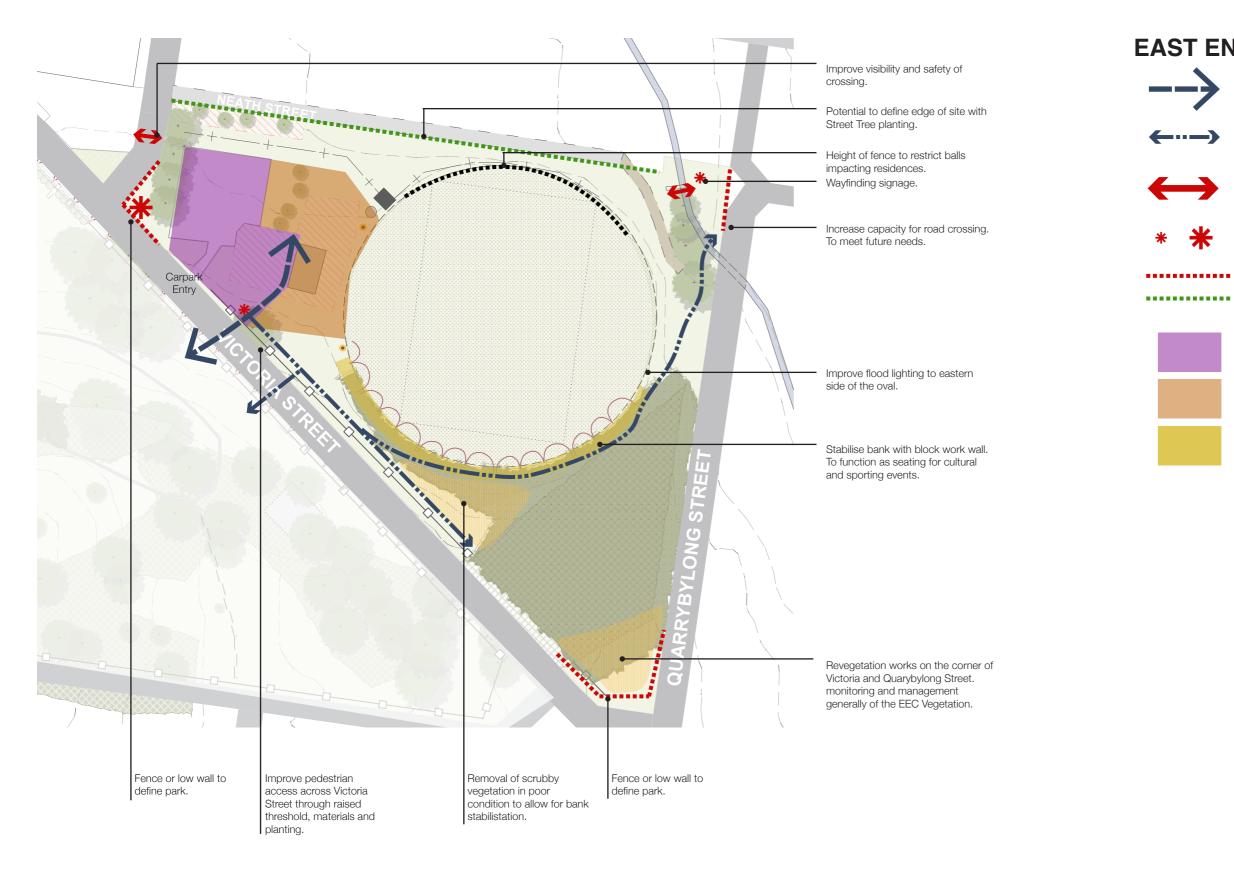
Storage container

Water tank Flood lighting

Canal Treated pine low perimeter fence. 0.9m Steel boundary fence. Erosion. Existing pedestrian access route. Informal entry

EAST END OVAL ANALYSIS







Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296

admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 Convent Hill, Bridges Hill and East End Oval Master Plan 1229 EAST END OVAL OPPORTUNITIES CESSNOCK COUNCIL

# **EAST END OVAL OPPORTUNITIES**



Major access route.

Minor access route.

Existing desire line.

Directional Signage required.

Edge to be define with vegetation and/or low fencing.



Expansion of carpark.

Space for ancillary activities for sports and other events.

Seating and viewing area.







tone and block work terracing

Moir Landscape Architecture Pty Ltd Studio 1, 88 Fern Street, PO Box 111. Islington NSW 2296 admin@moirla.com.au

Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908 **Dval** fencing

Convent Hill, Bridges Hill and East End Oval Master Plan 1229 EAST END OVAL MASTER PLAN

venue plantinc

CESSNOCK COUNCIL

Raised threshold

**LP10** REVF 03.06.2016

# EAST END OVAL MASTERPLAN

### (1) Carpark consolidation

Existing areas used for carparking consolidated, overall size of formal carpark expanded.

- (2) Ancillary activity space Space for ancillary activities formalised. Provision for additional tree planting for shade.
- (3) New storage facilities and water tank
- (4) Existing sportsfield
- (5) Perimeter footpath
- **(6)** Improved floodlighting
- (7) Terraced retaining wall seating with **Shade Structures**

Sandstone block retaining wall to stabilise embankment. This will also function as informal seating as a series of terraces. A number of shade structures are proposed of simple construction type which will provide shade and protection from rain.

#### (8) Revegetation of edge.

Revegetation works to include removal of weeds and planting of suitable species to improve quality of Endangered Ecological community.

- (9) Pedestrian crossing
- (10) Victoria Road raised crossing

Provide two raised crossings which connects to the proposed path networks in Bridges Hill, to the playground and hard court.

- **1** Parking along Victoria Street
- (12) Entry signage and low fence Entry sign and low wall to define entry to park and protect EEC vegetation.
- (13) Maintain facilities building Facilities building to be maintained. Some upgrades such as shower replacements as per user requests.
- (14) Upgrade to oval fencing Increase fencing height to prevent balls entering adjacent residential properties.
- (15) Upgrade footbridge
- (16) Street Tree planting Neath Street To define edge of oval and provide some protection from balls entering adjacent houses. Swale planting to be incorporated at bottom of hill to manage water from road and oval.





Moir Landscape Architecture Pty Ltd, Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296 admin@moirla.com.au Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908

### Convent Hill - Opinion of Probable Costs 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
STAGE	1				1	1
1.1	<b>CBD Way finding Sign</b> (Refer to plan LP04/No. 1)	Large Way finding sign. Including map. Requires design and fabrication.	Item	1	1000	1,000
1.2	<b>Convent Hill Entry - Tree removal/</b> <b>pruning.</b> ( <i>Refer to plan LP04/No. 3</i> )	Small tree and shrub removal. Branch trimming.	PC	1	10000	10,000
1.3	<b>Convent Hill Entry - Main Sign</b> (Refer to plan LP04/No. 2)	Large Way finding sign. Including map. Requires design and fabrication.	Item	1	3500	3,500
1.4	East - West Through link Directional sign	Medium way finding sign. Including map. Requires design and fabrication.	Item	2	2000	4,000
1.5	Temporary treatment to Yango Street garden beds. (Refer to plan LP04/No. 5)	Import and spread 300mm top soil.	m2	136	20	2,700
		Supply 300mm top Soil	t	41	53	2,200
		Mulch 75mm: spread by hand	m2	136	18.65	2,500
		Planting at approximately 4 plants/m2.	m2	136	40	5,400
		Subsoil preparation; cultivate soil by hand	m2	136	12.36	1,700
1.6	<b>Distance markers for lower route.</b> (Refer to plan LP04/No. 7)	Distance markers at 40m intervals. Markers are posts with distances attached.	Item	6	300	1,800
1.7	<b>Distance markers for upper route.</b> ( <i>Refer to plan LP04/No. 8</i> )	Distance markers at 40m intervals. Markers are posts with distances attached.	Item	5	300	1,500
1.8	Viewing Area -Lower Path (Refer to plan LP04/No. 11A)	Vegetation removal at viewing areas on lower path. Mainly lower branches.	PC			4,000
		Information sign on upper path. Requires design and fabrication. Interpretive information to be included.	Item	1	2000	2,000
1.9	Viewing Area -Upper Path (Refer to plan LP04/No. 11B)	Vegetation removal at viewing areas on upper path. Mainly lower branches.	PC			4,000
		Information sign on upper path. Requires design and fabrication. Interpretive information to be included.	Item	1	2000	2,000
1.1	Bush regeneration works (Refer to plan LP04/No. 12)	Works to include weed removal, replanting, and management of existing and new vegetation.	PC	1	150000	150,000
	SUB TOTAL STAGE 1					198,300
STAGE	2					
2.1	<b>Design for Edward Street Upgrade</b> ( <i>Refer to plan LP04/No. 1</i> )	To be initiated as part of stage 2. Refer to subtotal for approximation.				
2.2	<b>Design for Convent Hill Entry</b> ( <i>Refer to plan LP04/No. 3</i> )	To be initiated as part of stage 2. Refer to subtotal for approximation.				
2.3	Lower Footpath treatment (Refer to plan LP04/No. 7)	Footpath associated with lower route. 215m long,2500mm wide. Trim and compact subgrade (1.98/m2). Surface; 30mm AC10 (20.00/m2) with Bitumen Tack Coat 10mm (19.82/m2)	m2	550	45	24,770
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill. Along length of path and at 30m intervals under path.	lm	230	50	11,500
		Allowance for 44m of sandstone retaining 1 block high as required along the length of the path. 0.485m high sandstone log retaining wall, supply and construct.	lm	44	260	11,500
		Lighting; 215m. Allowance for bollard lights every twenty meters.	Item	11	400	4,400

### Convent Hill - Opinion of Probable Costs 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
2.4	Viewing Area -Lower Path- Seating (Refer to plan LP04/No. 11)	Bench seating.	Item	1	1000	1,000
	SUB TOTAL STAGE 2					53,170
STAGE	E 3					
NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST
	Demolition	Remove existing landscape elements	m2	105	25	2,628
3.1	Edward St Entry- Paths and Steps and lighting.(Refer to plan LP04/No. 3)	Footpath 1500mm wide. Concrete footpath with SL72 mesh, on 50mm sub base layer.	m2	105	100	10,500
		Stringers 3.750m long 2.800m vertical (Scotts metal)	Pair	5	590	3,000
		Treads (15 each stair case; Scott Metal)	Item	75	100	7,500
		Handrail / midrail pipe balustrade - complete;galvanised steel pipe 1000mm high	lm	38	204	7,800
		Concrete blob footing each end of each stringer (est. 400x400x400); 20 Mpa	m3	1.25	236	300
		Lighting for 100m. Allowance for every 10m. Low voltage to LED bollards	Item	10	500	5,000
		Concrete stairs between prefab flights. Concrete; incl. form work.	m2	8	200	1,600
3.2	Edward St Entry Retaining and stormwater management	Retaining wall sandstone blocks; allowing for 4 rows of 20m. 0.485m high sandstone log retaining wall, supply and construct.	lm	80	260	20,800
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill.	lm	80	50	4,000
3.3	Edward St Entry Additional planting and soil preparation. (Refer to plan LP04/No. 3)	Cultivation by hand	m2	1000	14	14,000
		Amelioration and mulch.	m2	1000	5	5,000
		Supplementary planting. Tubestock at 4/ m2.	m2	800	10	8,000
		Planting for garden beds at entry. 140mm pot size. 4/m2.	m2	200	30	6,000
3.4	East- West Through link- Stairs, lighting and planting. (Refer to plan LP04/No. 4)	Lighting	Item	6	500	3,000
		Concrete stairs, formwork and reinforcement. 1500mm wide, 45m length.	m2	67.5	150	10,100
		Cultivation by hand	m2	180	14	2,500
		Amelioration and mulch.	m2	180	5	900
		Supplementary planting. Tubestock at 4/ m2.	m2	180	10	1,800
3.5	<b>Upper Footpath treatment 200m</b> ( <i>Refer to plan LP04/No. 8</i> )	Aggregate driveways and paths - by hand;decomposed granite. 100mm thick	m2	400	30	12,000
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill. Along length of path and at 30m intervals perpendicular to path.	lm	214	50	10,700
		Allowance for 44m of sandstone retaining 1 block high as required along the length of the path. 0.485m high sandstone log retaining wall, supply and construct.	lm	44	260	11,400

### Convent Hill - Opinion of Probable Costs 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
		Lighting 200m. Allowance for bollard lights every twenty meters.	Item	10	400	4,000
3.6	Viewing Area -Upper Path- Seating (Refer to plan LP04/No. 11B)	Bench seating.	Item	1	1000	1,000
	SUB TOTAL STAGE 3					150,900
STAGE	E 4					
4.1	Edward Street - Raised Threshold, street trees and paving along street/ (Refer to plan LP04/No. 1)	Demolition and removal.	m2	470	40	18,800
		Trim and compact sub grade, 100mm select layer, 125mm lean concrete sub- base, 200mm jointed re-inforced coloured concrete pavement- coved finish.	m2	470	250	117,500
		100L tree, tree pit, soil as per services	item	12	1000	12,000
		Demolition and removal, base course preparation and paving. Paving to footpath along Edward Street.	m2	560	190	106,400
4.2	Yango Street Retaining walls, stairs, Planting and soil preparation. Entry Sign. (Refer to plan LP04/No. 5)	0.485m high sandstone log retaining wall, supply and construct. 500mm wide. 40m length.	lm	40	260	10,400
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill.	lm	40	50	2,000
		Concrete reinforced stairs, including formwork; one 5000mm flight from road up to Millfield Street reserve	m2	10	150	1,500
		Excavate top 300mm	m2	136	1.5	200
		Cultivate subgrade	m2	136	14	1,900
		Ameliorate and replace top 300mm	m3	136	5	700
		Large Way finding sign. Including map. Requires design and fabrication.	Item	1	2000	2,000
4.3	Millfield Street Upgrade. Retaining and stormwater management. Signage, Planting and soil preparation. Lighting. (Refer to plan LP04/No. 9)	Allowance for 5000mm row of blocks every 5m Approximately 120m length. 500mm wide blocks.	lm	120	260	31,200
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill.	lm	120	50	6,000
		Stringers 3.750m long 2.800m vertical. (Scotts metal)	Pair	5	590	3,000
		Treads (15 each stair case; Scott Metal)	Item	75	100	7,500
		Concrete blob footing each end of each stringer (est. 400x400x400); 20 Mpa	m3	1	236	200
		Handrail / midrail pipe balustrade - complete;galvanised steel pipe 1000mm high	lm	120	204	24,500
		Medium way finding sign. Including map. Requires design and fabrication.	Item	2	1000	2,000
		Cultivation by hand	m2	480	14	6,700
		amelioration and mulch.	m2	480	4	1,880
		Additional planting	m2	480	10	4,800
		Lighting 120m. Allowance for bollard lights every twenty meters. Low voltage LED	Item	6	400	2,400
	SUB TOTAL STAGE 4					363,580

### Convent Hill - Opinion of Probable Costs 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
STAGE	E 5					
5.1	King Street Entry: Includes Stairs, retaining and stormwater management. (Refer to plan LP04/No. 10)	Stringers 3.000m long 2.275m vertical (Scotts metal)	Pair	1	475	500
		Treads (12 each stair case; Scott Metal)	Item	15	100	1,500
		Handrail / midrail pipe balustrade - complete;galvanised steel pipe 1000mm high	lm	6	204	1,200
		Concrete blob footing each end of each stringer (est. 400x400x400); 20 Mpa	m3	0.25	236	100
		Retaining wall sandstone blocks; allowing for 4 rows of 2m. 0.485m high sandstone log retaining wall, supply and construct.	lm	8	260	2,100
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill.	m	8	50	400
5.2	Viewing Platform (Refer to plan LP04/No. 11A and 11B)	Allowance for simple viewing platform to be constructed.	PC	2	10000	20,000
	SUB TOTAL STAGE 5					25,800
	SUB TOTAL					791,750
	DESIGN (15% allowance)					118,762
	TOTAL (not including GST)					910,512



Moir Landscape Architecture Pty Ltd, Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296 admin@moirla.com.au Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908

### Bridges Hill - Opinion of Probable Cost 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
STA	GE 1					
1.1	DESIGN	To be initiated as part of stage 1. Refer to subtotal for approximation				
1.2	Weed Management	Works to include weed removal, replanting, and management of existing and new vegetation	m2	137	60	8,200
	SUB TOTAL STAGE 1					8,200
CT A	GE 2					
2.1	Lower and Upper Route Footpath (Refer to plan LP07/No. 5)	Lower footpath- Associated with direct link between Convent Hill and East End Oval. 1500mm wide. 284m long	m2	426	100	42,600
		Footpath linking lower and upper paths. 1500mm wide. 51m long	m2	76.5	100	7,700
	(Refer to plan LP07/No. 6)	Footpath Upper- Associated with direct link between Convent Hill and East End Oval. 2000mm wide. 264m	m2	528	100	52,800
	(Refer to plan LP07/No. 9)	Footpath Upper- Link from Millfield Street Associated with direct link between Convent Hill and East End Oval. 1500mm wide. 75m long	m2	112	100	11,200
2.2	<b>Distance markers</b> (Refer to plan LP07/No. 5 and 6)	Distance markers at 40m intervals on lower and upper paths	Item	15	300	4,500
2.3	<b>Sign- Main</b> (Refer to plan LP07/No. 13)	Sign on corner of Millfield and Victoria Street. Large Way finding sign. Requires design and fabrication	Item	1	3500	3,500
	(Refer to plan LP07/No. 14)	Sign on entry from Convent Hill, lower path.Large Way finding sign. Including map. Requires design and fabrication. To include interpretive information and/or artwork.	Item	1	5000	5,000
	SUB TOTAL STAGE 2					127,300
STA	GE 3					
3.1	Terraced Amphitheatre, access stairs, planting either side of upper stairs and extension of bush (Refer to plan LP07/No. 10 and 11)	Cut to fill. Assuming 2m wide and 0.75m depth along length of terracing and stairs	m3	624	7	4,400
		0.485m high sandstone log retaining wall, supply and construct. For three terraces total length is 375m . 500mm wide	lm	375	260	97,500
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill	lm	375	50	18,800
		Stairs: Allowance for sandstone stair every meter through terraced area. 3000mm wide	Im	75	260	19,500
		Stairs: Allowance for sandstone stair every meter through to upper path. 3000mm wide	lm	48	260	12,500
		Cultivation by hand	m2	64	14	900
		Amelioration and mulch	m2	80	5	400
		Planting for garden beds at entry. 140mm pot size at 4/m2	m2	200	30	6,000
		Extension of bushland on upper terrace: Works to include weed removal, replanting, and management of existing and new vegetation	m2	580	60	34,780

## Bridges Hill - Opinion of Probable Cost 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
3.2	<b>Shelter - small</b> (Refer to plan LP07/No. 15)	Small shelter located on terraced amphitheatre x2	PC	2	12500	25,000
3.3	Victoria road raised crossing Provide an extended raised crossing across Victoria Street to East End Oval, and footpath.	Demolition and removal	m2	884	40	35,400
	(Refer to plan LP07/No. 8)	Trim and compact sub grade, 100mm select layer, 125mm lean concrete sub- base, 200mm jointed re-inforced coloured concrete pavement- coved finish	m2	884	250	221,000
		Footpath - Along length of Victoria Street. 309m long. 1200mm wide	m2	370.8	100	37,100
3.4	Kerb, guttering and swales- Victoria and Yango Street	Upright kerb and gutter, along both sides of Victoria Street and southern side of Yango Street	lm	830	100	83,000
		Grass lined swale drain, along perimeter of Bridges Hill	lm	570	25	14,200
		Rip subgrade to 150mm; remove rock and debris; by machine	m2	570	1.26	700
3.5	<b>Directional sign</b> (As located on plan)	Directional signs along lower and upper footpaths. Medium way finding sign. Including map. Requires design and fabrication. Interpretive information to be included on 2/5 signs.	Item	5	1000	5,000
3.6	Large Trees + soil replacement	200L Tree	Item	4	1000	4,000
	(As located on plan)	Ameliorate 300mm and mulch	m2	12	6	100
	SUB TOTAL STAGE 3					620,280
STA	GE 4					
	GE 4 Screening Planting along carpark and 40m along Victoria Street.	Cultivate and ameliorate top 300mm soil, mulch.	m2	210	4	800
	Screening Planting along carpark		m2	210	4	
	Screening Planting along carpark and 40m along Victoria Street.	mulch.	m2 m2		-	1,200
4.1	Screening Planting along carpark and 40m along Victoria Street.	mulch.   45L TREE		17	70	1,200 8,400
4.1	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations	mulch.45L TREEGroundcover plantingVariety of varying challenges located in	m2	17 210	70 40	1,200 8,400 13,500
4.1	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining;	m2 Item	17 210 9	70 40 1500	1,200 8,400 13,500 33,000
4.1 4.2 4.3	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining;	m2 Item PC	17 210 9	70 40 1500	1,200 8,400 13,500 33,000 75,000
4.1 4.2 4.3	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation.	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.	m2 Item PC PC	17 210 9 3	70 40 1500 11000	1,200 8,400 13,500 33,000 75,000 7,400
4.1 4.2 4.3	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation.	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.Grading	m2 Item PC PC m2	17 210 9 3 3 1000	70 40 1500 11000 7.4	1,200 8,400 13,500 33,000 75,000 7,400 1,300
4.1 4.2 4.3	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation.	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.GradingGradingCultivation by machine.	m2 Item PC PC m2 m2	17 210 9 3 3 1000	70     40     1500     11000     7.4     1.26	1,200 8,400 13,500 33,000 75,000 7,400 1,300 3,000
4.1 4.2 4.3	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation.	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.GradingGradingCultivation by machine.Amelioration of top 200mm.	m2 Item PC PC m2 m2 m2	17 210 9 3 3 1000 1000	70     40     1500     11000     7.4     1.26     3	1,200 8,400 13,500 33,000 75,000 7,400 1,300 3,000 8,000
4.1 4.2 4.3 4.4	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation. (Refer to plan LP07/No. 3)	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.GradingGradingCultivation by machine.Amelioration of top 200mm.TurfBreak up by machine/hand as noted , includes plant/equipment hire , load spoil onto truck , cart 10km and disposal. Reinforced concrete, by machine.	m2 Item PC PC m2 m2 m2 m2 m2 m2	17 210 9 3 3 1000 1000 1000 1000	70     40     1500     11000     7.4     1.26     3     8	1,200 8,400 13,500 33,000 75,000 7,400 1,300 3,000 8,000
4.1 4.2 4.3 4.4	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation. (Refer to plan LP07/No. 3)	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.GradingGradingCultivation by machine.Amelioration of top 200mm.TurfBreak up by machine/hand as noted , includes plant/equipment hire , load spoil onto truck , cart 10km and disposal. Reinforced concrete, by machine.	m2 Item PC PC m2 m2 m2 m2 m2 m2 m2 m3	17     210     9     3     1000     1000     1000     1000     50	70     40     1500     11000     7.4     7.4     1.26     3     608	1,300 3,000 8,000 30,400
4.1 4.2 4.3 4.4	Screening Planting along carpark and 40m along Victoria Street. (As located on plan) Fitness Stations (Refer to plan LP07/No. 12) Toilet Block (Refer to plan LP07/No. 2) Free Play Area: Earthworks and soil preparation. (Refer to plan LP07/No. 3)	mulch.45L TREEGroundcover plantingVariety of varying challenges located in groups of three.Softfall area, including; concrete edging 100mm; sandstone log retaining; subgrade preparation; roadbase.GradingGradingCultivation by machine.Amelioration of top 200mm.TurfBreak up by machine/hand as noted , includes plant/equipment hire , load spoil onto truck , cart 10km and disposal. Reinforced concrete, by machine.Earthworks	m2 Item PC PC m2 m2 m2 m2 m2 m2 m3	17     210     9     3     1000     1000     1000     1000     1000     50     75	70     40     1500     11000     7.4     7.4     1.26     3     608     7.4	1,200 8,400 13,500 33,000 75,000 7,400 1,300 3,000 8,000 30,400 600

### Bridges Hill - Opinion of Probable Cost 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged.

m = metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
4.8	<b>Green Link-</b> Approximately 200m in length, up to 20m in width. To be undertaken in stages. Ongoing management required to maintain sight lines and manage for fire risk.	Works include soil amelioration, turf and weed removal, localised swales to hold water on the slope, planting, mulch, signage and fencing. Ongoing maintenance and monitoring not included in PC sum.	PC	1	150000	150,000
	SUB TOTAL STAGE 4					360,450
STA	GE 5					
5.1	<b>Playground Construction</b> ( <i>Refer to plan LP07/No. 1</i> )	Inclusive of nature-play playground; picnic shelters, Barbecue facilities and multipurpose court.	PC			1,400,000
5.2	<b>Covered Shelters.</b> To be located on former skate park site.	Small shelter located on terraced amphitheatre x2	PC	2	12500	25,000
5.3	Millfield Carparking (Refer to plan LP07/No. 17)	Grading	m2	180	7.4	1,300
		Trim and compact subgrade; 200mm sub base;150mm base coarse; bitumen tack (10mm seal); 30mm AC10.	m2	180	65	11,700
		Upright kerb and gutter.	m	54	100	5,400
		Cultivate and ameliorate top 300mm soil, mulch.	m2	60	4	200
		Planting for garden beds at entry. 140mm pot size at 4/m2	m2	60	30	1,800
	SUB TOTAL STAGE 5					1,445,400
	SUB TOTAL					2,561,630
	DESIGN (15% allowance)					384,245
	TOTAL (not including GST)					2,945,875



Moir Landscape Architecture Pty Ltd, Studio 1, 88 Fern Street, PO Box 111, Islington NSW 2296 admin@moirla.com.au Ph.(02) 4965 3500 Fax.(02) 4965 3555 www.moirla.com.au ACN: 097 558 908 ABN: 48 097 558 908

#### East End Oval - Opinion of Probable Cost 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction.

m =

This is not an estimate and is intended to give an indication of the probable costs.

Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged. metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

10.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
	STAGE 1					
1.1	Lighting (Refer to plan LP10/No. 6)	Sports Oval Lighting	PC	2	30000	60,000
1.2	<b>Oval Fence</b> ( <i>Refer to plan LP10/No. 14</i> )	Tubular fence - picket/loop/spear/patterns/ flat;average - 1800mm high tubular frame (does not include labour)	m	70	100	7,000
		Tubular fence - picket/loop/spear/patterns/ flat;average - 6000mm high tubular frame (does not include labour)	m	30	200	6,000
1.3	<b>Sign- Main</b> (Refer to plan LP10/No. 12)	Large Way finding sign.Requires design and fabrication	Item	2	3500	7,00
1.4	Weed Management	Works to include weed removal, replanting, and management of existing and new vegetation	m2	500	60	30,000
	SUB TOTAL STAGE 1					110,000
STAGE	2					
	DESIGN	To be initiated as part of stage 2. Refer to subtotal for approximation. Terracing, activity space, carpark				
2.2	Additional Large Tree Planting	200L Tree	Item	2	1000	2,00
	(Refer to plan)	Ameliorate 300mm and mulch, allow for 3m2 for 200L tree	m2	6	6	100
	SUB TOTAL STAGE 2					2,10
STAGE	3					1
3.1	Terracing for seating and bank stabilisation. (Refer to plan LP10/No. 7)	Earthworks: Cut to fill	m3	348	7	2,40
		0.4 - 0.85m high sandstone log retaining wall, supply and construct. For two terraces total length is 300m. 500mm wide	lm	300	260	78,00
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill	lm	300	50	15,00
3.2	Shelters (Refer to plan LP10/No. 7)		Item	2	12500	25,00
3.3	Additional Tree Planting	75L TREE	Item	3	200	60
		Ameliorate 300mm and mulch	m2	6	6	10
		45L TREE	Item	7	70	50
		Ameliorate 300mm and mulch	m2	7	6	10
3.4	Footpath- Associated with Victoria Street 285m. 1500mm. (Refer to plan LP10/No. 5)	Footpath 1500mm wide. Concrete footpath with SL72 mesh, on 50mm sub base layer	m2	428	100	42,80
3.5	Footpath to terrace extends along Quarrybylong St- Associated with terracing 267m. 1500mm.	Footpath 1500mm wide. Concrete footpath with SL72 mesh, on 50mm sub base layer	m2	400	100	40,00
	SUB TOTAL STAGE 3					204,50
STAGE	4					
4.1	Carpark: Additional 425m2 of car park. (Refer to plan LP10/No. 1)	Trim and compact subgrade; 200mm sub base;150mm base coarse; bitumen tack (10mm seal); 30mm AC10	m2	425	65	27,60
		Upright kerb and gutter	m	90	100	9,00
4.2	Ancillary activity space: Between carpark and oval. (Refer to plan LP10/No. 2)	Trim and compact subgrade	m2	1100	2	2,20
		Aggregate driveways and paths - by hand;decomposed granite. 100mm thick	m2	1100	30	33,00
		Cultivation by machine	m2	1100	1.5	1,60
		Amelioration of top 200mm	m2	1000	3	3,00
		Turf	m2	1000	8	8,00

#### East End Oval - Opinion of Probable Cost 30th May 2016 - FINAL

The following figures provide an indication of the probable order of costs for the specified works as described in the Masterplan documents. The masterplan documents are indicative concept drawings only and are not drawn based on a survey. They are not for construction. This is not an estimate and is intended to give an indication of the probable costs. Should a detailed accurate estimate be required then it is recommended that the services of a qualified quantity surveyor be engaged. metre, m2 = square metre, m3 = cubic metre, item = individual item, Im = lineal metre, PC = probable cost, t = tonnes

m =

NO.	ITEM	SPECIFICATION	UNIT	QUANTITY	RATE	COST (to 100)
4.3	Footpath- 40m long, 1500mm wide	Footpath 1500mm wide. Concrete footpath with SL72 mesh, on 50mm sub base layer	m2	60	76	4,600
4.4	Neath Street Planting (Refer to plan LP10/No. 16)	Cultivate and ameliorate top 300mm soil, mulch	m2	182	6	1,100
		45L TREE	Item	20	70	1,400
		Groundcover planting	m2	182	40	7,300
		100mm dia ag line with non-woven geotextile filter sock surround with free draining crushed stone backfill	m	182	50	9,100
	SUB TOTAL STAGE 4					107,900
STAGE	5					
5.1	<b>Upgrade Footbridge</b> (Refer to plan LP10/No. 15)	1.5m wide	PC			12,000
5.2	<b>Quarrybylong pedestrian crossing</b> ( <i>Refer to plan LP10/No. 9</i> )		PC			10,000
5.3	Sign - Directional	Medium way finding sign. Including map. Requires design and fabrication	Item	4	2000	8,000
5.4	Footpath- from Quarrybylong to Neath St (Refer to plan LP10/No. 15)	Footpath 1200mm wide. Concrete footpath with SL72 mesh, on 50mm sub base layer	m2	80	76.65	6,100
	SUB TOTAL STAGE 5					36,100
	SUBTOTAL					460,600
	DESIGN (15% allowance)			0.15		69,090
	TOTAL (not including GST)					529,690