

BUSINESS PAPER

ORDINARY MEETING OF COUNCIL

To be held at 6.00 pm on

Tuesday 30 January 2018

Council Chambers, Level 10, Council Administration Building, 41 Burelli Street, Wollongong

Order of Business

- 1 Acknowledgement of Traditional Owners
- 2 Civic Prayer
- 3 Apologies
- 4 Disclosures of Pecuniary Interest
- 5 Petitions and Presentations
- 6 Confirmation of Minutes Ordinary Meeting of Council 11/12/2017
- 7 Confirmation of Minutes Closed Council Session 11/12/2017
- 8 Public Access Forum
- 9 Call of the Agenda
- 10 Lord Mayoral Minute
- 11 Urgent Items
- 12 Notice of Motions
- 13 Agenda Items

Members

Lord Mayor -

Councillor Gordon Bradbery OAM (Chair)

Deputy Lord Mayor -

Councillor David Brown

Councillor Cameron Walters

Councillor Cath Blakey

Councillor Chris Connor

Councillor Dom Figliomeni

Councillor Janice Kershaw

Councillor Jenelle Rimmer

Councillor John Dorahy

Councillor Leigh Colacino

Councillor Mithra Cox

Councillor Tania Brown

Councillor Vicky King

QUORUM - 7 MEMBERS TO BE PRESENT



INDEX

PAGE NO.

	Minutes of Ordinary Meeting of Council 11/12/2017	
	Minutes of Closed Council Session 11/12/2017	
TEM A	Notice of Motion - Councillor Colacino - Construction of New Intersection - Top of Bald Hill where Lawrence Hargrave Drive and Lady Wakehurst Drive meet	1
ТЕМ В	Notice of Motion - Councillor Rimmer - Dedicated Seniors Exercise Park	2
TEM 1	Draft Planning Proposal Lot 100 DP 1207784 Cordeaux Road Mount Kembla PP-2017/2	3
TEM 2	Draft Planning Agreement: Bunnings Properties Pty Ltd - Northcliffe Drive, Kembla Grange (DA-2016/358)	61
TEM 3	Illawarra Shoalhaven Joint Organisation	99
TEM 4	City of Wollongong Traffic Committee Structure Review	121
TEM 5	Floodplain Risk Management Committees structure	132
TEM 6	Unanderra Skate Park Safety Report	139
TEM 7	Helensburgh Pool - Investigation and Feasibility Assessment for Heating and Potential Expansion	145
TEM 8	Policy Review: Paved Footpath Construction	263
TEM 9	Policy Review: School Use of Council Swimming Pools	269
TEM 10	Tender T17/34 - Air Conditioning Designs IPAC and Administration Buildings	274
TEM 11	Proposed Grant of Easement to Drain Water over Lot 23 DP 217420 Gerard Avenue, Farmborough Heights	277
TEM 12	December 2017 Financials	280
TEM 13	Statements of Investments - November and December 2017	290
TEM 14	City of Wollongong Traffic Committee - Minutes of Electronic Meeting held on Friday 5 January 2018	297





MINUTES

ORDINARY MEETING OF COUNCIL

at 6.00 pm

Monday 11 December 2017

Present

Lord Mayor – Councillor Gordon Bradbery OAM (in the Chair), Councillors Cameron Walters, Cath Blakey, Chris Connor, David Brown, Dom Figliomeni, Janice Kershaw, Jenelle Rimmer, John Dorahy (until 8.27 pm), Leigh Colacino, Mithra Cox, Tania Brown and Vicky King

In Attendance

General Manager – David Farmer, Director Infrastructure and Works, Connectivity Assets and Liveable City – Greg Doyle, Director Planning and Environment, Future City and Neighbourhoods – Andrew Carfield, Director Corporate Services, Connected and Engaged City (Acting) – Kylee Cowgill, Director Community Services, Creative and Innovative City (Acting) – Kerry Hunt, Manager Governance and Information (Acting) – Clare Phelan, Manager Finance (Acting) – Steve Packer, Manager Property and Recreation – Peter Coyte, Manager Environmental Strategy and Planning – Renee Campbell, Manager City Works and Services – Mark Roebuck, Manager Project Delivery – Glenn Whittaker, Manager Infrastructure Strategy and Planning – Mike Dowd, Manager Development Assessment and Certification, Mark Riordan and Manager Community, Cultural and Economic Development (Acting) – Sue Savage



INDEX

	PAGE N	Э.
	Disclosure of Interests	1
	Petitions	1
	Confirmation of Minutes of Ordinary Meeting of Council held on Monday, 20 November 2017	1
	Public Access Forum - Item 6 – Proposed Voluntary Planning Agreement with University of Wollongong	1
	Public Access Forum – Item c – Notice of Motion – Councillor Cox – Russell Vale Coal Mine	1
	Call of the Agenda	3
	Suspension of Standing Orders	3
ITEM 1	Draft Urban Greening Strategy 2017 - 2037	3
ITEM 2	Draft City of Wollongong Pedestrian Plan 2017 - 2021	3
ITEM 3	Draft West Dapto Section 94 Development Contributions Plan 2017	4
ITEM 4	Submission on the NSW Government's Future Transport 2056 Strategy	4
ITEM 5	Policy Review: Code of Meeting Practice and Public Access Forum	4
ITEM 6	Proposed Voluntary Planning Agreement with University of Wollongong	4
ITEM 7	Wollongong Development Control Plan 2009 Contaminated Lands Review - Post Exhibition	5
ITEM 8	Model Code of Conduct Complaints Statistics Report 2016-2017	5
ITEM 9	Corrimal Town Centre Shopfront Improvement Program	5
ITEM 10	Policy Review: Use of Confidential Information Policy - Post Exhibition	5
ITEM 11	Policy Review: Public Access to Documents and Information Held by Council	6
ITEM 12	Policy Review: Councillor Access to Council Information and Staff - Post Exhibition	6
ITEM 13	Crown Street Mall Activation and Market Progress Report	6
ITEM 14	Delegations to the General Manager over Christmas Period	6
ITEM 15	Tender T17/45 Fowlers Rd to Fairwater Rd - Stage 1C and 1D - Electrical Power Supply Relocations	7
ITEM 16	Tender T17/48 Harry Graham Drive Embankment Stabilisation	7
ITEM 17	Tender T17/44 Coniston Community Centre Refurbishment	7
ITEM 18	Tender T17/40 Wollongong Memorial Garden Front Quadrant Garden Stage 3	8
ITEM 19	Policy Review: Crime Prevention	8
ITEM 20	Outcome of Exhibition of Proposed Naming of Karreuaira Reserve, Wongawilli	8
ITEM 21	Proposed Grant of Easement to Drain Water over Lot 20 DP 852981 No 192 Gipps Road, Gwynneville	9
ITEM 22	Proposed Grant of Easement for Underground Cables over Lot 18 DP 854650 Huxley Drive, Horsley	9
ITEM 23	Proposed Dedication of Domville Road, Otford as Public Road	9



TEM 24	October 2017 Financials	10
TEM 25	Statements of Investments - October 2017	10
TEM 26	Quarterly Report on Development Applications Involving Variations to Development Standards 1 July to 30 September 2017	10
TEM 27	City of Wollongong Traffic Committee - Minutes of Meeting Held 15 November 2017	10
TEM 28	Bi-Monthly Returns of Disclosures of Interests and Other Matters - December 2017	10
TEM A	Notice of Motion - Councillor Walters - Funding Shortfall - Wollongong Shuttle Bus	11
TEM B	Notice of Motion - Councillor Cox - Russell Vale Coal Mine	13
тем с	Notice of Motion - Councillor Cox - Wollongong Becomes a Bike Friendly City	13
TEM D	Notice of Motion - Councillor Walters - Reopening of Breakwaters at Port Kembla to the Public	14
TEM C1	CONFIDENTIAL - Southern Suburbs District Community Centre and Library	15



DISCLOSURE OF INTERESTS

Councillor Figliomeni declared a conflict of interest in Item 6 as he is on Council of the University of Wollongong. Councillor Figliomeni advised he would leave the meeting during consideration of this Item.

Councillor T Brown a non-pecuniary, non-significant conflict of interest in Item 6 as she works for the University of Wollongong. Councillor Brown advised she would leave the Chambers during discussion and voting of this item.

Councillor Rimmer a non-pecuniary, non-significant conflict of interest in Item 8 as she works for a State Member of Parliament and will remain in Chambers during discussion and voting.

Councillor Walters a non-pecuniary, non-significant conflict of interest in Item 8 as he works for a State Member of Parliament and will remain in Chambers during discussion and voting.

PETITIONS

Councillor D Brown tabled a petition for children's play equipment and adult gym equipment to be installed at Waldron Park, Mount St Thomas.

CONFIRMATION OF MINUTES OF ORDINARY MEETING OF COUNCIL HELD ON MONDAY, 20 NOVEMBER 2017

163

COUNCIL RESOLUTION – RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor Cox that the Minutes of the Ordinary Meeting of Council held on Monday, 20 November 2017 (a copy having been circulated to Councillors) be taken as read and confirmed.

PUBLIC ACCESS FORUM - ITEM 6 - PROPOSED VOLUNTARY PLANNING AGREEMENT WITH UNIVERSITY OF WOLLONGONG

Bess Moylan thanked Councillors D Brown, T Brown, Dorahy, Cox and Blakey for taking an interest and contacting her to discuss this matter.

Items proposed in the Voluntary Planning Agreement (VPA) are vague in detail leaving open opportunities for misunderstanding and assumptions. There has been no environmental impacts for any of these items, for example:

- the items have not been raised by the community for development
- they are not in the Council's current works program
- they are not in the current Section 94 contribution plans
- these are ones that the University have decided are going to be of benefit to the community.

Some of the items will require community consultation so they are not necessarily guaranteed. They may have to go through the Development Application process and may be rejected. This possibly could lead some of the Council staff to a situation where they are pressured to approve some of the activities because they are in the Plan eg 20 year lease to the University to the Koolobong Oval is suggested in the VPA yet there has been no consideration whether that has been approved or will be put through.

Master planning for Beaton Park and Botanic Garden is currently underway and this suggests activities should not be entertained until these processes have been completed. This could possibly be confusing to the public and even undermines the integrity of the process. If people, for example, think that it has already been decided to move the soccer club from Beaton Park to the Koolobong Oval there will be questions about transparency and due process.



Some of the items appear to be those that the University was already to undertake and some might suggest it may be more benefit to the University than the broader community. It might be more equitable for Section 94 contributions from the University to be spread across the entire city to benefit.

Some items don't reflect local community needs. The community has asked for bike paths but none of the items in this VPA mention bike paths. There is an Access and Movement Strategy currently underway in the Keiraville/Gwynneville area. The implementation plan for that Strategy will have quite a number of items that will cost quite a lot of money. There is currently no reference to that need that the community, and the University, and the Council have identified.

If this goes ahead Councillors should be reviewing submissions, not just the General Manager.

PUBLIC ACCESS FORUM - ITEM 6 - PROPOSED VOLUNTARY PLANNING AGREEMENT WITH UNIVERSITY OF WOLLONGONG

Damien Israel, Chief Finance Officer for the University of Wollongong (University) addressed the meeting on this matter. He advised the University views the Voluntary Planning Agreement (VPA) very much a partnership approach between the University and Council to work together on a program of investments within the environs of the Wollongong Campus for the benefit of the community. The VPA responds to the opportunity raised in the process of developing our 20 year Wollongong Campus Master Plan to improve and activate the Northfields Avenue precinct informed by consultation with the community and Council.

The University also seeks to contribute to the challenges identified by Council in the provision of improved sporting facilities for a growing population through funding a substantial upgrade to the existing Kooloogong Ovals sportsfields. Together with the separate program of local works being scoped by Council over coming years for the Gwynneville/Keiraville area, we believe that our combined efforts will deliver significant benefit to both the local neighbourhood community and the wider Wollongong community.

PUBLIC ACCESS FORUM - ITEM C - NOTICE OF MOTION - COUNCILLOR COX - RUSSELL VALE COAL MINE

Kay Osborn representing the Illawarra Residents for Responsible Mining Inc (IRRM) addressed the meeting on this matter also providing a detailed paper on the matter to Councillors. Wollongong City Council approved the operations of the Russell Vale Emplacement Area (EA or Slag Heap) in three stages between 1986 and 1990. Numerous conditions of the approval remain unmet. This presentation aims to draw Council's attention to a number of risks which may have flow on effects to residents and ratepayers. These include: the risk of being left with the costs of rehabilitation in the vent of financial collapse of the mining company, Wollongong Coal Ltd; liability from an accident or disaster at the EA site; and, being the subject of litigation over a disaster or the ongoing particulate pollution emitted from the site.

The IRRM asked Council to assure residents and ratepayers that they will act promptly and decisively to finalise the final landform documents for the site, end the approval for the dumping of the mine's waste thereon and see through the rehabilitation of the land by Wollongong Coal. This conclusion would not only spare Council from the risk it is courting through the ongoing mismanagement of the site, it would also enable the ultimate goal of the original development approval to be realised – the expansion of the Russell Vale Golf Course.

164

COUNCIL RESOLUTION – RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor Colacino that all speakers be thanked for their presentation and invited to table their notes.



CALL OF THE AGENDA

165 COUNCIL RESOLUTION - RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor Figliomeni that the staff recommendations for Items 2, 3, 7, 8 and 10 to 12, 14 to 18, 20 to 28 inclusive, be adopted as a block.

SUSPENSION OF STANDING ORDERS

166 COUNCIL RESOLUTION - RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor Figliomeni that the Notice of Motions be considered after the numbered agenda items under suspension of standing orders.

ITEM 1 - DRAFT URBAN GREENING STRATEGY 2017 - 2037

- 167 COUNCIL RESOLUTION RESOLVED carried on the motion of Councillor D Brown seconded Councillor Rimmer:
 - 1 The updated draft Urban Greening Strategy 2017-2037 be adopted by Council.
 - 2 Council note the draft Urban Greening Strategy Implementation Plan 2017-21.

In favour Councillors Kershaw, Rimmer, D Brown, T Brown, King, Connor, Cox, Blakey, Colacino, Walters, Dorahy and Bradbery

Against Councillor Figliomeni

ITEM 2 - DRAFT CITY OF WOLLONGONG PEDESTRIAN PLAN 2017 - 2021

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 Council adopt the final draft City of Wollongong Pedestrian Plan 2017-21.
- 2 Council note the City of Wollongong Pedestrian Plan 2017-21 Implementation Plan

ITEM 3 - DRAFT WEST DAPTO SECTION 94 DEVELOPMENT CONTRIBUTIONS PLAN 2017 FOR ADOPTION

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

- 1 The advice from the Minister for Planning dated 21 September 2017 and the NSW Department of Planning & Environment letter dated 24 November 2017 be noted.
- The revised draft West Dapto Section 94 Development Contributions Plan (2017) which incorporates the NSW Department of Planning & Environment requirements and other minor amendments, be adopted and the Plan publically notified.
- 3 Council note that the Yallah-Marshall Mount Planning Proposal has been forwarded to the NSW Department of Planning & Environment for review, finalisation and notification.



ITEM 4 - SUBMISSION ON THE NSW GOVERNMENT'S FUTURE TRANSPORT 2056 STRATEGY

168 COUNCIL RESOLUTION - RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor Connor that the General Manager be endorsed to finalise the attached submission on the Draft Future Transport 2056 Strategy and forward to Transport for NSW by 13 December 2017.

ITEM 5 - POLICY REVIEW: CODE OF MEETING PRACTICE AND PUBLIC ACCESS FORUM

COUNCIL RESOLUTION — RESOLVED UNANIMOUSLY on the motion of Councillor D Brown seconded Councillor King that consideration of the Code of Meeting Practice and Public Access Forum Policy be deferred until after finalisation of the NSW OLG Model Code of Meeting Practice and that Council make a submission on the Model Code consultation drafts.

DEPARTURE OF COUNCILLOR

Due to a prior Disclosure of Interest Councillors T Brown and Figliomeni departed the Chamber and were not present during debate and voting for Item 6.

During debate and prior to voting on Item 6, Councillor Walters departed and returned to the meeting, the time being from 6.48 pm to 6.53 pm.

ITEM 6 - PROPOSED VOLUNTARY PLANNING AGREEMENT WITH UNIVERSITY OF WOLLONGONG

- 170 COUNCIL RESOLUTION RESOLVED on the motion of Councillor D Brown seconded Councillor Dorahy that:
 - 1 The draft planning agreement between University of Wollongong and Council for the carrying out of public domain works be exhibited for community comment for a minimum period of two (2) months.
 - 2 This matter return to Council for consideration following exhibition.
- Variation The variation moved by Lord Mayor to increase the exhibition period to two (2) months was accepted by the mover and seconder.
- In favour Councillors Kershaw, Rimmer, D Brown, King, Connor, Colacino, Walters, Dorahy and Bradbery
 - Against Councillors Cox and Blakey



ITEM 7 - WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 CONTAMINATED LANDS REVIEW - POST EXHIBITION

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 The following revised Wollongong Development Control Plan 2009 Chapters be adopted:
 - a E7: Waste Management;
 - b E19: Earthworks;
 - c E20: Contaminated Land Management, as amended following exhibition;
 - d E21: Demolition and Hazardous Materials Management; and
 - e E22: Erosion and Sediment Control Management, as amended following exhibition.
- 2 The adoption of the revised Wollongong Development Control Plan 2009 Chapters be notified in local newspapers in accordance with the Environmental Planning and Assessment Regulation 2000.

ITEM 8 - MODEL CODE OF CONDUCT COMPLAINTS STATISTICS REPORT 2016-2017

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION – The report on Model Code of Conduct Complaints Statistics Report for 2016-2017 be received and noted.

ITEM 9 - CORRIMAL TOWN CENTRE SHOPFRONT IMPROVEMENT PROGRAM

- 171 COUNCIL'S RESOLUTION RESOLVED UNANIMOUSLY on the motion of Councillor Kershaw seconded Councillor King that -
 - 1 Council provide funding to the proposed recipients for the Corrimal Shopfront Improvement Program as set out in Attachment 1.
 - 2 The Corrimal Main Street and Town Square Precinct Plan Scoping of Town Square and Main Street Renewal Project, start in 2018.

ITEM 10 - POLICY REVIEW: USE OF CONFIDENTIAL INFORMATION POLICY - POST EXHIBITION

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

- 1 Council note the report on the revised Use of Confidential Information policy post exhibition, and the submissions made to the draft;
- 2 The revised Use of Confidential Information policy be adopted.



ITEM 11 - POLICY REVIEW: PUBLIC ACCESS TO DOCUMENTS AND INFORMATION HELD BY COUNCIL

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION – Council adopt the revised Public Access to Documents and Information Held by Council policy.

ITEM 12 - POLICY REVIEW: COUNCILLOR ACCESS TO COUNCIL INFORMATION AND STAFF - POST EXHIBITION

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 Council note the report on the revised Councillor Access to Council Information and Staff policy post exhibition, and the submission made to the draft;
- 2 The revised Councillor Access to Council Information and Staff Policy be adopted.

ITEM 13 - CROWN STREET MALL ACTIVATION AND MARKET PROGRESS REPORT

172 COUNCIL'S RESOLUTION - RESOLVED UNANIMOUSLY on the motion of Councillor Connor seconded Councillor T Brown that Council note this report.

ITEM 14 - DELEGATIONS TO THE GENERAL MANAGER OVER CHRISTMAS PERIOD

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

- 1 Council note the report on Delegations to the General Manager over Christmas Period.
- 2 Council note the exercise of delegations to the General Manager during the Caretaker Period.
- Council delegate to the General Manager and the Lord Mayor or Deputy Lord Mayor the authority to accept, or otherwise, tenders under Request for Tender processes between 12 December 2017 and 28 January 2018, with a report on the exercise of such delegation to be provided to the Ordinary Meeting of Council in February 2018.



ITEM 15 - TENDER T17/45 FOWLERS RD TO FAIRWATER RD - STAGE 1C AND 1D - ELECTRICAL POWER SUPPLY RELOCATIONS

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- In accordance with clause 178(1)(a) of the Local Government (General) Regulation 2005, Council accept the tender of Abergeldie Contractors Pty Ltd for West Dapto Access Fowlers Road to Fairwater Drive Stages 1C & 1D Electrical Power Supply Relocations, in the sum of \$2,446,786.00, excluding GST.
- 2 Council delegate to the General Manager the authority to finalise and execute the contract and any other documentation required to give effect to this resolution.
- 3 Council grant authority for the use of the Common Seal of Council on the contract and any other documentation, should it be required, to give effect to this resolution.

ITEM 16 - TENDER T17/48 HARRY GRAHAM DRIVE EMBANKMENT STABILISATION

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 In accordance with clause 178(1)(a) of the Local Government (General) Regulation 2005, Council accept the tender of Specialised Geo Pty Ltd for Harry Graham Drive Embankment Stabilisation Stage 1, in the sum of \$422,071.50, excluding GST.
- 2 Council delegate to the General Manager the authority to finalise and execute the contract and any other documentation required to give effect to this resolution.
- 3 Council grant authority for the use of the Common Seal of Council on the contract and any other documentation, should it be required, to give effect to this resolution.

ITEM 17 - TENDER T17/44 CONISTON COMMUNITY CENTRE REFURBISHMENT

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

- In accordance with clause 178(1)(a) of the Local Government (General) Regulation 2005, Council accept the tender of Batmac Constructions Pty Ltd for the Coniston Community Centre Refurbishment, in the sum of \$453,905.28, excluding GST.
- 2 Council delegate to the General Manager the authority to finalise and execute the contract and any other documentation required to give effect to this resolution.
- 3 Council grant authority for the use of the Common Seal of Council on the contract and any other documentation, should it be required, to give effect to this resolution.



ITEM 18 - TENDER T17/40 WOLLONGONG MEMORIAL GARDEN FRONT QUADRANT GARDEN STAGE 3

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1a In accordance with clause 178(1)(b) of the Local Government (General) Regulation 2005, Council decline to accept the tender received for Wollongong Memorial Garden Front Quadrant Garden Stage 3 and resolve to enter into negotiations with the tenderer or any other party with a view to entering into a contract in relation to the subject matter of the tender.
- b In accordance with clause 178(4) of the Local Government (General) Regulation 2005, the reason for Council hereby resolving to enter into negotiations with the tenderer or any other party and not inviting fresh tenders is that it is anticipated that a satisfactory outcome can be achieved with one of those parties who demonstrate a capacity and ability to undertake the works.
- 2 Council delegate to the General Manager the authority to undertake and finalise the negotiations, firstly with the tenderer, and, in the event of failure of negotiations that tenderer, any other party, with a view to entering into a contract in relation to the subject matter of the tender.
- 3 Council grant authority for the use of the Common seal of Council on the contract and any other documentation, should it be required, to give effect to this resolution.

ITEM 19 - POLICY REVIEW: CRIME PREVENTION

173 COUNCIL'S RESOLUTION - RESOLVED UNANIMOUSLY on the motion of Councillor Colacino seconded Councillor Walters that Council adopt the Crime Prevention Council Policy.

ITEM 20 - OUTCOME OF EXHIBITION OF PROPOSED NAMING OF KARREUAIRA RESERVE, WONGAWILLI

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - Council adopt the naming proposal 'Karreuaira Reserve'.



ITEM 21 - PROPOSED GRANT OF EASEMENT TO DRAIN WATER OVER LOT 20 DP 852981 NO 192 GIPPS ROAD, GWYNNEVILLE

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 Council approve the grant of an Easement to Drain Water 1m wide over Lot 20 DP 852981 No 192 Gipps Road, Gwynneville, being the Wollongong Senior Citizens Centre and Wollongong Workshop Theatre, in favour of Lot 10 DP 1107164 No 11 Catherine Street, Gwynneville, as shown on the attachment to this report.
- Council accept the payment in the amount of \$54,000 (GST free) from the owner of Lot 10 DP 1107164 No 11 Catherine Street, Gwynneville as compensation for the grant of the easement.
- The creation of the easement be subject to approval of the applicant's development application for the redevelopment of his property at No 11 Catherine Street, Gwynneville and payment by him of all costs in the creation of the easement.
- 4 Approval be granted to affix the Common Seal of Council to the survey plan, Section 88B Instrument and any other documentation required to give effect to this resolution.

ITEM 22 - PROPOSED GRANT OF EASEMENT FOR UNDERGROUND CABLES OVER LOT 18 DP 854650 HUXLEY DRIVE, HORSLEY

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 Council authorise the grant of an Easement for Underground Cables 3m Wide in favour of Endeavour Energy over Lot 18 DP 854650 Huxley Drive, Horsley, as shown by heavy black dashed line on the attachment to this report.
- 2 Council accept the payment of \$1,530 (+ GST) from Endeavour Energy as compensation for the grant of the easement.
- 3 Approval be granted to affix the Common Seal of Council to the Transfer Granting Easement document and any other documentation required to give effect to this resolution.

ITEM 23 - PROPOSED DEDICATION OF DOMVILLE ROAD, OTFORD AS PUBLIC ROAD

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - In accordance with Section 16 of the Roads Act 193, Council approve the dedication of Domville Road, Otford as public road, as shown hatched on the attachment to this report, and action be taken to dedicate the road by the placement of a notice in the NSW Government Gazette.



ITEM 24 - OCTOBER 2017 FINANCIALS

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION -

- 1 The financials be received and noted.
- 2 Proposed changes in the Capital Works Program be approved.

ITEM 25 - STATEMENTS OF INVESTMENTS - OCTOBER 2017

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - Council receive the Statements of Investments for October 2017.

ITEM 26 - QUARTERLY REPORT ON DEVELOPMENT APPLICATIONS INVOLVING VARIATIONS TO DEVELOPMENT STANDARDS 1 JULY TO 30 SEPTEMBER 2017

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - Council note the report.

ITEM 27 - CITY OF WOLLONGONG TRAFFIC COMMITTEE - MINUTES OF MEETING HELD 15 NOVEMBER 2017

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - In accordance with the powers delegated to Council, the Minutes and recommendations of the City of Wollongong Traffic Committee meeting held 15 November 2017 in relation to the Regulation of Traffic be adopted.

ITEM 28 - BI-MONTHLY RETURNS OF DISCLOSURES OF INTERESTS AND OTHER MATTERS - DECEMBER 2017

The following staff recommendation was adopted as part of the Block Adoption of Items (refer Minute No 165).

COUNCIL'S RESOLUTION - Council note the tabling of the Returns of Disclosures of Interest as required by Section 450A of the Local Government Act 1993.

DEPARTURE OF COUNCILLORS

During debate and prior to voting on Item A, Councillor Colacino departed and returned to the meeting, the time being from 7.40 pm to 7.43 pm.

During debate and prior to voting on Item A, Councillor Cox departed and returned to the meeting, the time being from 7.56 pm to 7.57 pm



ITEM A - NOTICE OF MOTION - COUNCILLOR WALTERS - FUNDING SHORTFALL - WOLLONGONG SHUTTLE BUS

MOVED by Councillor Walters seconded Councillor Colacino that –

- Wollongong City Council request that the General Manager approaches Wollongong University to discuss meeting the 25% shortfall for the Wollongong Shuttle funding (Route 55A and 55C). (12.5% funding from University of Wollongong and Wollongong City Council.)
- 2 The General Manager report back to Council on the outcomes of the discussions with the University of Wollongong. This reporting occur in the form of a briefing to take place as soon as possible.
- Wollongong City Council requests the official total costings from Transport for NSW for meeting the 25% proposed funding component so that Council and the University can consider the full implications of this fund-sharing agreement.
- 4 Council write to the NSW Premier Gladys Berejiklian and the Minister for Transport and Infrastructure, Andrew Constance, requesting that the deadline for the cessation of the free shuttle service, as it currently stands, be delayed for a period of three months so the discussions and considerations outlined in Points 1, 2 and 3 can be progressed.

Variation The variation moved by Councillor Colacino to add Point 4 of Motion was accepted by the mover.

At this stage, Councillor D Brown FORESHADOWED a MOTION should Councillor Walters' Motion be defeated.

During debate a PROCEDURAL MOTION was MOVED by Councillor Colacino and seconded Councillor Walters to allow additional time for Councillor Dorahy [two minutes] to address the meeting. CARRIED.

Councillor Walter's MOTION on being PUT to the VOTE was LOST.

In favour Councillors Colacino, Walters and Dorahy

Against Councillors Kershaw, Rimmer, D Brown, T Brown, King, Connor, Cox, Blakey, Figliomeni and Bradbery

Following the defeat of Councillor Walters' Motion, Councillor D Brown's FORESHADOWED MOTION became the MOTION.

- 174 COUNCIL'S RESOLUTION RESOLVED on the MOTION by Councillor D Brown seconded Councillor T Brown that Council -
 - 1 Reaffirms its opposition to any introduction of a fee for the Gong Shuttle, noting that the NSW Government committed to 'continue to operate the free shuttle bus in the Wollongong City Centre, with strong patronage which continues to rise' as identified in the Illawarra Regional Transport Plan 2014.
 - 2 Once again urges Premier Berejiklian to reverse the move to charge a fee on the Shuttle and request the State Government continue to fully fund the service.
 - 3 Authorise payment of up to \$350,000 per annum, starting from the 2018-19 financial year,



to fund in partnership with the University of Wollongong and/or other partners, the announced State Government funding shortfall for the Gong Shuttle:

- a Confirms the funding above be conditional on the Shuttle remaining free for users and be for a term of three years or a lesser period if the State Government agrees to maintain full funding;
- b Delegates to the General Manager, Lord Mayor and Deputy Lord Mayor the authority to finalise any agreements to give effect to this resolution.
- 4 Continues to recognise the Gong Shuttle has been a huge success since such a service was proposed in Wollongong's City Centre Revitalisation Strategy as was adopted in 2006 of which elements were in 2007.
- 5 Thank local stakeholders, interest groups and residents who support the campaign to keep the Gong Shuttle free and urge them to continue their efforts to this end.
- 6 Agree in principle to maintain funding of approximately \$180,000 per annum, on average, to provide shelters, seats, bike racks and associated infrastructure at Gong Shuttle stops.
- 7 Continue investigating a southern suburbs shuttle loop as outlined in Wollongong's 2013 Access and Movement Strategy.
- 8 Write to the NSW Premier Gladys Berejiklian and the Minister for Transport and Infrastructure, Andrew Constance, requesting that the deadline for the cessation of the free shuttle service, as it currently stands, be delayed for a period of three months so the discussions and considerations outlined in Points 1 to 7 can be progressed.

Variation The variation moved by Councillor Colacino to add Point 8 was accepted by the mover and seconder.

In favour Councillors Kershaw, Rimmer, D Brown, T Brown, King, Connor, Colacino, Walters, Dorahy and Bradbery

Against Councillor Figliomeni

DEPARTURE OF COUNCILLOR

During debate and prior to voting on Item B, Councillor Dorahy departed the Chambers at 8.27 pm and tendered his apologies for the remainder of the meeting.

During debate and prior to voting on Item B, Councillor Colacino departed the Chambers and returned to the meeting, the time being from 8.28 pm to 8.31 pm.



ITEM B - NOTICE OF MOTION - COUNCILLOR COX - RUSSELL VALE COAL MINE



COUNCIL'S RESOLUTION – RESOLVED UNANIMOUSLY on the motion of Councillor Cox seconded Councillor Blakey that Councillors be given a briefing on the Russell Vale coal mine, including but not limited to:

- 1 The land use agreement between Wollongong Coal and Wollongong Council on the mine site and adjacent land in the Russell Vale Golf course;
- 2 Unpaid security bonds, and what efforts Council has made to recover those debts;
- 3 Council's liability for site remediation in the event that Wollongong Coal goes bankrupt;
- 4 Update on emplacement area Council conditions;
- 5 Environmental controls currently in place, both for the mine and also the emplacement area on Council land; and
- 6 Indicative cost to Council if the Company defaults on its obligations.

Variation

The variation moved by Councillor Figliomeni to add Point 6 was accepted by the mover and seconder.

DEPARTURE OF COUNCILLOR

During debate and prior to voting on Item C, Councillor Rimmer departed the Chambers and returned to the meeting, the time being from 8.48 pm to 8.50 pm.

ITEM C - NOTICE OF MOTION - COUNCILLOR COX - WOLLONGONG BECOMES A BIKE FRIENDLY CITY

Moved by Councillor Cox seconded Councillor Blakey that -

- 1 Council develop a 30 year plan to transform Wollongong into a bike friendly city, with the ambition that by 2050:
 - a Every road has a dedicated cycleway, that is physically separated from car traffic.
 - b Bikes outnumber cars on our roads, and more trips are made by bike than by car.
 - c Wollongong is recognised as a global leader in active transport.
- 2 The 30 year bike plan should include measurable targets and milestones that are embedded into our current strategic plan. These targets and milestones should be measurable, and should map out a clear path to reach and achieve our ultimate 2050 goal of a cycleway on every street. The first milestone would be the completion of the 2014-2018 Bike Plan.

During debate a PROCEDURAL MOTION was MOVED by Councillor Colacino and seconded Councillor Walters to allow additional time for Councillor Blakey [one minute] to address the meeting. CARRIED.



At this stage Councillor D Brown Foreshadowed a Motion should Councillor Cox's Motion be defeated.

The MOTION was PUT to the VOTE and LOST.

In favour Councillors Cox and Blakey

Against Councillors Kershaw, Rimmer, D Brown, T Brown, King, Connor, Colacino, Walters, Figliomeni and Bradbery

Following the defeat of Councillor Cox's Motion, Councillor D Brown's FORESHADOWED MOTION became the MOTION.

176 COUNCIL'S RESOLUTION – RESOLVED on the Motion of Councillor D Brown seconded Councillor T Brown that consideration of cycling usage targets and supporting infrastructure be deferred until City of Wollongong Bike Plan 2014-2018 is presented for review.

In favour Councillors Rimmer, D Brown, T Brown, Connor, Cox, Blakey, Figliomeni and Bradbery Against Councillors Colacino, Walters, King and Kershaw

ITEM D - NOTICE OF MOTION - COUNCILLOR WALTERS - REOPENING OF BREAKWATERS AT PORT KEMBLA TO THE PUBLIC

- 177 COUNCIL'S RESOLUTION Councillor Walters seconded Councillor Colacino submitted the following Motion -
 - 1 Wollongong City Council request the General Manager approaches NSW Ports to discuss the reopening of breakwaters at Port Kembla to the public. This would be to discuss the areas that were open to the public prior to the lease of Port Kembla. With the outcome of these discussions be provided in an information note to Councillors.
 - Wollongong City Council supports the opening of the breakwaters at Port Kembla to the public as it is utilised by locals and tourists for a range of activities.
 - Wollongong City Council supports the opening of the breakwater between dawn to dusk and closing them in severe weather conditions.

In favour Councillors Figliomeni, Walters, Colacino, Cox, Blakey, Connor and Rimmer

Against Councillors Kershaw, D Brown, T Brown, King and Bradbery

CLOSED COUNCIL SESSION

The Lord Mayor called for a motion to close the meeting for consideration of a report which deals with the Southern Suburbs District Community Centre and Library.

- COUNCIL'S RESOLUTION RESOLVED UNANIMOUSLY on the MOTION by Councillor Figliomeni seconded Councillor Connor that the meeting into Closed Session to consider Southern Suburbs District Community Centre and Library in accordance with Section 10A 2(d)(i) of the Local Government Act 1993 on the basis that
 - a the report contains commercial information of a confidential nature that would, if disclosed, prejudice the commercial position of the person who supplied it;
 - b on balance, the public interest in preserving the confidentiality of commercial information outweighs the public interest in openness and transparency in Council decision-making by discussing the matter in open meeting.



Before the MOTION was PUT in accordance with Section 10A(4) of the Local Government Act 1993, the Lord Mayor invited members of the gallery to make representations to the Council as to whether this part of the meeting should be closed.

One submission was received from Kate McIlwain on behalf of the Illawarra Mercury objecting to the closure of the meeting.

The MOTION was PUT to the VOTE and CARRIED UNANIMOUSLY.

At this stage, the time being 9.30 pm members of the press and gallery departed the Council Chambers and the meeting moved into closed session.

Council resumed into Open Session at 9.48 pm and members of the gallery were invited back into the Council Chambers.

ITEM 29 - RESOLUTION FROM THE CLOSED SESSION OF COUNCIL - SOUTHERN SUBURBS DISTRICT COMMUNITY CENTRE AND LIBRARY

- 179 COUNCIL'S RESOLUTION The Lord Mayor advised those present that whilst in Closed Session, Council resolved to
 - 1 Council authorise the acquisition of properties on King Street, Warrawong subject to the following conditions:
 - a Council proceed to contract on negotiated prices as detailed in the confidential report to Council.
 - b The General Manager is delegated to negotiate and complete the acquisition of the remaining properties.
 - c Each party be responsible for their own legal costs.
 - 2 Council authorise the demolition upon the acquisition being finalised on the basis that demolition costs do not exceed those outlined in the confidential report to Council per property.
 - 3 Council allocate funds for the purchase of the properties from the Strategic Projects Restricted Account.
 - 4 Upon the acquisition being finalised, the properties be classified as Operational Land in accordance with the Local Government Act 1993.
 - 5 Authority be granted to affix the Common Seal of Council to the transfer documents and any other documentation required to give effect to the resolution.
 - 6 The General Manager be authorised to sign any documentation necessary to complete the acquisition.

THE MEETING CONCLUDED AT 9.50 PM

Confirmed as a correct record of proceedings at the Ordinary Meeting of the Council of the City of Wollongong held on 30 January 2018.

Chairperson	



File: CO-910.01.010 Doc: IC18/21

ITEM A

NOTICE OF MOTION - COUNCILLOR COLACINO - CONSTRUCTION OF NEW INTERSECTION - TOP OF BALD HILL WHERE LAWRENCE HARGRAVE DRIVE AND LADY WAKEHURST DRIVE MEET

Councillor Colacino has submitted the following Notice of Motion -

"I formally move that -

- 1 Council investigate options that will allow it to work collaboratively with Roads and Maritime Services (RMS) on ways to construct a new intersection at the top of Bald Hill, where Lawrence Hargrave Drive and Lady Wakehurst Drive meet.
- 2 After the correct option has been decided, Council then enter into discussions with the RMS with the intent of finding a solution that will reduce the confusion which currently exists at that intersection.
- 3 The layout of the new intersection must clearly define who has the right of way at any one time and the current ambiguity of "right of way" be resolved.
- 4 An intermediate report come back to Council in the form of a Briefing, no later than 26 March 2018, detailing if the RMS is or is not willing to consider in the near future any new works at the intersection mentioned in point 1.
- The near future be defined by a clear and precise timeline which includes the design and then the construction of the appropriate intersection solution agreed upon within the discussions between Council and the RMS, mentioned in point 2.
- The clear and precise timeline mentioned in point 5, be reported to Council in the form of a Briefing, no later than 17 September 2018."



File: CO-910.01.001 Doc: IC18/23

ITEM B

NOTICE OF MOTION - COUNCILLOR RIMMER - DEDICATED SENIORS EXERCISE PARK

Councillor Rimmer has submitted the following Notice of Motion -

"I formally move that Council begins investigation for a dedicated seniors exercise park and a Briefing be provided to Councillors including estimated cost and possible locations."



File: PP-2017/2 Doc: IC17/726

ITEM 1

DRAFT PLANNING PROPOSAL LOT 100 DP 1207784 CORDEAUX ROAD MOUNT KEMBLA PP-2017/2

A draft Planning Proposal request has been submitted for Lot 100 DP 1207784 Cordeaux Road, Mount Kembla which seeks to facilitate additional large lot residential development, together with the establishment of a Vegetation Management Plan (VMP) and funding mechanism to protect in perpetuity the identified environmental values of the site. This site was considered in the Farmborough Heights to Mount Kembla Concept Plan that was endorsed by Council (9 December 2013) and the Department of Planning (20 March 2014) to guide future development potential for this area.

This report presents the preliminary assessment of the draft Planning Proposal request and recommends that Council resolve to submit a draft Planning Proposal to the NSW Department of Planning and Environment seeking a Gateway Determination to enable public exhibition.

RECOMMENDATION

- A draft Planning Proposal be prepared and submitted to the NSW Department of Planning and Environment for Lot 100 DP 1207784 Cordeaux Road Mount Kembla seeking a Gateway determination to:
 - a Rezone 2.36ha of the site from E3 Environmental Management to E4 Environmental Living with a Minimum Lot Size of 5,000m² and Floor Space Ratio of 0.3:1;
 - b Rezone 5.14ha of the site from E3 Environmental Management to E2 Environmental Conservation; and
 - c Retain 1.47ha of the site as E3 Environmental Management zoning.
- 2 The draft Planning Proposal be exhibited for a minimum period of 28 days.
- 3 The Department of Planning and Environment be requested to issue authority to the General Manager to exercise plan making delegation in accordance with Council's resolution of 26 November 2012.

REPORT AUTHORISATIONS

Report of: Vanni De Luca, Manager Environmental Strategy and Planning (Acting)

Authorised by: Andrew Carfield, Director Planning and Environment - Future City and Neighbourhoods

ATTACHMENTS

- 1 Site Locality Map and Current Zoning
- 2 Extract from endorsed Concept Plan and accompanying Planning Principles
- 3 Indicative Subdivision Layout
- 4 Proposed Zoning, Minimum Lot Size and Floor Space Ratio Maps
- 5 Indicative Vegetation Management Plan

BACKGROUND

In January 2017, a Planning Proposal request was submitted by Cardno on behalf of the landowner for Lot 100 DP 1207784 Cordeaux Road, Mount Kembla, with additional information submitted between June and November 2017. The site is approximately 9 hectares in size and is currently zoned E3 Environmental Management. The site is bounded by land zoned E4 Environmental Living to the south and east, and E3 Environmental Management to the west (Attachment 1).

Lot 100 DP 1207784 is predominantly cleared pasture grassland with no existing dwellings or structures, and is currently used as grazing land for livestock. Native vegetation is present along the southern boundary in a low to moderate condition. A floodplain is located on the low lying eastern portion of the site, which is associated with the American Creek catchment. The site contains first, second and third order vegetated watercourses. The ridgeline separating the floodplain and upper plateau of the site is



densely vegetated. The site assessment identified patches of Moist Box – Red-Gum Foothills Forest (MU13), Acacia scrub and weeds and exotics. No threatened flora species were recorded on the site.

A site inspection undertaken in March 2017 identified several hollow-bearing trees within the stands of vegetation marked as high and moderate ecological value. Both the vegetation and hollows present have the potential to provide habitat for a number of threatened species, and are proposed to be retained within the riparian area/E2 Environmental Conservation zoning.

Farmborough Heights to Mt Kembla Concept Plan

This site was considered in the Farmborough Heights to Mt Kembla Concept Plan that was endorsed by Council (9 December 2013) and the Department of Planning (20 March 2014) to provide a strategic framework to guide future development potential for this area in the context of active conservation. The key objectives of the Concept Plan were to provide certainty for the community by identifying land suitable for conservation and potential development within the study area, as well as provide the opportunity to implement a number of mechanisms that will conserve and manage the environmental attributes of the foothills of the Illawarra Escarpment.

The focus of the development of the Concept Plan has been the long term management of the Illawarra Escarpment and the contribution that appropriately scaled and located residential development could make to conserving land of high ecological value, restoring degraded lands and providing an overall community benefit in terms of creating conservation opportunities. The Plan recognises that ongoing management of areas of high ecological value will be required in order to maintain or improve biodiversity values of the Illawarra Escarpment, and stipulates that any development is linked to the protection and enhancement of key identified environmental attributes.

The endorsed Concept Plan is importantly consistent with and complements the Illawarra Escarpment Strategic Management Plan (IESMP 2015) and the Illawarra Escarpment Land Use Review Strategy (IELURS 2007), which consider limited development may be possible having regard to the environmental sensitivity of the receiving environment, and provided there are mechanisms in place to drive rehabilitation and restoration of the land and its surrounds. The Concept Plan is also consistent with the objectives and targets of regional strategies including the Illawarra Biodiversity Strategy (2011) and the Illawarra Shoalhaven Regional Plan (2015), with a focus on priority vegetation and important habitat corridors.

In developing the Concept Plan it was necessary for the consultant (GHD) to provide a high level estimate of potential dwellings as input into traffic and utilities modelling to assess the likely impact that potential development might have on existing infrastructure and amenity. These estimates were used to develop a Concept Plan, with the GHD report clearly stating that these estimates did not constitute a guarantee of the estimated development potential nor a detailed subdivision plan. Additionally, it was acknowledged in the report to Council (13 December 2013) that the Strategic Planning Study conducted to inform the development of the Concept Plan included a number of high level investigations, and hence identified that more detailed site specific studies may produce some variations to the findings and associated recommendations contained in the Concept Plan. It was recommended that as new information and/or studies are completed in the future there may be the opportunity to revisit the Concept Plan recommendations, should amendments be justified. The role of the Concept Plan is to guide development in the area with individual Planning Proposals invited for specific land holdings, and updated and more detailed studies encouraged in this regard.

The endorsed Concept Plan identified potential to rezone this site to permit large lot residential development, subject to satisfying the accompanying Planning Principles and demonstration that an improved environmental outcome could be achieved for the land. The Concept Plan proposed an E4 Environmental Living zoning for the developable area with a minimum lot size of 5,000m², which would enable approximately three residential allotments in the north western part of the site. An E2 Environmental Conservation zoning was proposed for the remainder of the site, in recognition of the ecological attributes of the site and the flood plain located in the east. The Concept Plan identified the opportunity for the long term management, protection and enhancement of the riparian corridors on site (Attachment 2).



The Concept Plan additionally identified the need to demonstrate adequate access to individual lots and through site connectivity. Development would be subject to the preparation of a geotechnical impact assessment at the development application stage that confirms resolution of any geotechnical issues and development of the site would be subject to visual amenity controls due to its prominent location. A power easement constraint extends along the western boundary restricting development and a sewer pumping station is located along the northern boundary fronting Cordeaux Road.

PROPOSAL

The draft Planning Proposal request includes an indicative subdivision layout depicting three rural/residential large lots, 5,801m², 18,474m² and 74,715m² in size, including the conservation of 6.62 hectares of the site (Attachment 3). The draft Planning Proposal request seeks to rezone 2.36ha of the site from E3 Environmental Management to E4 Environmental Living with a Minimum Lot Size of 5,000m² and Floor Space Ratio of 0.3:1 and rezone the remainder of the site from E3 Environmental Management to E2 Environmental Conservation. It is noted that the proposed 5,000m² minimum lot size could theoretically permit four lots, rather than the proposed three lots.

The Planning Proposal request also indicates the desire to continue limited grazing on the proposed Lot 3 (74,715m²), with the Vegetation Management Plan (VMP) proposing the installation of stock proof fencing as one measure to protect the riparian corridors identified for in-perpetuity restoration and conservation works. The submitted proposal proposed an E2 Environmental Conservation zoning over the riparian and cleared grazing land. However, as the cleared grazing land does not have ecological values and is proposed to be continued for grazing, an E2 Environmental Conservation zone is not appropriate. Accordingly, it is proposed to retain the current E3 Environmental Management zoning in the cleared part of the site earmarked for grazing, and achieve the conservation outcome through the protection of the riparian corridors and vegetation in the south with an E2 Environmental Conservation zoning and the establishment of a Conservation Agreement for rehabilitation works.

Other supporting documents submitted with the draft Planning Proposal request included:

- Ecological Constraints Assessment (EcoPlanning 2017);
- Geotechnical Assessment (Southern Geotechnics 2016);
- Bushfire Assessment (Peterson Bushfire Consulting Services 2017);
- Aboriginal Heritage Information Management System Search (Cardno 2016);
- Vegetation Management Plan (EcoPlanning 2017);
- Aboriginal Cultural Heritage Due Diligence Assessment (Biosis 2017); and
- Preliminary Site Contamination Investigation (Cardno 2017).

To facilitate the proposed development, it is recommended that the draft Planning Proposal amend the Wollongong Local Environmental Plan 2009 as follows:

- a Rezone 2.36ha of the site from E3 Environmental Management to E4 Environmental Living with a Minimum Lot Size of 5,000m² and Floor Space Ratio of 0.3:1;
- b Rezone 5.14ha of the site from E3 Environmental Management to E2 Environmental Conservation; and
- c Retain 1.47ha of the site as E3 Environmental Management zoning.

Access to the subdivision is proposed via a private driveway from Cordeaux Road and a battle axe access road. Full urban reticulation services (power, sewer, water and telecommunications) can be provided to the site. The Concept Plan notes that there is capacity within the existing road network to accommodate additional development throughout the study area. Should a rezoning be approved, any subsequent development application would need to be supported by a detailed assessment of traffic impacts, car parking, site servicing/manoeuvring and waste collection. Any proposed access to the site



would need to comply with Australian Standards AS2890.1 and Wollongong Development Control Plan 2009 to provide adequate grades, widths and safe sight distances.

The proponent has undertaken consultation with Council officers and the Office of Environment and Heritage (OEH), to inform the preparation of this draft Planning Proposal request.

KEY ISSUES FOR CONSIDERATION

The following key issues are relevant to the evaluation of the Planning Proposal request:

Consistency with Endorsed Farmborough Heights to Mt Kembla Concept Plan

The endorsed Concept Plan identifies potential for additional residential development on this site in conjunction with scope to rehabilitate the riparian corridors. The recommended zoning for the potential developable areas is E4 Environmental Living, given the proximity to the escarpment and the desire for any development to be rural residential in character. This zoning controls for a more limited range of permitted land uses appropriate to the surrounding environmental setting and importantly this E4 zoning won't allow further subdivision for dual occupancies and multi dwelling houses. The Concept Plan proposed 5,000m² lots for the developable area. An E2 Environmental Conservation zoning was recommended in the Concept Plan to protect and restore the riparian corridors on site.

Consistent with the Concept Plan, the submitted Planning Proposal request is seeking a rezoning to the recommended E4 Environmental Living zoning for land proposed to be developed, with a minimum lot size of 5,000m² proposed. The riparian corridor and floodplain were proposed to be zoned E2 Environmental Conservation with a minimum lot size of 39.99ha, in line with the Concept Plan recommendations. The submitted draft Planning Proposal request would result in approximately 3 - 4 residential lots, depending on further investigations and finalisation of a subdivision plan at the development application phase. The Planning Proposal is consistent with the Planning Principles contained in the IESMP and IELURS, and further developed through community consultation on the Concept Plan.

Proposed Conservation Plan

The Farmborough Heights to Mt Kembla Concept Plan identifies that there is potential and capacity for appropriately scaled and located development on the interface of the escarpment provided that this development is considered within the context of active conservation. The endorsed Concept Plan for the wider Farmborough Heights to Mt Kembla study area identified approximately 213 hectares as potential future conservation areas, and concluded that ongoing management of proposed conservation areas will be required in order to improve and maintain biodiversity values. The Concept Plan acknowledges that management is likely to be linked to specific development via a conservation offset strategy that would specify titling, management and funding arrangements. The Concept Plan stated that individual Planning Proposals would be required to be prepared by each land owner detailing how any rezoning on that property will lead to an overall conservation improvement for the escarpment or foothills.

The Planning Proposal request seeks large lot low density residential development opportunity on land identified in the Concept Plan with little ecological value (areas dominated by cleared land and exotic vegetation), and proposes to undertake ecological conservation and rehabilitation works associated with the riparian corridors on site. Rehabilitation of riparian corridors can incur significant costs and as such a suitable mechanism for management and funding is required. A Vegetation Management Plan (VMP) has been prepared and submitted (1 August 2017) detailing the management and restoration methods for the areas designated as conservation zones. The VMP includes calculations of indicative costings - an amount of \$100,878 has been identified to provide on ground rehabilitation works over a five year period.

The VMP identifies the following standard and other management actions for the restoration and stabilisation of the riparian areas, to improve biodiversity values on site:

- Weed control of noxious and exotic weed species;
- Revegetation to restore native vegetation cover over areas of cleared and disturbed pasture;



- Supplementary planting in areas of sparse native vegetation cover, to supplement natural regeneration and provide weed suppression;
- Sediment and erosion controls:
- Impede cattle access to revegetated areas of the site (stock proof fencing);
- Vertebrate pest management; and
- Create a vegetation buffer to riparian zones and maintenance of natural flow regimes in the riparian zone.

The draft Planning Proposal request refers to a Property Vegetation Plan (PVP) as the likely legislative mechanism to be used to ensure the VMP is registered on title and implemented in perpetuity. Since the lodgement of the draft Planning Proposal request the *Biodiversity Conservation Act 2016* and associated reforms have now commenced and therefore an in perpetuity **Conservation Agreement** will need to be registered on land title, funding obtained and active management underway prior to the issuing of a subdivision development approval. Whilst the VMP submitted refers to a five year period, this VMP will provide the basis for a Conservation Agreement (which have replaced PVPs) registered on title and administered by the Biodiversity Conservation Trust (Office of Environment and Heritage) to ensure in perpetuity funding of conservation works. This Agreement will need to be registered with the Office of Environment and Heritage (OEH) prior to finalisation of the Planning Proposal to rezone the land, as evidence of the improved environmental outcome to be achieved through the Planning Proposal (as required by the Concept Plan).

Additionally, the Planning Proposal request initially proposed a Torrens Title subdivision, however a Community Title subdivision is likely to be required in order to facilitate private road construction and maintenance, and provide funding for the conservation works identified in the VMP. One option to fund the in perpetuity conservation works is a Community Title arrangement with a Body Corporate collecting a yearly environmental fee and managing the restoration works detailed in the VMP. Should the land proposed for E2 Environmental Conservation zoning be retained in private ownership, Council's Environment team recommend that the riparian E2 Environmental Conservation land identified for rehabilitation and conservation be contained within one separate lot, to be owned and managed as Community Title, as the best way to achieve the conservation and improvement outcome for biodiversity. The funding details will be finalised in consultation with the Biodiversity Conservation Trust (OEH) with the establishment of the Conservation Agreement, which can then inform the final subdivision plan. Under the new Biodiversity Conservation legislation, some Conservation Agreements will be eligible for stewardship payments and a range of assistance, with landowners able to access the Landholder Support Program.

In terms of the Conservation Agreement the following process would apply:

- 1 Draft Vegetation Management Plan (VMP) prepared and submitted with Planning Proposal request completed.
- 2 Council resolves to prepare a draft Planning Proposal.
- 3 During / post exhibition: Final VMP prepared based on exhibition feedback, including updated costings.
- 4 Council resolves to finalise Planning Proposal.
- 5 Conservation Agreement registered with the Biodiversity Conservation Trust.
- 6 Council submits the Planning Proposal to the Department of Planning and Environment for notification.

The Office of Environment and Heritage (OEH) has identified that the subject site represents a strategically important linkage opportunity in the context of the foothills and escarpment, support a long term conservation outcome being achieved for the site through establishing the proposed conservation areas, and stress that the mechanism for securing and managing the environmental corridor should be resolved as part of the Planning Proposal.



It should be noted that the option of dedication of the land proposed for E2 Environmental Conservation zoning to Council with funding was discussed with the proponent, as a mechanism to ensure in perpetuity conservation works required by the Concept Plan. The Office of Environment and Heritage (OEH) submission also recommended the consideration of dedication of the riparian corridor to Council along with in-perpetuity management funding to ensure a long term conservation outcome. The proponent has indicated a preference to retain the land proposed for E2 zoning in private ownership and register a Conservation Agreement with the Biodiversity Conservation Trust (OEH) as the mechanism to achieve active conservation in this regard.

While the site is part of a creek corridor, it is not a missing piece of a public reserve or drainage corridor. While Council owns a small piece of land zoned RE1 Public Recreation to the east, Council does not own land to the west. Accordingly, the transfer of land to Council is not supported.

Conservation of ecologically constrained land with funding in association with low density limited residential development provides both the legal and financial mechanisms to ensure the long term conservation and enhancement of the identified biodiversity values and rehabilitation of an important riparian corridor. This aligns with the Concept Plan and associated Planning Principles (2013), where any rezoning on a property must lead to an overall conservation improvement. A focus on riparian conservation to improve the ecological value of the watercourse is consistent with Council's Illawarra Biodiversity Strategy (2011), which highlights the degradation of native riparian vegetation and invasion of exotic weeds as major threats to biodiversity in the Illawarra, and identifies the importance of Council encouraging conservation and restoration efforts in this regard. A network of regional biodiversity corridors has been mapped as part of the Biodiversity Strategy, with the value of landscape connectivity well recognised by various state, regional and local policies, including Australia's Biodiversity Conservation Strategy (2009), the Southern Rivers Catchment Action Plan (2013-23), and the Illawarra Shoalhaven Regional Plan (2015). Maintaining connectivity and enhancing existing connectivity within corridors by regenerating or revegetating missing links, is also one of the three recommended approaches to managing biodiversity in the face of climate change.

The development strategy for this site has the potential to support, rehabilitate and improve the following important environmental functions of the riparian corridor:

- providing a diversity of fauna and flora habitat resources;
- providing connectivity between wildlife habitats;
- providing bed and bank stability and reducing potential bank and channel erosion;
- protecting water quality by trapping sediment, nutrients and other contaminants; and
- conveying flood flows and controlling the direction of flood flows.

The Planning Proposal would result in the retention and rehabilitation of approximately 6.62 hectares of vegetation, through the establishment of a Conservation Agreement administered by the Biodiversity Conservation Trust (Office of Environment and Heritage).

Bushfire

A bushfire assessment was undertaken by Peterson Bushfire (2017) in accordance with *Planning for Bushfire Protection 2006* (PBP) and consisted of desktop analysis and a site inspection. The assessment of the site identified two areas of vegetation which pose a bushfire hazard and which will influence future development and subdivision of the site. The first area is vegetation associated with the riparian corridor which traverses the southern boundary of the site (ranging from 60m to 80m in width) and is associated with a tributary of American Creek. The second area of vegetation is associated with the riparian corridor which travels north along the steep embankment from the southern riparian corridor through to Cordeaux Road.



The bushfire assessment provided the following recommended mitigation measures to ensure suitability of part of the subject lands for residential development:

- Asset Protection Zones (60m and 25m) to be provided to all future dwelling houses;
- Access for firefighting operations to be constructed in accordance with the specifications of Section 4.1.3 (1) of *Planning for Bushfire Protection 2006*; and
- Reticulated water supply and installation of utilities.

The NSW Rural Fire Service (RFS) raised no objection to the proposal during the preliminary notification period, however noted that future lots will be required to provide Asset Protection Zones (APZs) as per the plan in the Bushfire Assessment report prepared by Peterson Bushfire (2017). The RFS will be provided with further opportunities to comment at the development application and detailed subdivision stage. Similarly the Department of Primary Industries (DPI) raised no objection, however noted that hazard reduction activities to create APZs should not encroach into the riparian corridor.

Geotechnical

Southern Geotechnics (2008 and 2016) undertook a geotechnical assessment of the stability of the site and its suitability for subdivision and residential development. The geotechnical investigations of the site involved seven test pit investigations and logging by a geotechnical engineer, and machine drilling of nine boreholes, and concluded that the cleared areas proposed for limited residential development have an overall very low to low risk of slope instability for damage to property and risk to life.

The geotechnical assessment provided the following recommendations:

- Building envelopes should be located within areas that have a slope of less than 15 degrees;
- Excavations greater than 0.6m deep in soil should be supported with retaining walls;
- Fill should not be imported unless required for driveway or slab construction;
- Roof water and surface runoff should be redirected from the building area to a watercourse via a pipe or channel system;
- Driveway alignment should follow the ridgeline and pass on the eastern side of trees at the lowest level of the slope near the site gate; and
- Further assessment is recommended at the design stage for each proposed dwelling.

The internal referral feedback was that the geotechnical report dated 5 December 2016 by Southern Geotechnics provided a good description of the land proposed for rural/residential development and demonstrates feasibility of the proposal from a geotechnical perspective.

Heritage

An Aboriginal Heritage Information Management System (AHIMS) search was undertaken, with no recorded Aboriginal Heritage sites or Aboriginal places declared in or near the site. Following the preliminary notification, OEH requested that an Aboriginal cultural heritage due diligence assessment be undertaken. This due diligence assessment was subsequently undertaken (Biosis 2017), involving a desktop analysis and archaeological survey. No new sites were discovered during the archaeological survey with the conclusion drawn that the entire study area is assessed as having low archaeological potential.

The report recommended that in the event of the discovery of unanticipated Aboriginal objects or ancestral remains, then any works associated with the proposal must cease and OEH and Aboriginal stakeholders notified.

Contamination

Given the agricultural history of the site, a preliminary study addressing State Environmental Planning Policy (SEPP) 55 (Remediation of Land) was required to ensure the likelihood of contamination is considered as early as possible in the process and that the land is suitable, or can be made suitable, for



residential development. A report submitted (Cardno 2017) confirmed that the site is currently used for livestock grazing and a review of available information indicates that the historical site use was limited to livestock grazing, with no evidence of historical industrial, commercial, residential or agricultural (cultivation) land uses. No potential areas of concern were identified on the site, the conclusion drawn that there is a low to negligible potential for subsurface contamination at the site from historical uses.

Visual Impact

The Planning Principles adopted with the Concept Plan identify the need for development to be located with full consideration of its visual context within a precinct. While the indicative subdivision plan incorporates larger lot sizes to achieve a rural residential development, further visual impact analysis may be required at the development application stage when finalising a subdivision layout. The potential visual impact of a subdivision on the upper ridges of the site should be carefully considered at the development application stage with respect to the principles and strategies outlined in the IESMP, given the heritage significance of the Illawarra Escarpment and the cultural significance of Mt Kembla.

CONSULTATION AND COMMUNICATION

Preliminary consultation was carried out as part of the assessment of the draft Planning Proposal request, which involved referral to Roads and Maritime Services, NSW Rural Fire Service, the Office of Environment and Heritage, Department of Primary Industries – Water, Sydney Water, and relevant internal divisions of Council. The Office of Environment and Heritage attended a site visit in March 2017. Preliminary community consultation has not been conducted as extensive consultation occurred with the development of the Farmborough Heights to Mt Kembla Concept Plan.

State Authority comments provided on the Planning Proposal request were as follows:

Issues Raised	Council Officer Response
Roads and Maritime Services (RMS):	
Do not object to the planning proposal in principle as it is unlikely to have a significant impact on the state road network. It is noted that Cordeaux Road, to which the proposal gains access to and from, is a local road under the care and control of Council.	Noted.
Council needs to be satisfied that sufficient sight lines are available/not restricted at the site's access points with Cordeaux Road.	Noted.
NSW Rural Fire Service (RFS):	
No objection to the proposed rezoning. Future lots will be required to provide Asset Protection Zones as per the plan in the Bushfire Assessment report prepared by Peterson Bushfire.	Noted.
Office of Environment & Heritage (OEH):	
Support a long term conservation outcome being achieved for the site. This would be achieved through establishing the proposed environmental corridor under an E2 Environmental Conservation zoning, as envisaged by the Farmborough Heights to Mount Kembla Concept Plan (2013). The mechanism for securing and managing the environmental corridor is critical and should be resolved as part of the Planning Proposal. Dedication of the corridor to Council along	A long term conservation outcome will be achieved through the rezoning of 5.14ha to E2 Environmental Conservation and the establishment of a Conservation Agreement with the Biodiversity Conservation Trust (OEH), registered on title. Registration on title will be required prior to the finalisation of a Planning Proposal. The option of dedication of the land proposed for E2



Issues Raised	Council Officer Response
with in-perpetuity management funding should be considered to ensure a long term conservation outcome.	Environmental Conservation zoning to Council with funding was discussed with the proponent, as a mechanism to ensure in perpetuity conservation works required by the Concept Plan. The proponent has indicated a preference to retain the land proposed for E2 zoning in private ownership and register a Conservation Agreement with the Biodiversity Conservation Trust (OEH) as the mechanism to achieve active conservation in this regard. Additionally, the site is not adjacent to significant Council reserves.
Question the proposed minimum lot size of 5,000 m ² applying to both the E4 developable lots and E2 zoned lands. Whilst appropriate for the E4 lots, a minimum lot size of 5000m ² could lead to fragmentation and degradation of the environmental corridor and grazing land in the future.	Land proposed for E2 Environmental Conservation zoning is recommended for a Minimum Lot Size of 39.9 ha. The E3 Environmental Management zoned land will retain a 39.9ha minimum lot size.
The proponent should conduct a due diligence assessment at planning proposal stage in accordance with OEH guidelines, before any ground disturbance works that may result from the proposed subdivision of this land. The due diligence process should determine whether a more detailed Aboriginal cultural heritage assessment is required.	Due Diligence assessment completed.
Department of Primary Industries – Water (DPI Water):	
No objection to the rezoning. Once rezoned appropriate protections should be included to ensure that the E2 zone is protected from future activities. It is suggested that physical structures be incorporated along the E2 zone to ensure that no hazard reduction activities to create the Asset Protection Zone (APZ) encroach into the riparian corridor.	Noted.
Sydney Water:	
Generally supportive. More detailed comments relating to servicing future residential developments will be provided when development applications are submitted to Council and referred to Sydney Water.	Noted.



PLANNING AND POLICY IMPACT

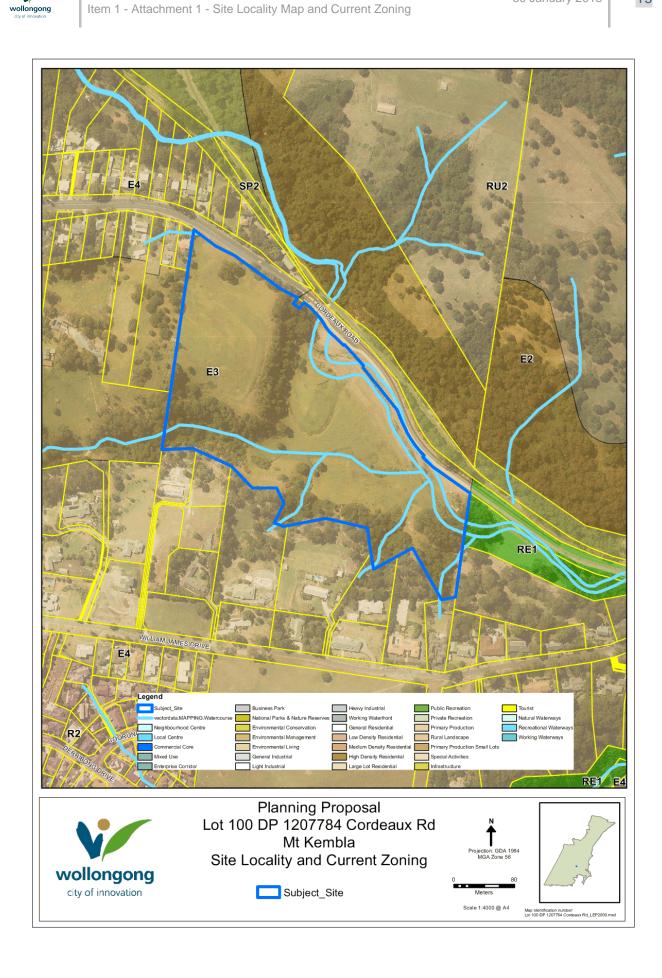
This report contributes to the delivery of Wollongong 2022 goal objective "The Natural environment is protected and enhanced" under the Community Goal "We value and protect our environment". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
1.6.1 Our urban environment minimizes impacts on habitat and biodiversity and areas of high conservation value are protected.	1.6.1.1 Review planning control for environmentally sensitive locations.	Continue to assess Planning Proposals against environmental strategies, including the Illawarra Biodiversity Strategy and the Illawarra Escarpment Strategic Management Plan.

CONCLUSION

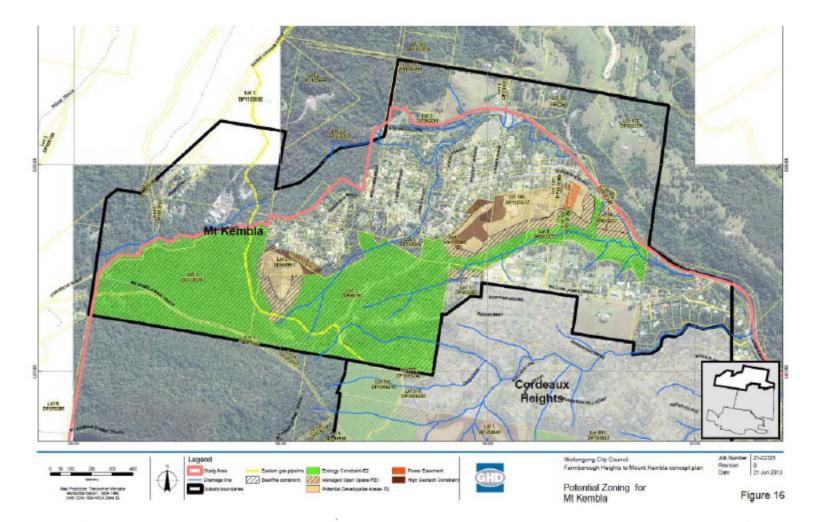
The protection of ecologically constrained land with funding in association with low density limited residential development will provide a suitable development outcome for this site whilst significantly enhancing the biodiversity values of an important riparian and habitat corridor. The Office of Environment and Heritage has acknowledged the potential for net conservation gains at this site and support a long term conservation outcome being achieved. The establishment of a Conservation Agreement, registered on title and administered by the Biodiversity Conservation Trust (OEH), will provide the legal and financial mechanism to achieve active conservation on this site, as required by the Concept Plan.

It is recommended that Council resolve to prepare a draft Planning Proposal for Lot 100 DP 1207784 Cordeaux Road, Mt Kembla and submit it to the NSW Department of Planning and Environment seeking a Gateway determination to allow public exhibition.



14





Item 1 - Attachment 2 - Extract from endorsed Concept Plan and accompanying Planning Principles

Lot 10 DP 814237

Zoning: E3 Up to 3 Existing dwellings: 0

- Zoning: Managed Open Space RE1 and potential developable areas E4.
- Development Controls: Demonstrate adequate access to individual lots and through site connectivity. Development to be subject to the preparation of a geotechnical impact assessment that confirms resolution of any geotechnical issues on the site. Site would be subject to visual amenity controls due its prominent location on the ridge
- Site composition: 100% of developable area to have a minimum lot size of 5,000 m².
- Constraints: Site is significantly limited in development potential due to ecological constraints extending from the riparian corridor to Cordeaux, the power easement on the western boundary of the site and a flood plain located in the north east comer of the site.



Item 1 - Attachment 2 - Extract from endorsed Concept Plan and accompanying Planning Principles

Planning Principles to Accompany Concept Plan

In order to address a number of key concerns raised through the public exhibition of the Strategic Planning Study and draft Concept Plan, it is recommended that the following Planning Principles accompany the Concept Plan to guide development in the vicinity of the escarpment in the Farmborough Heights to Mt Kembla area. Some of these principles were outlined in the IESMP and IELURS and were designed to minimise the impact of any development on the environment and ensure the most important environmental assets are given full protection. Additional principles have been suggested as part of the public exhibition.

- Principles contained in the IESMP and IELURS:
 - A gradation and increasing lot size and reduced density from high density urban development to no development from east to west;
 - Riparian corridors are applied consistent with the recommendations contained within the Riparian Corridor Management Study (WCC 2004);
 - No clearing of native vegetation for the location of a dwelling site, provision of services/infrastructure or for the implementation of bushfire controls/location of Asset Protection Zones (APZs);
 - No overt increase in the density of development so as to retain rural atmosphere (dwellings to be hidden or clustered);
 - Development needs to contribute to the improved management of adjoining high conservation value lands:
 - Environmental controls, such as effluent management, can be incorporated and contained within the site:
 - There are sufficient water resources for domestic and firefighting purposes;
 - Provision of vegetated buffers to adjoining high conservation value land;
 - Identification of appropriate sites to be managed under an agreed environmental management plan or voluntary conservation agreement;
 - Where a heritage site is to be affected, development may be acceptable if it allows its
 preservation in situ, or where this is impractical, its investigation and recording.
 Development will only be acceptable in areas of archaeological potential if proper
 evaluation of the archaeological implications of the proposed development has been
 undertaken and taken into account;
 - Protect, maintain and enhance flora and fauna species and habitats of importance;
 - Limiting exposure where possible to bushfire hazard and limiting development in areas of instability or geotechnical risk;
 - Location of development with full consideration of its visual context within a precinct; and
 - Promotion of a pattern of land use sympathetic to the valuable escarpment landscape.
- 2. Additional Principles arising from the public exhibition of the draft Concept Plan:
 - The provision of limited residential development must be considered within the context of active conservation and as a secondary outcome (COI);
 - Planning proposals must provide justification in terms of specific conservation initiatives proposed to enhance the escarpment for the long term;
 - A corridor of rural and bushland around the eastern approaches to Mt Kembla must be maintained to provide a separation from Cordeaux Heights and to preserve the historic identity of Mt Kembla Village;



Item 1 - Attachment 2 - Extract from endorsed Concept Plan and accompanying Planning Principles

- No residential or infrastructure development on visually significant or prominent ridgelines – ridgelines should be managed for conservation, visual and biodiversity outcomes. Vegetated ridges should separate suburbs;
- Development opportunities should be considered where there is only a localised visual impact which is not visible from the broader city urban areas;
- Limited development in appropriate locations and which provides for practical considerations such as access and service provision; and
- Subdivision on bushfire prone land must be designed to minimise the siting of future dwellings away from ridge tops and other steeply sloping land (>15%), especially upslope lands, within saddles or narrow ridge crests, and to provide an efficient and safe road network which minimises potential bottlenecks and provides for satisfactory access and manoeuvring of fire fighting vehicles.

Item 1 - Attachment 3 - Indicative Subdivision Layout

17



Item 1 - Attachment 4 - Proposed Zoning, Minimum Lot Size and Floor Space Ratio Maps





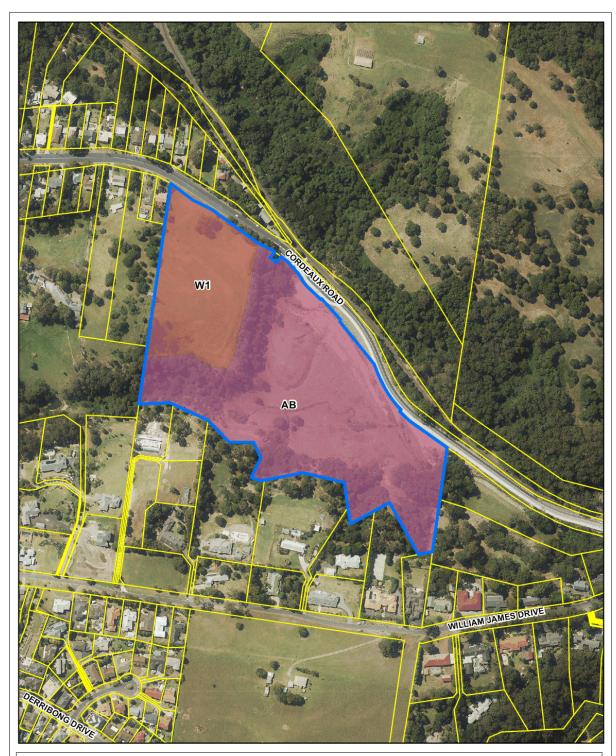
Planning Proposal Lot 100 DP 1207784 Cordeaux Rd Mt Kembla Proposed Zoning







Item 1 - Attachment 4 - Proposed Zoning, Minimum Lot Size and Floor Space Ratio Maps





Planning Proposal Lot 100 DP 1207784 Cordeaux Rd Mt Kembla Proposed Minimum Lot Size



Subject_Site



W1 4999sqm









Planning Proposal Lot 100 DP 1207784 Cordeaux Rd Mt Kembla Proposed Floor Space Ratio









Vegetation Management Plan



Lot 100 // DP 1207784

Cordeaux Road, Mount Kembla, NSW 2526

Proposed residential subdivision

Prepared for Cardno Pty Ltd

1 August 2017

PROJECT NUMBER	2016-084				
PROJECT NAME	Vegetation Managemen	Vegetation Management Plan			
PROJECT ADDRESS	Lot 100 // DP 1207784,	Lot 100 // DP 1207784, Cordeaux Road, Mount Kembla, NSW, 2526			
PREPARED FOR	Cardno Pty Ltd	Cardno Pty Ltd			
AUTHOR/S	Thomas Hickman				
REVIEW	Bruce Mullins	Bruce Mullins			
	Version Draft/Final Date to client				
VERSION	4.0	Draft	01/08/17		
	1.0				

This report should be cited as: 'Ecoplanning (2017). Vegetation Management Plan, Lot 100 // DP 1207784, Cordeaux Road, Cordeaux Heights. Prepared for Cardno Pty Ltd.'

ECOPLANNING PTY LTD 74 Hutton Ave BULLI NSW 2516 M: 0421 603 549 www.ecoplanning.com.au

Disclaimer: This report has been prepared by Ecoplanning Pty Ltd for Cardno Pty Ltd and may only be used for the purpose agreed between these parties, as described in this report. The opinions, conclusions and recommendations set out in this report are limited to those set out in the scope of works and agreed between these parties. Ecoplanning P/L accepts no responsibility or obligation for any third party that may use this information or for conclusions drawn from this report not provided in the scope of works or following changes occurring subsequent to the date that the report was prepared.



Glossary and abbreviations

Abbreviation	Description
*	Denotes exotic species
DA	Development Application
DCP	Development Control Plan
DPI	Department of Primary Industries
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
ha	Hectares
LGA	Local Government Area
MZ	Management Zone
NOW	NSW Office of Water (now DPI Water)
TSC Act	NSW Threatened Species Conservation Act 1995
VMP	Vegetation Management Plan
WLEP	Wollongong Local Environmental Plan 2009
WM Act	NSW Water Management Act 2000
WoNS	Weeds of National Significance



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Contents

Ί.	ıntr	Oduction	ხ
	1.1	Description of project and purpose of Vegetation Management Plan	6
	1.2	Site description	10
2.	Site	assessment	12
	2.1	Methods	12
	2.2	Results	12
	2.2	.1 Plant communities	12
	2.2	.2 Moist Box-Red Gum Foothills Forest (MU13)	12
	2.2	.3 Site resilience	13
3.	VM	P weed management and revegetation	17
	3.1	Preliminary Works	17
	3.2	Weed Management Techniques	17
	3.3	Vegetation Management Zones	20
	3.3	.1 Management Zone 1 – Reconstruction through revegetation	20
	3.3	.2 Management Zone 2 – Assisted natural regeneration and revegetation	20
	3.3	.3 Management Zone 3 – Assisted natural regeneration	21
	3.4	Revegetation	26
	3.4	.1 Staging and logic	26
	Ма	nagement zone 1	26
	Ма	nagement zone 2	26
	Ма	nagement zone 3	26
	3.4	.2 Planting densities and species	26
	3.4	.3 Equipment, installation and timing	27
	3.5	Concurrent Works	27
	3.6	Maintenance	28
	3.7	Cost of implementation	28
4.	Per	formance criteria and Monitoring	30
	4.1	Performance criteria	30
	4.2	Monitoring reports	31
	4.3	Bush regeneration contractors	31
5.	Ref	ferences	33
Α	ppend	ix A: Flora inventory	34
	Rhi	ipidura albiscapa	36



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Appendix B: Planting palette
Appendix C: Weed treatment methods
Figures
Figure 1.1: VMP subject site and study area
Figure 1.2: Strahler stream order and associated riparian buffers
Figure 1.3: Locality of the study area and VMP subject site depicting surrounding suburbs and landscape features
Figure 2.3: Vegetation within the study area (Ecoplanning 2017)
Figure 2.4: Pasture grassland looking toward the north west of the study area and the 2 nd order watercourse
Figure 2.5: Regenerating patch of Moist Box Foothills Forest (MU13) in the east of the study area
Figure 3.1: Indicative location for the installation of stock proof fencing
Figure 3.2: Looking in a north westerly direction towards the 2^{nd} order watercourse in MZ1 22
Figure 3.3: A 1 st order watercourse in MZ2, consisting of Acacia scrub dominated by Lantana camara* and Ageratina adenophora*
Figure 3.4: Taken in the west of MZ2 along the 2 nd order watercourse, depicting a Lantana camara* dominated midstorey
Figure 3.5: Looking in a westerly direction up American Creek in MZ323
Figure 3.6: Looking in a northerly direction above MZ3 with American Creek located below the regenerating MU13
Figure 3.7: Management zones within the VMP subject site
Tables
Table 2.1. Daily weather observation at Albion Park (Wollongong Airport)—station 068241 (15km north-east of the development site)
Table 2.2. Priority weeds and Weeds of National Significance (WoNS)
Table 3.1. Planting density table for revegetation works
Table 3.2: Cost of VMP implementation over the three year contract period
Table 4.1. Revegetation performance monitoring criteria
Table 4.2. Example monitoring report template

26



Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Introduction

1.1 Description of project and purpose of Vegetation Management Plan

The study area is Lot 100, DP 1207784, Cordeaux Road, NSW (**Figure** 1.1) on land that is currently zoned E3 – Environmental Management under the Wollongong Local Environmental Plan 2009 (WLEP). The objective of this VMP is to provide feasible management options for rehabilitating the riparian zones of the study area. At present, the cleared land in the north west of the study area is proposed to be sub-divided into three (3) residential Lots, with a majority of the conservation land to be contained within one of these lots. The vegetation management plan (VMP) is required to vegetate the riparian zone of all watercourses in the study area (referred to as the subject site, **Figure 1.1**). Several watercourses meander through the study area, including two 1st order streams, a 2nd order stream and American Creek, a 3rd order stream (**Figure 1.2**).

A review of aerial imagery from 1948/51, 1977, 2006, 2012 and 2014 illustrates that native vegetation has been removed from areas currently consisting of grassland/pasture for almost 70 years. The aerial imagery from 1948/51 shows the subject site to be mostly cleared, with a few patches of vegetation remaining in the west of the study area. Further clearing of native woody vegetation occurred between 1948/51 to 1977, with the exception of some scattered trees, which were retained. There is a general trend in the increase of vegetation cover since the early 2000's. The site assessment identified patches of Moist Box-Red-Gum Foothills Forest (MU13), 'Acacia scrub' and 'weeds and exotics' in the study area.

This VMP outlines management methods for the restoration and stabilisation of the riparian zones within the subject site in consideration of the recommendations outlined in Chapter E23 of the Wollongong Development Control Plan (DCP) 2009. Most of the land intended for management consists of cleared land, which has been grazed extensively. Cleared areas of the site consist predominantly of exotic pasture grasses, with occasional native groundlayer species, such as Carex longebrachiata. Some areas of the VMP subject site are partly vegetated, particularly in the east and west of the site. A stand of establishing Eucalyptus saligna x botryoides (Wollongong Woollybutt) is present in the south eastern corner of the site adjacent to American Creek. Woody weeds, including Lantana camara* (Lantana), Senna pendula var. glabrata* and Solanum mauritianum* (Wild Tobacco) dominate the midstorey, particularly in the west of the study area.

Revegetation of the cleared areas of the site, primary removal of woody weeds and the facilitation of assisted regeneration will be implemented to achieve the VMPs primary objectives:

- reduce the abundance and cover of all exotic species, particularly woody weeds, which are preventing the establishment and further succession of native plant species
- create revegetated riparian zones to buffer the watercourse from the impacts of the surrounding land use (e.g. nutrient enriched runoff). This will contribute to the health of the watercourse in the subject site and the overall catchment
- revegetate the subject site with a combination of native midstorey, overstorey and grasses/groundcovers, with considerations made towards the sites flooding capacity





Vegetation Management Plan

Cordeaux Road, Cordeaux Heights

- Impede cattle access to revegetated areas of the site, whilst allowing unimpeded access for grazing to occur in the remainder of the study area.
- increase the complexity of the habitat within the riparian zone for macroinvertebrates and terrestrial fauna, and
- improve the soil stability of the riparian zone through the revegetation of appropriate species.

Wollongong Local Government Area (LGA) require the submission of a VMP with any Development Application (DA) lodged for proposed developments within 40 m from the top of bank of any watercourse, lake or estuary in accordance with the Wollongong Development Control Plan (DCP) (2009). This report includes a proposal for staging of works to guide the weed management, revegetation and general restoration of the subject site by a qualified bush regeneration company. This VMP is intended to be implemented over a five year period, however, further maintenance may be required beyond the scope of this VMP (WCC 2017).



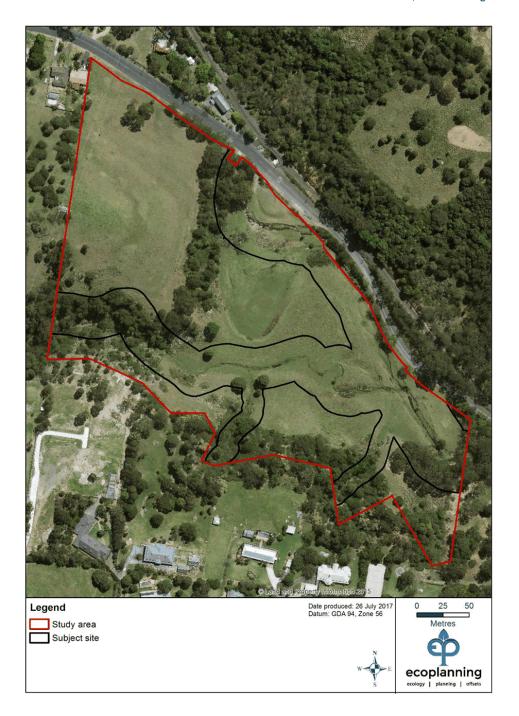


Figure 1.1: VMP subject site and study area.

Vegetation Management Plan Cordeaux Road, Cordeaux Heights

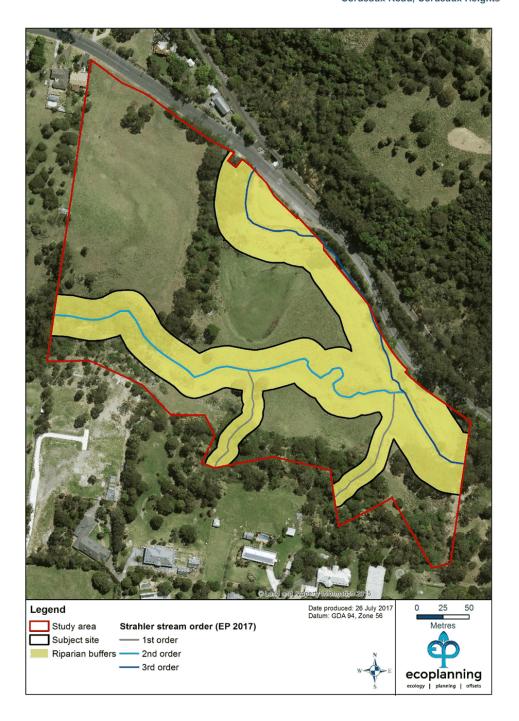


Figure 1.2: Strahler stream order and associated riparian buffers.



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

1.2 Site description

The suburb of Mount Kembla is situated on the midslopes of the Illawarra Escarpment. Mount Kembla is located approximately 4 km to the south west of the study area (**Figure 1.3**). An unnamed 2nd order watercourse runs in a north easterly direction through the centre of the study area. Two 1st order watercourses run in a north easterly direction and enter the 2nd order watercourse in the south of the study area. American Creek (a 3rd order stream) enters the site from the north of Cordeaux Road, flowing east, where it exits the subject site on the eastern boundary. American Creek joins with the unnamed 2nd order stream in the eastern section of the study area.

Most of the study area consists of cleared land 'pasture grassland' and 'weeds'. Native vegetation is present along the southern boundary of the study area in a low – moderate condition. A strip of regrowth vegetation runs from the north of the study area (opposite Cordeaux Heights train station) to within 50 m of the study areas southern boundary, then in a westerly direction. This strip of vegetation contains the most intact area of regrowth in the study area, with establishing canopy species, including *Eucalyptus tereticornis* (Red Gum) and *Eucalyptus quadrangulata* (White-topped Box). The midstorey is mostly dominated by woody weeds, including *Lantana camara** (Lantana) and *Solanum mauritianum**. Several areas of *Acacia* regrowth occur through the study area, which tend to lack a native midstorey and overstorey species.

The VMP subject site is restricted to the riparian buffers of all mapped watercourses in the study area (**Figure 1.2**). The riparian buffer widths are based on the Strahler System of ordering watercourses in accordance with the specifications outlined by the NSW DPI Water. The stream order and riparian corridor widths required by DPI (2012) for the watercourses in the study area include:

- 1st order stream 10 m each side of the watercourse
- 2nd order stream 20 m each side of the watercourse
- 3rd order stream 30 m each side of the watercourse

The western portion of the 2nd order watercourse contains a high cover and abundance of *Lantana camara**, with occasional *Acacia* spp. regrowth and a low – moderate cover of native groundcover species. The eastern portion of the 2nd order watercourse is heavily cleared and grazed, thus contains few native midstorey or overstorey species. The two 1st order streams that join the 2nd order stream are sparsely vegetated with *Melaleuca styphelioides* (Pricklyleaved Tea Tree) and *Acacia* spp. regrowth. The south eastern portion of American Creek contains a reasonable assemblage of midstorey and overstorey species, including several regenerating *E. saligna* x *botryoides*. The groundlayer includes an assemblage of native grasses, forbs and sedges, including *Carex longebrachiata* and *Microlaena stipoides* var. *stipoides* (Weeping Grass). However, this patch also contains a high cover and abundance of herbaceous weeds, including *Ageratina adenophora** (Crofton Weed), *Gomphocarpus fruticosus** (Narrow-leaved Cotton Bush) and *Senecio madagascariensis** (Fireweed).

Restoration of the VMP subject site will require substantial intervention, including fencing, revegetation and ongoing maintenance works. Cleared areas of the site have minimal resilience, thus will require ongoing maintenance, particularly in the first 5 years, to ensure the successful establishment of planted native vegetation and reduction of herbaceous weeds and exotic grasses (see **Section 2.2.3**).

Vegetation Management Plan Cordeaux Road, Cordeaux Heights

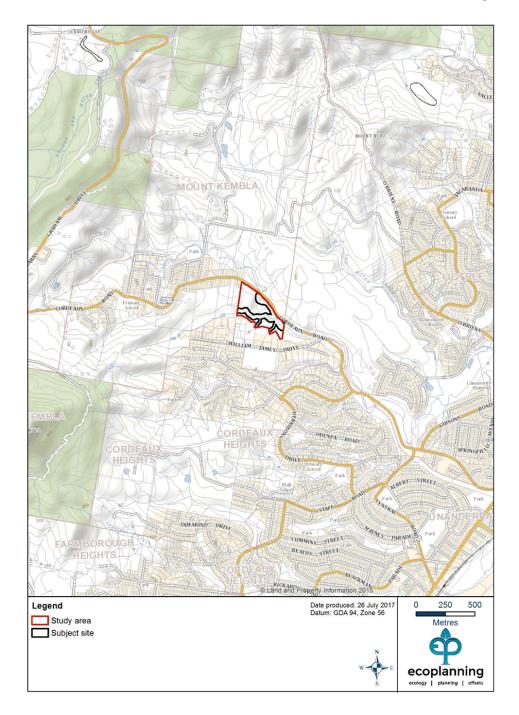


Figure 1.3: Locality of the study area and VMP subject site depicting surrounding suburbs and landscape features.



2. Site assessment

2.1 Methods

An assessment of ecological constraints for the site by Ecoplanning (2017) was reviewed prior to field survey.

A field survey was undertaken on 26 May 2017 by Thomas Hickman (Ecologist, Ecoplanning). The study area and subject site were traversed by foot on either side of the unnamed creek. The weather conditions on the day were cool – warm with clear skies (**Table 2.1**).

Table 2.1. Daily weather observation at Albion Park (Wollongong Airport)—station 068241 (15km north-east of the development site)

Date	Temp (°C)		Rainfall	Max wind	
	Min	Max	(mm) ¹	Direction	Speed (km/h)
26/05/17	5.7°C	20.8°C	0 1	SSE	24

The field assessment aimed to determine the overall resilience of the subject site, thus its capacity to respond to regeneration works. Appropriate management methods were considered, with the aim of identifying areas of the site requiring revegetation, as opposed to assisted natural regeneration. The site was surveyed to determine the problematic exotic species onsite, and aimed to identify all priority weeds and Weeds of National Significance (WoNS). During the survey, appropriate weed control techniques were considered, for the dominant exotic species onsite. All vegetation patches were assessed to determine their location and extent, and to confirm their structure and floristics.

2.2 Results

2.2.1 Plant communities

Ecoplanning (2017) confirmed the presence of Moist Box-Red Gum Foothills Forest (MU13), Acacia scrub and Weeds and Exotics on site (**Figure 2.1**).

2.2.2 Moist Box-Red Gum Foothills Forest (MU13)

As a result of extensive clearing, underscrubbing and grazing, only a few small patches of vegetation discernible as Moist Box-Red Gum Foothills Forest (MU13) had been mapped in the study area. Two distinct patches had been mapped in the south east of the study area, with additional patches in the north west of the study area, which were dispersed amongst Weeds (MU56c) and *Acacia* Scrub (MU56a). This community was the only mapped native vegetation community in the subject site, and occurred as moderately intact areas of vegetation in a stage of regrowth.

The dominant canopy species in the study area were *E. quadrangulata*, *E. saligna* x botryoides and *E. tereticornis*, of which few mature – over mature species were present. A mature *E. quadrangulata* located in the study area had developed multiple hollows and was one of the larger canopy species onsite. More intact areas of the site contained a native midstorey of species, including *Alphitonia excelsa* (Red Ash), *Elaeodendron australe var. australe*,



Exocarpos cupressiformis (Cherry Ballart), Melaleuca styphelioides, Myrsine variabilis, Pittosporum multiflorum (Orange Thorn) and Pittosporum undulatum (Sweet Pittosporum). Native groundcovers and grasses were present, particularly where the native canopy and midstorey had established. These species included, Carex longebrachiata, Microlaena stipoides var. stipoides and Pellaea falcata (Sickle Fern).

Exotic species had become established across 70 – 80% of the areas mapped as Moist Box-Red Gum Foothills Forest (MU13). Woody and herbaceous weeds were the most abundant weeds, particularly the species *Ageratina adenophora**, *Ageratina riparia*, *Erythrina x sykesii ** (Coral Tree), *Lantana camara**, *Senecio madagascariensis* (Fireweed), *Senna pendula* var. *glabrata** and *Solanum mauritianum**. *Lantana camara** was the most abundant weed issue on site and will require a substantial amount of primary and secondary work (**Figure 3.3** and **Figure 3.4**). Exotic vines species occurred through the mapped MU13, including *Araujia sericifera** (Moth Vine), *Delairea odorata** (Cape Ivy) and *Ipomoea indica** (Morning Glory).

2.2.3 Site resilience

Field assessment determined that a majority of the VMP subject site had a low capacity for natural regeneration to occur. The riparian buffers in the site were heavily degraded from past and current land use, including vegetation clearing and intensive grazing (**Figure 2.2**). These areas will require substantial intervention for restoration to be successful, including, revegetation, cattle proof fencing and ongoing maintenance works. The southern portions of the two 1st order streams contained a small amount of native vegetation including a patch of Moist Box Red-Gum Foothills Forest along the eastern 1st order watercourse. The 1st order watercourses were otherwise dominated by woody weeds and vegetation indicative of a disturbed landscape, such as *Acacia* spp. regrowth.

The south eastern portion of American Creek retained a somewhat intact assemblage of native midstorey and canopy species and was one of the more intact patches of vegetation in the subject site. An area of regenerating Moist Box Red-Gum Foothills Forest (MU13), included a stand of early mature *E. saligna* x *botyroides* on the southern slope of American Creek (**Figure** 2.3). A large *E. saligna* x *botryoides* was located along the southern bank, as well as several mesic midstorey species, such as *Alphitonia excelsa* (Red Ash). Several additional patches of vegetation mapped as Moist Box Red-Gum Foothills Forest occurred within the VMP subject site, such as in the north west of the study area.

The western portion of the unnamed 2nd order watercourse contained a reasonably intact area of vegetation, which was otherwise surrounded by woody weeds and *Acacia* regrowth. Revegetation of midstorey and canopy species will likely be necessary in this section of the subject site. Although, can occur at relatively low densities. Ample time should be allowed to determine the potential for areas of the site to regenerate naturally, prior to revegetation in more resilient areas of the site.

Vegetation Management Plan

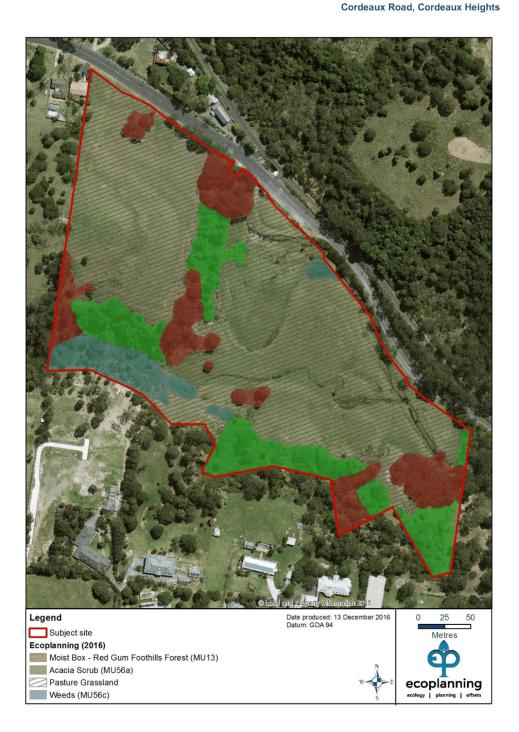


Figure 2.1: Vegetation within the study area (Ecoplanning 2017).



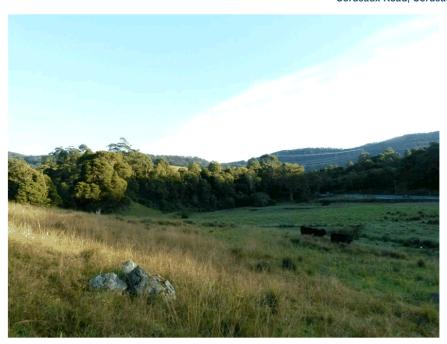


Figure 2.2: Pasture grassland looking toward the north west of the study area and the 2^{nd} order watercourse.



Figure 2.3: Regenerating patch of Moist Box Foothills Forest (MU13) in the east of the study area.



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Flora species

A total of 74 flora species were identified within the study area, of which 35 are exotic and 39 are native species (**Appendix A**). Four weeds listed under the NSW *Biosecurity Act 2015* in accordance with the Wollongong LGA are known within the study area (**Table 2.2**). All four of these species are Weeds of National Significance WoNS.

Table 2.2. Priority weeds and Weeds of National Significance (WoNS).

Common name	Scientific name	WoNS	Duty
Blackberry	Rubus fruticosus species agg.	Y	Mandatory Measure Must not be imported into the State or sold All species in the Rubus fruticosus species aggregate have this requirement, except for the varietals Black Satin, Chealem, Chester Thornless, Loch Ness, Murrindindi, Silvan, Smooth Stem and Thornfree.
Ground Asparagus	Asparagus aethiopicus	Υ	Mandatory Measure Must not be imported into the State or sold
Fireweed	Senecio madagascariensis	Y	Regional Recommended Measure Land managers should mitigate the risk of new weeds
Lantana	Lantana camara	Y	being introduced to their land

No threatened flora species listed under the *Threatened Species Conservation Act 1995* (TSC Act) or *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) were recorded in the study area or subject site.



3. VMP weed management and revegetation

Vegetation management works outlined below should be implemented for the subject site. Weed management should begin prior to subdivision of the study area. A suitably qualified and experienced bush regeneration contractor as per **Section 4.3** must be engaged to carry out vegetation management works.

3.1 Preliminary Works

Seed collection

Seed collection will be required to ensure indigenous species are available for revegetation works; species identified for revegetation are outlined in **Appendix B**. All plantings should be of local provenance, collected from adjacent patches of vegetation. However, nurseries that supply indigenous seedling stock, (not horticultural varieties), may also be used to supplement the plantings.

Seed collection zones can extend within a radius of 3 km for groundcover, shrubs and trees and up to 10 km for grasses. The collection site should reflect the natural conditions that exist for the area being regenerated.

Record keeping of seed collection and planting locations is to be as per the Flora Bank guidelines (Mortlock 2000), the bush regeneration contractor is responsible for recording this information. A Section 132C licence under the NSW *National Parks and Wildlife Act 1974* will be required to undertake seed collection works.

Fencing

Stock proof fencing should be installed around the perimeter of the VMP subject site. An indicative location for the fence is displayed in **Figure 3.1**. Given that the perimeter of the subject site bends and curves it may be necessary to include additional areas of pasture within the fenced areas of the site to create a straight fence line. These additional areas will not technically be part of the VMP subject site, thus will not require revegetation. However, occasional spot spraying could be conducted to prevent the spread of grasses and herbaceous weeds into the subject site. A costing has been provided for the installation of stock proof fencing for the perimeter of the VMP subject site (approximately 1500 m) (see **Table 3.2**).

Signage

Signage in accordance with WCC standardised signs for conservation areas will be installed at select locations along the perimeter of the subject site.

3.2 Weed Management Techniques

Weed management will be carried out using primary and secondary weed control followed by ongoing maintenance. Weed control will include mechanical removal techniques, herbicide application and natural shading techniques. Disturbance of the soil during the weed management process should be minimised at all times (see Buchanan 2000, Bradley 2002). Weed control objectives and treatment techniques are outlined below (**Appendix C**) in accordance with weed type.



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Primary Weed Control

Primary weed control is the initial removal of weed species. Mechanical removal techniques relevant to the weed being removed (Buchanan 2000; Bradley 2002; DPI 2015) should be used for all woody weeds and herbaceous plants. Herbicide application, such as backpack spraying should be avoided where off target loss of native species is likely to occur.

Secondary Weed Control

Secondary weed control involves follow-up weed control to remove seedlings that have emerged after primary control and treatment of any existing plants that reshoot. Any new weed infestation areas identified must also be treated.

Maintenance

Maintenance is the long-term management of a site to prevent weeds from becoming reestablished after primary and secondary work. Substantial effort should be focussed on reducing the weed seed bank, eradicating problematic weeds and supporting the growth of native vegetation. Areas of high resilience should be the focus of intensive maintenance works, which will include fine hand weeding. A structured maintenance regime following primary and secondary work will reduce the time taken for the site to reach a reasonable level of stability.

Weed Disposal

All seeding herbaceous/grass material and tubers should be bagged, removed from site and disposed of at an appropriate green waste facility. Woody weeds, such as *Lantana. camara**, *Solanum mauritianum** and *Senna pendula* var. *glabrata** should be removed offsite, given the relatively small size of the site, its potential to flood and the large volume of *L. camara** in some areas of the site. Small piles of woody weeds may be stored onsite for fauna habitat, however should not be located within the flooding extent of the watercourses.

Vegetation Management Plan

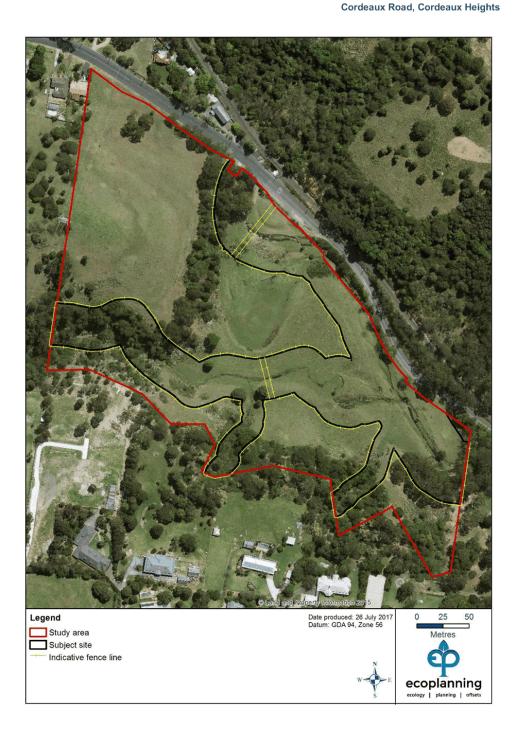


Figure 3.1: Indicative location for the installation of stock proof fencing.

3.3 Vegetation Management Zones

The VMP subject site has been categorised into three management zones, based on the different management actions required to restore the vegetation onsite (**Figure 3.7** and **Appendix C**).

3.3.1 Management Zone 1 – Reconstruction through revegetation

This zone encompasses the cleared areas of the VMP subject site, which constitutes 2.17 ha or approximately 62.36% of the site (**Figure 3.2**). No established canopy or midstorey species are located within the zone, which consists predominantly of exotic grasses and herbaceous weeds. Therefore, the management of this zone will be achieved by revegetation, which aim of reconstructing the native vegetation community Moist Box-Red Gum Foothills Forest (MU13). This zone should be revegetated with a combination of native midstorey and overstorey species based on the planting densities outlined in **Section 3.4**. Preparation prior to planting will include the establishment of 50cm diameter weed free zones, where native tubestock will be installed. This will be achieved through the use of herbicides, such as Roundup Biactive® at a solution suitable for the target species, which may include rates of up to 2% Roundup Biactive® if treating species that are difficult to eradicate, such as *Cynodon dactylon** (Couch). The establishment of native canopy and midstorey vegetation will be ensured through regular spot spraying and hand weeding in proximity of the plantings.

The spread of native groundlayer species, such as *Carex longebrachiata* will be facilitated through the MZ, with all extant individuals to be hand weeded and carefully spot sprayed around. All herbaceous weeds through the zone, including *Senecio madagascariensis**, *Cirsium vulgare** (Spear Thistle), *Gomphocarpus fruticosus** and *Ageratina adenophora** will be regularly managed using a combination of spot spraying and hand weeding around native species. The use of a broadleaf herbicide (i.e. Starane Advanced) will suppress herbaceous weed growth, whilst retaining exotic grass cover, where it is providing stability for the bank and floodplain, particularly along the 2nd and 3rd order watercourses. Exotic grasses should gradually be suppressed as the native midstorey and canopy become established and native groundlayer species are consolidated.

3.3.2 Management Zone 2 – Assisted natural regeneration and revegetation

This management zone includes areas of the subject site consisting of 'weeds' and 'Acacia scrub' and is mostly confined to the western portion of the 2nd order watercourse and the southern portions of the 1st order watercourses (**Figure 3.3** and **Figure 3.4**). The management zone has a dense midstorey of woody and herbaceous weeds, including Lantana camara*, Solanum mauritianum* and Ageratina adenophora* with sections containing regrowth of Acacia spp., such as Acacia maidenii (Maiden's Wattle). Management of this zone will initially require the primary removal of all woody weeds. Treatment of woody weeds, such as Lantana camara* will be achieved by cutting and painting the stems at ground level with neat Roundup Biactive®. Smaller individuals should be hand removed, only if minimal soil disturbance will occur. These works should occur concurrently with planting preparation and revegetation in MZ1.

The recruitment and establishment of native species will be facilitated through the zone for one – two years following primary and secondary works. This will allow sufficient time to determine the resilience of the zone, prior to installing additional plants to increase the cover, abundance and richness of native flora species. Site inspection determined that this zone has a low – moderate potential for natural regeneration, given that the zone contains a heavy cover of *Lantana camara**. However, native midstorey species are located sporadically through the zone, which is also proximal and downslope of establishing *E. quadrangulata* and *E. tereticornis*,



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

which may disperse their seed into the MZ. Native groundlayer species, such as *Pellaea falcata*, *Geranium homeanum* and *Oplismenus imbecillis* (Creeping Beard Grass) are located through the zone. These species will respond well to the removal of woody weeds, although it is uncertain to what extent. As such, the installation of native canopy, shrub and groundcover will be necessary, and has been scheduled for mid-way through year two.

Spraying should generally be avoided through the MZ, given that there are native species in the groundlayer that would be adversely impacted. However, it may be necessary to implement a spray regime in the degraded areas of the MZ where native species are absent. This will likely be of most relevance following the removal of woody weeds, which is likely to promote the growth of annual herbaceous weeds and exotic grasses. Herbaceous weeds should be treated prior to seeding, which will assist in reducing the weed seed bank. The use of spraying will be gradually reduced, with hand weeding becoming the dominant treatment method as the abundance and cover of exotic species is reduced.

Exotic vines and scramblers, including *Delairea odorata** (Cape Ivy) and *Araujia* sericifera* (Moth Vine) occur sporadically through the MZ. These species should be targeted intensively during primary and secondary weed treatments. *Araujia sericifera** will be treated using a combination of scrape and painting with neat Roundup Biactive®, whereas *Delairea odorata** should be hand removed and carefully spot sprayed with a 1% Roundup Biactive® solution, where possible without resulting in off target damage to native species.

3.3.3 Management Zone 3 – Assisted natural regeneration

This management zone includes sections of the site mapped as Moist Box-Red Gum Foothills Forest (MU13). Several patches of this community occur within the VMP subject site, however, the largest patches are where American Creek enters the sites northern boundary, and where it exits on its south eastern perimeter (**Figure 3.5**). Patches of the MZ are also mapped in the southern portions of the 1st order watercourse and in the west of the study area. Management of this zone will consist of primary, secondary and maintenance works, however unlike MZ1 and 2, it will not require revegetation, as restoration can mostly be achieved utilising the zones capacity to naturally regenerate.

Primary and secondary work will consist of the removal of woody weeds and herbaceous weeds, including Lantana camara* and Ageratina adenophora*, which are well established through the MZ. The portion of the MZ in the south east the subject site consists of a moderately intact area of vegetation with establishing *E. saligna* x botryoides (**Figure 3.6**). The groundlayer in this area is quite diverse, although may possibly benefit from the installation of native midstorey species in the future. This MZ contains the most resilient patches of native vegetation in the subject site. As such, restoration works in the earlier part of the management should focus on stabilising this area. This will assist in creating weed free areas of the VMP subject site, where future restoration efforts can be expanded out from.

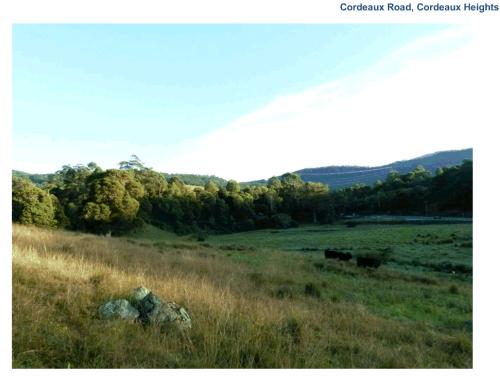


Figure 3.2: Looking in a north westerly direction towards the 2nd order watercourse in MZ1.



Figure 3.3: A 1st order watercourse in MZ2, consisting of Acacia scrub dominated by $Lantana\ camara^*$ and $Ageratina\ adenophora^*$.



Figure 3.4: Taken in the west of MZ2 along the 2^{nd} order watercourse, depicting a *Lantana camara** dominated midstorey.



Figure 3.5: Looking in a westerly direction up American Creek in MZ3.

Vegetation Management Plan



Figure 3.6: Looking in a northerly direction above MZ3 with American Creek located below the regenerating MU13.

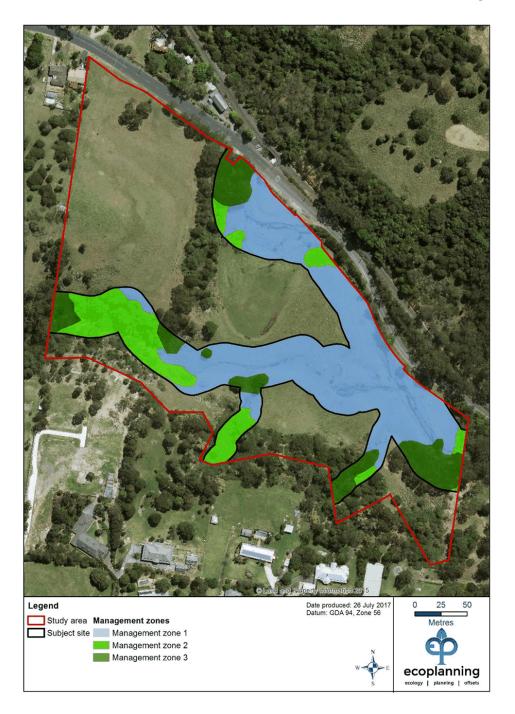


Figure 3.7: Management zones within the VMP subject site.



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

3.4 Revegetation

Revegetation of MZ1 and MZ2 will be necessary to achieve a reasonable restoration outcome. The densities and timing of revegetation will depend on the level of degradation in each of the MZs, thus its capacity to respond to assisted natural regeneration. Infill planting will be conducted in MZs with a reasonable potential to regenerate naturally (i.e. MZ2), whereas denser planting will be necessary in the heavily cleared areas of the site (i.e. MZ1).

3.4.1 Staging and logic

Management zone 1

This MZ consists of cleared land with a long disturbance history, thus reconstruction of the vegetation will be necessary. This will be achieved by installing midstorey and canopy species mid-way through the first year of the contract. Areas of 50 cm diameter will be sprayed throughout the MZ to reflect the advised planting densities for midstorey and canopy species (see **Section 3.4.2**). The removal of all exotic pasture grasses should avoided until the planted midstorey and canopy species are sufficiently established. The installation of groundlayer species has not been considered for this zone, as the main aim of the VMP in this MZ is to improve the structural connectivity in the canopy and midstorey stratums. Supplementary revegetation should be conducted if more than 10% attenuation occurs and will be conducted mid-way through year 3.

Management zone 2

Native canopy and midstorey species will be installed into the MZ following the completion of primary works, whilst allowing ample time to determine whether natural recruitment is likely. All primary work on woody weeds, including *Lantana camara** will have been removed prior to revegetation. As such, revegetation will be conducted mid-way through year two, approximately 6 months — one year after the completion of primary woody weed removal. This will allow enough time to determine where revegetation will need to occur at lower or higher densities, given the recruitment of native midstorey and canopy species. Supplementary revegetation should be conducted if more than 10% attenuation occurs and will be conducted mid-way through year three.

Management zone 3

This zone requires minimal revegetation, as it contains an established, or establishing *Eucalyptus* spp. overstorey, as well as a reasonably intact native groundlayer. It is possible following restoration works that the native midstorey develops in this vegetation zone, which currently contains a less species rich midstorey than typical of Moist Box-Red. Planting densities are advised below for midstorey species should this zone require supplementary planting. In the case that is not necessary these plants could be utilised in other areas of the subject site, particularly where natural attenuation has occurred. Revegetation of this zone is a low priority, and should be scheduled for mid-way through the 3rd year of the contract. Given that native midstorey species will likely self-recruit following restoration work, infill planting to account for a %10 natural attenuation rate was not seen as necessary.

3.4.2 Planting densities and species

Plantings will be installed at a density resembling the vegetation community Moist Box-Red Gum Foothills Forest (MU13) in an 'unmodified' condition. The native species used for revegetation should be consistent with the planting palette provided (**Appendix B**), with the aim of reconstructing the floristics of the site to be representative of Moist Box-Red Gum Foothills

Forest (MU13) (see NSW NPWS 2002 for list of representative species). Planting densities have been determined for each MZ based on site condition and flooding capacity of the study area, and guided by the Wollongong LGA DCP (Chapter E23), as follows:

Management Zone 1:

- 1 shrub species per 5 m²
- 1 canopy per 20 m²

Management Zone 2:

- 1 shrub species per 5 m²
- 1 canopy per 10 m²
 - 1 groundcover (grass, fern, forb or sedge) at a density of 1 per 5 m²

Management Zone 3:

1 shrub species per 5 m²

Table 3.1. Planting density table for revegetation works.

Zana	Avec (he)		Zone total			
Zone	Area (ha)	G	S	С	Zone total	
1	2.17 ha	-	4,340	2,170	6,510	
2	0.7 ha	700	1,400	1,400	3,500	
3	0.61 ha	-	1,220	-	1,220	

G = groundcover, S = shrubs and C= canopy.

3.4.3 Equipment, installation and timing

Plantings should be planned for late winter leading up to spring when regular rainfall is naturally occurring and growth conditions are ideal. Planting of tube-stock (tree and shrub species) and Hiko or Viro cells (grasses and other groundcover species) will be favoured over broad scale seed application, such as direct seeding or brush matting.

A water retaining and fertilising product (e.g. Terraform™) should be applied to each hole, to assist in the establishment of the plants. Each plant should be sufficiently watered on the same day as installation and regular watering should continue in lieu of rainfall for a period of 6 weeks, or until plantings have taken. The bush regenerator should oversee and assist with watering.

3.5 Concurrent Works

Vegetation management works will be carried out concurrently with civil construction works, therefore, planning between the bush regeneration contractor and civil works supervisor must be undertaken.

The civil works team will install environmental management controls across the site including exclusion zone fencing and erosion and sediment control. It is the responsibility of the bush regeneration contractor not to damage these controls and if any damage is observed or inadvertently caused it must be notified to the civil works supervisor immediately.

3.6 Maintenance

The maintenance phase must continue for 4 years, following 1 year of primary and secondary works. Regular inspections of site condition will be conducted, including general site monitoring for potential new infestation areas and subsequent weed control of any identified weed species. Inspections and site monitoring must occur every 3 months during winter and autumn and every 1-month during summer and spring. This schedule could be revised depending on performance criteria recorded.

Weed maintenance works will include:

- Removal of all exotic species prior to establishment and seeding
- Spot spraying of exotic grasses and herbaceous weed through MZ1
- Maintaining woody weeds and exotic vines at low levels

Re-vegetation maintenance works will include:

- Replacement of poorly growing or diseased individuals consistent with the prescribed planting
- Management of insect damage, if necessary
- Watering during dry periods
- Augmenting past planting areas where attenuation has occurred

Additional maintenance tasks will include:

Repairs to the cattle proof fencing along the sites perimeter.

3.7 Cost of implementation

The costing for the VMP has been calculated over a five-year period and is estimated at a total of \$100,878 (**Table 3.2**), including the cost of monthly and annual reporting. This figure reflects a first year cost of \$32,375, second year costs of \$21,400, third year costs of \$16,903, fourth year costs of \$9,600 and fifth year costs of \$9,600. Monthly and annual reporting costs over the five year period add up to a total of \$11,000. The costs have been calculated based on the employment of trained bush regenerators at a rate of \$400 pp/day (\$50 pp/hr for an 8 hour working day), which covers crew and supervisor wages, equipment, herbicides, and all other associated business costs.

The costing indicates how many crew members are required to attend monthly visits over the three year contract, based on the size of the site, extent of weed infestation and expected timeframes for the completion of primary, secondary works and initiation of maintenance works. The costs are indicative of commercial bush regeneration charge out rates, and some variation is excepted depending on the bush regeneration company used and their associated charge out rates.

Plantings

Additional plantings may be required to augment previous plantings if some are lost to natural attenuation. The cost of revegetation was based on \$2.50 per plant, including purchasing and installation costs. Supplementary plantings have been calculated based on a 10% attenuation rate from original installation numbers.



Table 3.2: Cost of VMP implementation over the three year contract period.

Timing	Task	Cost	
Year 1	<u>Primary and secondary weed control</u> based on the cost of employing a team of 3 bush regenerators at \$400 (\$50 per hour for 8 hours) pp/day to attend site monthly.	\$14,400	
Initiation of contract	the perimeter of the site, as displayed in Figure 3.1. Note: The proposed		
Mid-way through year 1.	Revegetation of MZ1 with a total of 6,510 midstorey and canopy plants (see Table 3.1) at \$2.50 per plant.	\$16,275	
	Year 1 total	\$32,375	
Year 2	Maintenance weed control throughout based on the cost of employing a team of 3 bush regenerators at \$400 (\$50 per hour for 8 hours) pp/day monthly.	\$14,400	
Mid-way through year 2	Revegetation of M2 with a total of 3,500 plants (see Table 3.1) at \$2.50 per plant.	\$7,000	
	Year 2 total	\$21,400	
Year 3	Maintenance weed control based on the cost of employing a team of 3 bush regenerators at \$400 pp/day on a monthly basis.	\$14,400	
Mid-way through year 3	Revegetation of MZ1 based on a ~10% attenuation of the initial plantings (~651 plants) at \$2.50 per plant		
Mid-way through year 3	Aid-way chrough Revegetation of MZ2 based on a ~10% attenuation of the initial plantings (~350 plants) at \$2.50 per plant.		
	Year 3 total	\$16,903	
Year 4	Maintenance weed control based on the cost of employing a team of 2 bush regenerators at \$400 pp/day on a monthly basis.	\$9,600	
	Year 4 total	\$9,600	
Year 5	Year 5 Maintenance weed control based on the cost of employing a team of 2 bush regenerators at \$400 pp/day on a monthly basis.		
	Year 5 total	\$9,600	
Monthly	Cost of monthly reporting over the 5 year contract period. Report should consist of a one - two page report detailing the works conducting onsite (\$100 per month).		
Annually	Annual report detailing all works conducted onsite, weed treatment methods, planting success and failures etc. (\$1,000 annually)	\$5,000	
	Reporting costs total	\$11,000	
	Grand Total	\$100,878	



4. Performance criteria and Monitoring

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

4.1 Performance criteria

The progress and compliance with the VMP will be monitored and reviewed annually. This process will involve the bush regeneration contractor and land manager. The performance criteria listed in **Table 4.1** below are considered to be best practice and are not linked with any specific legislation. The bush regeneration contractor, in consultation with Wollongong City Council can adapt these criteria as required in response to the success of restoration works. Based on the success of the management works, further performance criteria may need to be developed for the maintenance phase.

Table 4.1. Revegetation performance monitoring criteria.

Treatment Zones	Year 1	Year 2	Year 3	Year 4	Year 5	
	Commencement of all tasks outlined in the VMP or evidence of planning for their implementation.					
	A demonstrated increase in native cover and diversity and a demonstrated decrease in exotic species cover and diversity by the end of the 3 rd year.					
	A minimum of 9	0% survival rate o	of all revegetation			
	A visible improv	ement of soil stab	pility along the ripa	arian zone.		
All Zones	An 80% reduction in exotic vine cover.	An 80-95% reduction in exotic vine cover.	Exotic vines maintained at <5% cover.	Exotic vines maintained at <5% cover.	No exotic vines >5 cm in length with low abundance and cover (<5%) throughout the site.	
	A 50% reduction in herbaceous weeds and exotic grass cover.	A 50-70% reduction in herbaceous weeds and exotic grass cover.	A 70-90% reduction in herbaceous weeds and exotic grass cover.	Herbaceous weeds and exotic grasses maintained at <5% cover.	Herbaceous weeds and exotic grasses maintained at <5% cover.	
	An 80% reduction in woody weed cover.	Woody weeds retained at low levels (<5% cover).	Woody weeds retained at low levels (<5% cover).	Woody weeds retained at low levels (<5% cover).	No woody weeds >10 cm in height remaining, with low cover (<5%) and abundance throughout the site.	

4.2 Monitoring reports

The bush regeneration contractor and the land manager will monitor the vegetation for changes over time. The objective of the monitoring and reporting program is to record changes to the vegetation as a result of vegetation management works. Monitoring works will require liaison with the land manager, the bush regeneration contractor and Wollongong Council.

Monthly monitoring and reporting must be documented and compiled into an annual report to determine the effectiveness of the works undertaken. Site conditions should be recorded on the work plan template at the beginning and end of on-ground works. This data should be included in the annual report. Monitoring photo points should be established at 3 permanent reference points.

An example report is detailed in **Table 4.2**, the report should include:

- Works carried out, including weed species targeted and their location;
- An approximation of the time spent on each task;
- Any observations, such as the occurrence of new weed species;
- Rates of regeneration of native species;
- A description of any problems encountered and how they were overcome;
- A summary of how the site-specific objectives have been met (or not);
- Herbicide and other chemicals used, including quantity, dilution rate and other relevant information;
- Weed control mechanisms used during the period;
- Climatic conditions which may have influenced weed germination and growth;
- Performance criteria and success; and
- If required, maps of weed distribution and density.

4.3 Bush regeneration contractors

Suitably qualified and experienced bush regeneration contractors that are members of the Australian Association of Bush Regenerators or fulfil the membership criteria must undertake all vegetation management works. In addition to this, team leaders should hold a Certificate III in Conservation & Land Management or possess equivalent field experience and certification. The contractor should carry out best practice bush regeneration techniques as described by Buchanan (2009).



Table 4.2. Example monitoring report template.

Date		
Name of Contractor:		
Hours worked on site since last monitoring report:		
Site Condition:	Zone	
	Weed cover %	
	Seedling survival %	
	Planting numbers	
	Herbicide used (in Litres)	
	Other	
Describe relevant weed management techniques:		
Describe problems; e.g. weed invasions, damage to planted material, etc.:		
Photographic evidence:		
Planned work before next monitoring report:		



Vegetation Management Plan Cordeaux Road, Cordeaux Heights



5. References

Bradley, J. (2002) *Bringing back the bush. The Bradley Method of Bush Regeneration*. New Holland Publishers, Sydney.

Brodie L (1999) The National Trust Bush Regenerators Handbook. National Trust of Australia (NSW).

Buchanan R.A (2000) Bush regeneration: recovering Australian landscapes. 2nd edn, TAFE NSW, Sydney.

Fuller, L. (2011) Wollongong's Native Trees. Big Bean Books, Wollongong

Hazelton and Tille, P.J. (1990) Soil Landscapes of the Wollongong-Port Hacking 1:100 000 Sheet and Map. Soil Conservation Service of NSW, Sydney

Landcom (2004) Managing urban stormwater: soils and construction.

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Mortlock, W. (2000) The Hawkesbury-Nepean Catchment Management Authority (2000) Florabank Guideline 10: Seed collection ranges for revegetation. http://www.florabank.org.au/Florabank, Yarralumla, ACT [20 August 2001]

Muyt, A. (2001) Bush Invaders of South-East Australia. R.G. and F.J. Richardson Publishers, Meredith, Vic.

NSW Dept. of Planning and Environment (DPE) (2015) NSW Planning Viewer Beta. NSW Government. Accessed at: https://maps.planningportal.nsw.gov.au/Terms

NSW Land and Property Information (LPI) (2015) SIX Maps. Accessed at: https://maps.six.nsw.gov.au/

NSW NPWS (2002) Native Vegetation of the Illawarra Escarpment and Coastal Plain. NSW NPWS, Hurstville

NSW Office of Water (NOW) (2012) Controlled activities on waterfront land – Guidelines for vegetation management plans on waterfront land.

Wollongong City Council (WCC) (2016) Pre-lodgement Notes PL-2016/136; dated 10/10/16





Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Appendix A: Flora inventory

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Table A1 – Flora species recorded during site visit

Family Name	Scientific Name	Common Name	Native/Exotic
Apiaceae	Centella asiatica	Indian Pennywort	Native
Apocynaceae	Araujia sericifera	Moth Vine	Exotic
, , , , , , , , , , , , , , , , , , , ,		Narrow-leafed Cotton	
Apocynaceae	Gomphocarpus fruticosus	Bush	Exotic
Asparagaceae	Asparagus aethiopicus	Asparagus Fern	Exotic
Asteraceae	Ageratina adenophora	Crofton Weed	Exotic
Asteraceae	Bidens pilosa	Cobbler's Peg	Exotic
Asteraceae	Cirsium vulgare	Spear Thistle	Exotic
Asteraceae	Conyza sp.	Fleabane	Exotic
Asteraceae	Hypochaeris radicata	Catsear	Exotic
Asteraceae	Senecio madagascariensis	Fireweed	Exotic
Asteraceae	Sigesbeckia orientalis		Native
Bignoniaceae	Jacaranda mimosifolia	Jacaranda	Exotic
Bignoniaceae	Pandorea pandorana	Wonga Wonga Vine	Native
Blechnaceae	Doodia aspera		Native
Caesalpiniaceous	Senna pendula var. glabrata	Cassia	Exotic
Celastraceae	Elaeodendron australe var. australe		Native
Convolvulaceae	Dichondra repens	Kidney Weed	Native
Convolvulaceae	Ipomea indica	Morning Glory	Exotic
Cyperaceae	Carex longebrachiata		Native
Dennstaedtiaceae	Pteridium esculentum	Bracken	Native
Dilleniaceae	Hibbertia scandens	Climbing Guinea Flower	Native
Fabaceae	Acacia binervia	Coastal Myall	Native
Fabaceae	Acacia maidenii	Maiden's Wattle	Native
Fabaceae	Acacia mearnsii	Black Wattle	Native
Fabaceae	Erythrina x sykesii	Coral Tree	Exotic
Fabaceae	Glycine clandestina		Native
Fabaceae	Vicia sp.	Vetch	Exotic
Gentianaceae	Centaurium sp.		Exotic
Geraniaceae	Geranium sp.		Native
Iridaceae	Romulea rosea	Onion Grass	Exotic
Juncaceae	Juncus sp.		Native
Lauraceae	Cinnamomum camphora	Camphor Laurel	Exotic
Luzuriagaceae	Geitonoplesium cymosum	Scrambling Lily	Native
Malaceae	Pyracantha angustifolia	Orange Firethorn	Exotic
Malvaceae	Sida rhombifolia	Paddy's Lucerne	Exotic
Meliaceae	Melia azedarach	White Cedar	Native
Myrsinaceae	Myrsine variabilis		Native
Myrtaceae	Backhousia myrtifolia	Grey Myrtle	Native
Myrtaceae	Eucalyptus bosistoana	Coastal Grey Box	Native
Myrtaceae	Eucalyptus eugenioides	Large-leaf Stringybark	Native
Myrtaceae	Eucalyptus quadridentate	Coastal White Box	Native
Myrtaceae	Eucalyptus saligna x botryoides	Wollongong Woolybutt	Native
Myrtaceae	Eucalyptus tereticornis	Forest Red Gum	Native
wynaceae	Lacarypius teredicornis	1 Orest Neu Guill	Manve



Item 1 - Attachment 5 - Indicative Vegetation Management Plan



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Family Name	Scientific Name	Common Name	Native/Exotic
Myrtaceae	Melaleuca styphelioides	Prickly-leaved Tea Tree	Native
Oleaceae	Ligustrum lucidum	Large-leaved Privet	Exotic
Oleaceae	Ligustrum sinense	Broad-leaf Privet	Exotic
Phyllanthaceae	Glochidion ferdinandi	Cheese Tree	Native
Pittosporaceae	Pittosporum multiflorum		Native
Pittosporaceae	Pittosporum revolutum	Rough-fruit Pittosporum	Native
Pittosporaceae	Pittosporum undulatum	Sweet Pittosporum	Native
Plantaginaceae	Plantago lanceolata	Plantain	Exotic
Poaceae	Axonopus fissifolius	Carpet Grass	Exotic
Poaceae	Briza subaristata		Exotic
Poaceae	Bromus catharticus	Prairie Grass	Exotic
Poaceae	Cynodon dactylon	Cooch Grass	Exotic
Poaceae	Dichelachne sp.		Native
Poaceae	Echinopogon ovatus		Native
Poaceae	Ehrharta erecta	Panic Veldt Grass	Exotic
Poaceae	Holcus lanatus	Yorkshire Fog	Exotic
Poaceae	Microlaena stipoides	Weeping Grass	Native
Poaceae	Paspalum dilatatum	Paspalum	Exotic
Poaceae	Pennisetum clandestinum	Kikuyu	Exotic
Poaceae	Rytidosperma racemosum		Native
Polygonaceae	Persicaria sp.		Native
Rhamnaceae	Alphitonia excelsa	Red Ash	Native
Rosaceae	Rubus fruticosus spp. agg	Blackberry	Exotic
Rosaceae	Rubus parvifolius	Native Raspberry	Native
Santalaceae	Exocarpos cupressiformis	Cherry Ballart	Native
Sapindaceae	Dodonaea viscosa subsp. angustifolia		Native
Solanaceae	Solanum mauritianum	Wild Tobacco	Exotic
Solanaceae	Solanum pseudocapsicum	Jerusalem Cherry	Exotic
Urticaceae	Urtica incisa	Stinging Nettle	Native
Verbenaceae	Lantana camara	Lantana	Exotic
Verbenaceae	Verbena officinalis	Common Verbena	Exotic

Vegetation Management Plan Cordeaux Road, Cordeaux Heights



Appendix B – Fauna species recorded during site inspection Table B1 – Opportunistic fauna sightings (heard, visual or evidence)

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Scientific name	Common name
Physignathus lesueurii	Eastern Water Dragon
Litoria fallax	Eastern Dwarf Tree Frog
Dama dama	Fallow Deer
Felis catus	Cat
Anthochaera carunculata	Red Wattlebird
Cacatua galerita	Sulphur-crested Cockatoo
Chrysococcyx lucidus	Shining Bronze-cuckoo
Corvus coronoides	Australian Raven
Cracticus torquatus	Grey Butcherbird
Dacelo novaeguineae	Laughing Kookaburra
Eolophus roseicapillus	Galah
Eopsaltria australis	Eastern Yellow Robin
Grallina cyanoleuca	Magpie Lark
Leucosarcia melanoleuca	Wonga Pigeon
Malurus cyaneus	Superb Fairy-wren
Meliphaga lewinii	Lewin's Honeyeater
Pachycephala rufiventris	Rufous Whistler
Psophodes olivaceus	Eastern Whipbird
Pycnonotus jocosus	Red-whiskered Bulbul
Rhipidura albiscapa	Grey Fantail
Rhipidura leucophrys	Willie Wagtail
Trichoglossus haematodus	Rainbow Lorikeet
Turdus merula	European Blackbird





Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Appendix B: Planting palette

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Planting palette for the vegetation community Moist Box-Red Gum Foothills Forest, as described in the Native Vegetation of the Illawarra Escarpment and Coastal Plain (NPWS 2003).

Scientific Name	Common Name
Tree	
Alphitonia excelsa	Red Ash
Eucalyptus quadrangulata	White-topped Box
Eucalyptus saligna x botryoides	Wollongong Woollybutt
Eucalyptus tereticornis	Forest Red Gum
Small Tree	
Acmena smithii	Lilly Pilly
Elaeodendron australe var. australe	Red Olive Plum
Melaleuca styphelioides	Prickly-leaved Tea Tree
Melicope micrococca	Hairy-leaved Doughwood
Pittosporum undulatum	Native Daphne
Rapanea variabilis	Muttonwood
Rhodamnia rubescens	Scrub Turpentine
Streblus brunonianus	Whalebone Tree
Wilkiea huegeliana	Veiny Wilkiea
Shrub	
Backhousia myrtifolia	Grey Myrtle
Clerodendrum tomentosum	Hairy Clerodendrum
Croton verreauxii	Green Native Cascarilla
Notelaea venosa	Veined Mock-olive
Pittosporum multiflorum	Orange Thorn
Pittosporum revolutum	Wild Yellow Jasmine
Backhousia myrtifolia	Grey Myrtle
Grasses	
Entolasia marginata	Bordered Panic
Microlaena stipoides var. stipoides	Weeping Grass
Oplismenus imbecillis	Creeping Beard Grass
Panicum pygmaeum	Pygmy Panic
Poa labillardierei	Tussock
Fern	
Adiantum formosum	Black Stem
Asplenium flabellifolium	Necklace Fern
Doodia aspera	Prickly Rasp Fern
Doodia australis	Common Rasp Fern
Pellaea falcata	Sickle Fern



Item 1 - Attachment 5 - Indicative Vegetation Management Plan



Vegetation Management Plan Cordeaux Road, Cordeaux Heights

Scientific Name	Common Name	
Eustrephus latifolius	Wombat Berry	
Geitonoplesium cymosum	Scrambling Lily	
Marsdenia rostrata	Milk Vine	
Morinda jasminoides	Sweet Morinda	
Pandorea pandorana subsp. pandorana	Wonga Wonga Vine	
Parsonsia straminea	Monkey Rope	
Smilax australis	Lawyer Vine	
Other		
Dichondra repens	Kidney Weed	
Gymnostachys anceps	Settlers' Twine	
Nyssanthes diffusa	Barbwire Weed	
Pseuderanthemum variabile	Pastel Flower	





Appendix C: Weed treatment methods

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

Zone	Objective	Main Weeds	Method	Key Performance Indicators (KPI)
All	Control and suppress exotic grasses and herbaceous weeds.	Ageratina adenophora, Cenchrus clandestinus, Cynodon dactylon, Cirsium vulgare, Senecio madagascariensis and Verbena bonariensis.	 Primary and secondary treatment of herbaceous weeds and exotic grasses will occur in the first year of the contract. This will include a combination of spot spraying and hand weeding, particularly in MZ2 and MZ3, where off target damage could occur to native groundcover species. Aquatic weeds, such as Ageratina adenophora should be cut and painted with neat Roundup Biactive®. Maintenance works will consist of detailed hand weeding amongst developing patches of native groundlayer species in MZ2 and MZ3 and spot spraying in MZ1. Herbaceous weeds will be treated prior to seeding, bagged, removed from site and disposed at a licensed green waste facility. 	A 50% reduction in cover by the end of year one. A 50-70% reduction by end of year two. A 70-90% reduction by the end of year three. S5% cover by the end of year four. S5% cover by the end of year five.
	Deseeding, skirting and eventual eradication of exotic vine species.	Araujia sericifera, Delairea odorata and Ipomoea indica.	 Primary and secondary work will aim to substantially reduce exotic vine abundance and cover in the first year of the contract. Exotic vines should be treated using a combination of hand removal and scrape and painting with neat Roundup Biactive®. Maintenance sweeps will be conducted to prevent the establishment of exotic vines species, particularly <i>Araujia sericifera</i>, which is likely to have viable seed stored in the weed seed bank. 	An 80% reduction in cover by the end of year one. An 80-95% reduction in cover by the end of year two. Exotic vines maintained at

59

Item 1 - Attachment 5 - Indicative Vegetation Management Plan

60



Ecological Constraints Assessment, 227 Cordeaux Road, Mount Kembla

Zone	Objective	Main Weeds	Method	Key Performance Indicators (KPI)
	Treatment of all	Erythrina x sykesii, Lantana camara,	Primary and accordant weeds wood removal will be	<5% cover by the end of year 3. No vines >5cm in length and maintained at <5% cover by end of year 5.
	Treatment of all woody weeds.	Eryinina x sykesii, Lahiaha camara, Ligustrum lucidum, Ligustrum sinense, Solanum mauritianum. and Senna pendula var. glabrata.	 Primary and secondary woody weed removal will be conducted in the first year of the contract. Initial works should aim to eradicate all woody weed species with a focus on MZ2 and MZ3. Stem injection should be utilised for the treatment of Erythrina x sykesii using neat Roundup Biactive®. All smaller woody weeds (i.e. Lantana camara, Senna pendula var. glabrata and Solanum mauritianum) will be treated by cut and painting with neat Roundup Biactive®. Maintenance woody removal will consist of sweeps through the VMP subject site to prevent woody weeds from becoming re-established. Maintenance work should be conducted regularly, with a focus on removing woody weeds before reaching >50 cm, or prior to seeding. It is recommended that all cut woody weed material is removed from site and disposed of at a licenced green waste facility. However, small habitat piles can be constructed out of woody weed material (i.e. Lantana camara and Solanum mauritianum). Erythrina x sykesii should not be retained and piled within the subject site, given the ability for offcuts to rapidly layer and reestablish. 	reduction in woody weed cover by the end of year one. Woody weeds maintained at <5% cover by end of year 2. No individuals >10cm remaining and maintained at <5% cover by end of year five.



File: ESP-100.05.025 Doc: IC17/355

ITEM 2

DRAFT PLANNING AGREEMENT: BUNNINGS PROPERTIES PTY LTD NORTHCLIFFE DRIVE, KEMBLA GRANGE (DA-2016/358)

Bunnings Properties Pty Ltd has requested that Council enter into a Planning Agreement for the shared cost of constructing a roundabout on the western end of Northcliffe Drive, Kembla Grange. The roundabout is required to address traffic management issues in relation to Development Application 2016/358 and also to facilitate the future extension of Northcliffe Drive as identified in the West Dapto Access Strategy. A locality plan, the Draft Planning Agreement and the Explanatory Note are provided as attachments to this report.

It is recommended that Council exhibit the draft Planning Agreement for community input.

RECOMMENDATION

- 1 The draft Planning Agreement between Bunnings Properties Pty Ltd and Council (Attachment 2) be exhibited for a minimum period of 28 days.
- 2 The Southern Joint Regional Planning Panel be advised that Bunnings Properties Pty Ltd and Council are proposing to enter into a Planning Agreement for the design and construction of a roundabout on Northcliffe Drive, Kembla Grange, and should it determine that DA-2016/358 be approved, appropriate conditions of consent be included requiring the Planning Agreement to be entered into and the terms of the Agreement to be satisfied.
- 3 The General Manager be delegated authority to determine, finalise and execute the Planning Agreement, including making minor amendments, after consideration of any issues raised in the public exhibition.

REPORT AUTHORISATIONS

Report of: Vanni De Luca, Manager Environmental Strategy and Planning (Acting)

Authorised by: Andrew Carfield, Director Planning and Environment - Future City and Neighbourhoods

ATTACHMENTS

- 1 Locality Plan
- 2 Draft Planning Agreement
- 3 Explanatory Note

BACKGROUND

West Dapto Strategy Context

Council's long-term West Dapto Access Strategy includes an extension of Northcliffe Drive to the west, with an expected bridge over the Princes Highway and the southern rail line. The road corridor for this extension is identified and is predominantly already owned by Council. This extension has previously been conceptualised by internal civil design to include a roundabout at the intersection where the extension joins Northcliffe Drive. The anticipated timeframe for design and construction is in 2026-2031, that is, in 10-15 years. The Northcliffe Drive extension supports Stages 1 and 2 of the West Dapto Release Area with the majority of the road included in the West Dapto Section 94 Development Contributions Plan 2017. The boundary of the West Dapto Section 94 Plan is the Princes Highway and therefore the roundabout on Northcliffe Drive is currently unfunded.

Bunnings Development Proposal

Council is currently assessing DA-2016/358 for the development of a new 'Bunnings' warehouse on the north east corner of Northcliffe Drive and Princes Highway, Kembla Grange (Attachment 1). As the development has a value over \$20 million, it is required to be determined by the Southern Joint Regional Planning Panel (JRPP). The development will involve significant traffic changes to allow vehicular access to and from Northcliffe Drive and the Princes Highway. The initial concept by the developer for



vehicles entering/exiting on Northcliffe Drive was for a signalised intersection. This is the same location as that of the future roundabout referenced above.

Advice from Councils Traffic section indicates that, regardless of the Northcliffe Drive extension considerations, a roundabout is strongly preferred to signals for the Bunnings development access for reasons of maintaining and managing traffic flow in this location. This preference is strengthened when taking into account the Northcliffe Drive extension and associated traffic increases.

As part of the Development Application, Bunning's have lodged amended plans which show the proposed roundabout on Northcliffe Drive. The proposal would also require the closure of the right turn movements of the Northcliffe Drive / Phar Lap Avenue intersection and the extension of the medium strip. The closure of the medium strip gap would be required by either the roundabout or traffic light solution. The amended plans have been advertised to affected land owners.

As a result of these amendments the Development Application was re-notified on 19 July 2017 and three submissions were received. Issues raised in the submissions included noise, traffic management (both during and after construction) and drainage. These issues will be considered during assessment of the development application and do not directly relate to the associated Planning Agreement.

Discussions with Bunnings

Council officers met with the representatives of Bunnings Properties Pty Ltd and confirmed that the roundabout was Council's preferred solution in preference to the traffic lights. Bunning's consultants have prepared preliminary concept designs of a roundabout (Attachment 1) which have a cost estimate of \$2.5 million. Given the concept status of these estimates and the exclusion of contingency and project management costs, the total project cost is likely to be closer to \$3 million.

Through early stage consultation, Bunnings indicated a potential of committing \$1.5 million to the roundabout construction - an amount equivalent to their cost to construct traffic signals as originally planned. Council would need to bring forward funding for the remaining \$1.5 million. An option for part funding of the proposed roundabout was included as part of the draft Wollongong Section 94A Development Contributions Plan (2017) that was considered by Council on 8 May 2017, exhibited between 17 May and 16 June 2017 and adopted by Council on 17 July 2017.

A Planning Agreement is the appropriate mechanism to facilitate this outcome.

PROPOSAL

A Planning Agreement is a voluntary arrangement between a developer and Council under which the developer is required to dedicate land free of cost, pay a monetary contribution or provide any other material public benefit, or a combination of these, to be used for or applied towards the provision of public infrastructure or another public purpose.

In this instance, the developer has proposed to provide a material public benefit, being the construction and part funding of a roundabout at the western end of Northcliffe Drive, Kembla Grange. This is instead of the otherwise payable Section 94A contributions of approximately \$200,000 and will result in a greater benefit to the community and Council.

On 6 February 2017, the applicant provided a Letter of Offer to enter into a Planning Agreement under Section 93F of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in connection with DA-2016/358.

Council officers further negotiated the proposal in accordance with Council's Planning Agreement Policy, and it is now proposed that through the Planning Agreement:

- The developer will undertake detailed designs for Councils approval;
- The works will need to be completed to the satisfaction of Council;
- The developer will appoint an Independent Project Manager to oversee the project;
- Any variations to the design or cost estimate will need to be approved by Council;



- The total final costs will be shared equally between the parties; and
- The Planning Agreement will exclude the application of Section 94A of the EP&A Act (ie. \$200,000).

Overall, it is considered that the proposed Planning Agreement will result in a positive outcome for the developer, Council and the community.

CONSULTATION AND COMMUNICATION

Internal:

- Infrastructure Strategy and Planning;
- Development Assessment and Certification;
- Finance;
- Governance and Information: and
- Project Delivery.

External:

DA-2016/358 and the amended plans has been advertised.

If Council endorses the recommendations of this report the draft Planning Agreement (Attachment 2) and Explanatory Note (Attachment 3) will be exhibited for community input for a minimum period of 28 days.

PLANNING AND POLICY IMPACT

The draft Planning Agreement has been negotiated and prepared in accordance with Council's Planning Agreements Policy, Sections 93F - S93I of the *Environmental Planning and Assessment Act 1979* and Clauses 25B – 25E of the *Environmental Planning and Assessment Regulation 2000*.

The development has a Capital Investment Value of over \$20 million and therefore pursuant to Schedule 4A of the EP&A Act, the Southern Joint Regional Planning Panel (JRPP) is the consent authority. If Council endorses this report it will provide Council's 'in principle' support for a Planning Agreement in order to provide the JRPP with certainty that should the Development Application be approved it can impose a requirement for the developer to enter into a Planning Agreement with Council for the construction and funding of the roundabout.

This report contributes to the delivery of Wollongong 2022 Goal 6 "We have sustainable, affordable and accessible transport". It specifically delivers on core business activities as detailed in the Transport Services Service Plan 2017-18.

RISK ASSESSMENT

The proposed Planning Agreement provides a formal instrument to manage and mitigate any risks associated with developer delivery of the works.

Should the Planning Agreement not proceed now, the risk exists that the developer will pursue the traffic light intersection solution to provide access to their site, which would then require Council to fund all future intersection redesign/construction works associated with the Northcliffe Drive extension. These future costs would be significantly greater than the identified \$1.5 million for this project.

FINANCIAL IMPLICATIONS

This proposal will require Council to bring forward its share of funding (approximately \$1.5 million) in Capital Expenditure to 2017/18 – 2018/19. The full value of the constructed asset ultimately vested with Council would be approximately \$2.5 - \$3 million, with an annual depreciation increase of approximately \$30,000.

It is proposed to fund Council's share of the cost as \$1 million from Section 94A Development Contributions and \$500,000 from the regional roads annual allocations.



Further approved cost variations are not expected, however, may be considered from within the capital works program.

While undertaking the project now will cost Council and initial unplanned sum - approximately \$1.5 million, it will negate a future planned cost of \$3 million. Hence an agreement with the developer will result in significantly reduced costs to Council and provide better traffic management for the site.

CONCLUSION

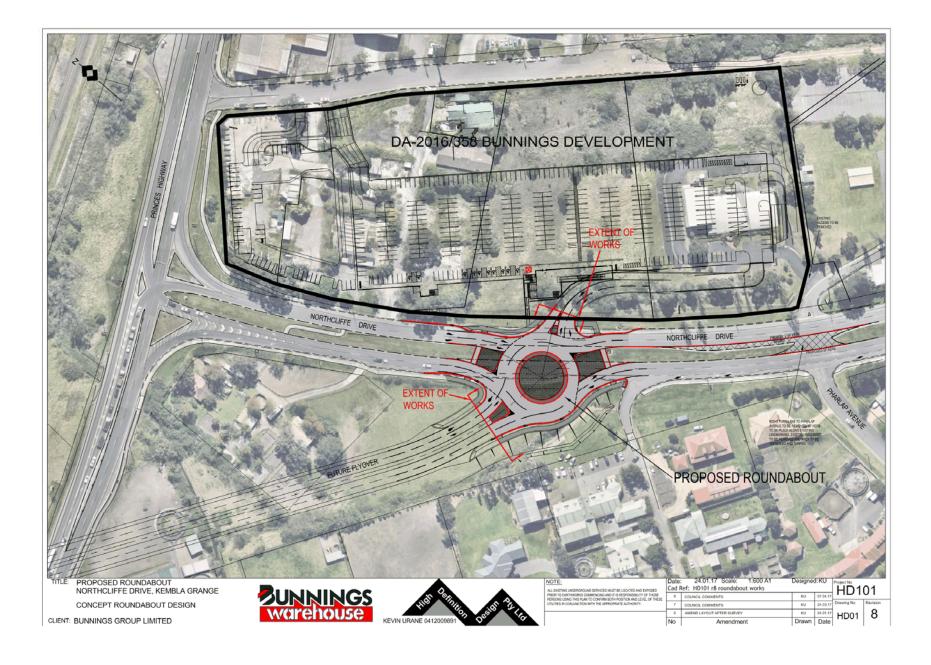
Bunnings Properties Pty Ltd has requested that Council enter into a Planning Agreement to facilitate the construction of a roundabout on the western end of Northcliffe Drive, Kembla Grange with the total costs being equally shared between both parties. It is considered that the early construction, and part funding by the developer, will provide positive outcomes to the community.

It is recommended that Council endorse the Draft Planning Agreement for exhibition to enable community comments. If there are no major issues raised during the exhibition period, it is proposed that delegation be issued to the General Manager to determine, finalise and execute the Planning Agreement, including making minor changes.

Item 2 - Attachment 1 - Locality Plan

65





Item 2 - Attachment 2 - Draft Planning Agreement



DRAFT PLANNING AGREEMENT

Wollongong City Council

and

Bunnings Properties Pty Ltd



WOLLONGONG CITY COUNCIL

41 Burelli Street, Wollongong NSW 2500 Locked Bag 8821, Wollongong DC NSW 2500 Tel: 02 4227 7111

Fax: 02 4227 7277

Web: www.wollongong.nsw.gov.au

ABN: 63 139 525 939 – GST Registered





DATE [DATE]

PARTIES WOLLONGONG CITY COUNCIL (ABN 63 139 525 939) of 41

Burelli Street, Wollongong in the State of New South Wales

(Council)

BUNNINGS PROPERTIES PTY LTD (ABN 46 008 557 622)

of 11 Shirley Street, Rosehill NSW 2142 (Developer)

BACKGROUND

- 1. The Developer is the registered proprietor of the Developer Land.
- 2. The Developer has made the Development Application with Council.
- 3. The Developer has offered to provide the Contributions if the Development is undertaken.
- 4. This Agreement describes the Contributions and provides for the manner in which, and the terms upon which:
 - a. the Developer is to provide the Contributions; and
 - b. Council is to contribute towards the cost of the Contributions.

OPERATIVE PROVISIONS

1. DEFINITIONS

The following definitions apply unless the context otherwise requires:

Act means the Environmental Planning and Assessment Act 1979 (NSW).

Acquisition Act means the Land Acquisition (Just Terms Compensation) Act 1991 (NSW).

Additional Cost has the meaning given in clause 5.1.

Assign as the context requires refers to any assignment, sale, transfer,

disposition, declaration of trust over or other assignment of a legal and/or

beneficial interest.

Authority means (as appropriate) any:

- (1) federal, state or local government;
- (2) department of any federal, state or local government;
- (3) any court or administrative tribunal; or
- (4) statutory corporation or regulatory body.







Item 2 - Attachment 2 - Draft Planning Agreement

Bank Guarantee	means the bank guarantee(s) from an Australian bank required to be provided to Council by the Developer under this agreement.	
Claim	against any person any allegation, action, demand, cause of action, suit, proceeding, judgement, debt, damage, loss, cost, expense or liability howsoever arising and whether present or future, fixed or unascertained, actual or contingent whether at law, in equity, under statute or otherwise.	
Complete, Completed Completion	means completed in accordance with the requirements of this document.	
Concept Design	means the concept design for the Works at Annexure A.	
Construction Certificate	means a construction certificate issued in accordance with the Act.	
Construction Contract	means the contract to be entered into by the Developer (or by Bunnings Group Limited ACN 008 672 179) and the builder for the construction of the Works.	
Contributions	means the provision of the Works by the Developer in accordance with this document.	
Council Land	means that part of the road reserve at Northcliffe Drive where the Works will occur.	
Council Representative(s)	Means the person(s) notified by Council to the Developer as the Council Representative for the purpose of this Agreement.	
Deed of Novation	means the form of deed contained in Annexure D.	
Deed of Novation Defects Liability Period	means the form of deed contained in Annexure D. means a period of twelve (12) months commencing from the date on which the final Item of Work is completed.	
Defects Liability	means a period of twelve (12) months commencing from the date on	
Defects Liability Period	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla	
Defects Liability Period Developer Land	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange.	
Defects Liability Period Developer Land Development Development	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange. means the Development described in the Development Application. means development application DA-2016/358 lodged by the Developer on	
Defects Liability Period Developer Land Development Development Application	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange. means the Development described in the Development Application. means development application DA-2016/358 lodged by the Developer on 24 March 2016 with Council for the Development Consent. means a development consent issued under the Act with respect to the	
Defects Liability Period Developer Land Development Development Application Development Consent	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange. means the Development described in the Development Application. means development application DA-2016/358 lodged by the Developer on 24 March 2016 with Council for the Development Consent. means a development consent issued under the Act with respect to the Development.	
Defects Liability Period Developer Land Development Development Application Development Consent	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange. means the Development described in the Development Application. means development application DA-2016/358 lodged by the Developer on 24 March 2016 with Council for the Development Consent. means a development consent issued under the Act with respect to the Development. means in relation to the Works or an Item of Work:	
Defects Liability Period Developer Land Development Development Application Development Consent	means a period of twelve (12) months commencing from the date on which the final Item of Work is completed. means the whole of the land contained in Folio Identifiers 1/1118629, 2/1118629, 50/879625, 51/879625 and 52/879625, known as 638, 642 and 644-650 Northcliffe Drive and 1-3 and 9 Canterbury Road, Kembla Grange. means the Development described in the Development Application. means development application DA-2016/358 lodged by the Developer on 24 March 2016 with Council for the Development Consent. means a development consent issued under the Act with respect to the Development. means in relation to the Works or an Item of Work: (1) the construction cost of each Item of the Works; (2) any costs incurred under a building contract in relation to the Works	





Final Design means the final design of the Works determined in accordance with the

procedure set out in clause 7.2.

Final Timetable has the meaning given in clause 7.2(3).

GST Law means A New Tax System (Goods and Services Tax) Act 1999 (Cth) and

any other Act or regulation relating to the imposition or administration of

the goods and services tax.

Indicative Cost of

Works

has the meaning given in clause 5.1(1) of this agreement.

Indicative Cost of Works Report

means the report prepared by KCE Pty Ltd dated 12 April 2017 at

Annexure B.

Item of Work means an individual item of the Works as set out in Annexure B.

Land means the Council Land and the Developer Land.

means all legislation, regulations, by-laws, common law and other binding Law

order made by any Authority.

Maintenance Liability

Period

means twelve (12) months.

Occupation Certificate means an occupation certificate issued in accordance with the Act.

Physical

Commencement

Has the same meaning as set out at section 95 of the Act.

Planning Legislation means the Act, the Local Government Act 1993 (NSW) and the Roads Act

1993 (NSW).

Project Management

Agreement

means the agreement to be entered into between the Developer and the

Project Manager pursuant to clause 10.1 of this agreement.

Project Manager means the project manager appointed under clause 10 of this agreement.

Proposed Construction **Drawings**

has the meaning given in clause 7.2.

Proposed Timetable has the meaning given in clause 7.2.

Quantity Surveyor means a quantity surveyor selected and appointed by Council from a list

> of Quantity Surveyors recommended by the Developer all of whom must be members of Panels for the NSW Department of Commerce or Local

Government Procurement.

Security Amount A means an amount which is 45% of the Indicative Cost of Works.

Security Amount B means an amount which is 5% of the Indicative Cost of Works.

Works means the works generally described as the construction of a four-leg

roundabout to Northcliffe Drive and the construction of a median in Northcliffe Drive in the vicinity of Phar Lap Avenue, substantially in accordance with the Concept Design as approved with the Development.





Item 2 - Attachment 2 - Draft Planning Agreement

DEFINITIONS

wollongong

The following rules of interpretation apply unless the context requires otherwise:

clauses, annexures and schedules

a clause, annexure or schedule is a reference to a clause in or annexure

or schedule to this document.

reference to statutes a statute, ordinance, code or other law includes regulations and other

instruments under it and consolidations, amendments, re-enactments or

replacements of any of them.

singular includes

plural

the singular includes the plural and vice versa.

person the word "person" includes an individual, a firm, a body corporate, a

partnership, joint venture, an unincorporated body or association or any

government agency.

executors, administrators, successors

a particular person includes a reference to the person's executors, administrators, successors, substitutes (including persons taking by

novation) and assigns.

dollars Australian dollars, dollars, \$ or A\$ is a reference to the lawful currency of

Australia.

calculation of time if a period of time dates from a given day or the day of an act or event, it is

to be calculated exclusive of that day.

reference to a day a day is to be interpreted as the period of time commencing at midnight

and ending 24 hours later.

reference to a group

of persons

a group of persons or things is a reference to any two or more of them

jointly and to each of them individually.

meaning not limited the words "include", "including", "for example" or "such as" are not used

as, nor are they to be interpreted as, words of limitation, and, when introducing an example, do not limit the meaning of the words to which the

example relates to that example or examples of a similar kind.

next day if an act under this document to be done by a party on or by a given day is

done after 4.30pm on that day, it is taken to be done on the next day.

next Business Day if an event must occur on a stipulated day which is not a Business Day

then the stipulated day will be taken to be the next Business Day.

time of day time is a reference to Sydney time.

headings headings (including those in brackets at the beginning of paragraphs) are

for convenience only and do not affect the interpretation of this document.

agreement a reference to any agreement, Agreement or instrument includes the

same as varied, supplemented, novated or replaced from time to time.

Gender a reference to one gender extends and applies to the other.





3. DEFINITIONS

3.1 Planning Agreement

This document is a planning agreement:

- (1) Within the meaning set out in s93F of the Act; and
- (2) Governed by Subdivision 2 of Division 6 of Part 4 of the Act.

3.2 Application

This document applies to the Land and the Development.

3.3 Operation of document

- (1) Subject to paragraph (2), this document operates from the date it is executed by both parties.
- (2) If the Development Consent:
 - a. lapses; or
 - b. is surrendered by the Developer prior to Physical Commencement,

then this document ceases to operate and the Council releases the Developer from its obligations under this document.

4. APPLICATION OF S94 AND S94A

4.1 Application

This document excludes the application of section 94 and section 94A of the Act to the Development.

5. DELIVERY OF CONTRIBUTION

5.1 Estimate of cost of Works

- (1) The parties acknowledge and agree that:
 - a. at the date of this agreement the Indicative Cost of Works is estimated to be \$2,551,200 excluding GST, based on the Indicative Cost of Works Report.
 - additional costs will be incurred in the delivery of the Works in addition to those set out in the Indicative Cost of Works Report, including but not limited to:
 - i. Fees to be paid to any regulatory authority;
 - ii. Consultants' costs required to progress the project from Concept Design to Final Design;
 - iii. Costs associated with the appointment of the Project Manager including the Project Manager's fee for the performance of its services; and
 - iv. Any additional costs incurred as a result of construction including any costs associated with delay in construction,

(Additional Cost).

- (2) Within 30 days of the approval of the Final Design and Final Timetable as required pursuant to clause 7.2 of this Agreement, the Developer must provide Council with a detailed cost estimate of the Final Design as prepared by a Quantity Surveyor.
- (3) Where the detailed cost estimate referred to above exceeds 20% of the Indicative Cost of Works, the Parties agree to meet and discuss, in good faith, opportunities to revise the Final Design so as to reduce costs.



wollongong

PLANNING AGREEMENT

5.2 Determination of Final Cost of Works

- (1) Upon Completion of any Item of Work the Developer must provide Council with a certificate from a Quantity Surveyor in favour of both Council and the Developer as to the Final Cost of Works of the relevant Item of Work.
- (2) The determination of the Quantity Surveyor as to the cost of an Item of Work is conclusive and binding on the parties except in the case of manifest error.

5.3 Responsibility for Final Cost of Works

- (1) The Developer shall be responsible for payment of the Final Cost of Works.
- (2) Council shall reimburse the Developer half the Final Cost of Works at the following 2 stages:
 - upon the Works being 50% complete as determined under the Construction Contract;
 and
 - b. upon practical Completion of all Items of Work.
- (3) Any claim for payment by the Developer under clause 5.3(2) must be accompanied by the following:
 - a. in relation to:
 - i. clause 5.3(2)a, a certificate evidencing the work is 50% complete; and
 - ii. clause 5.3(2)b, the notices issued by Council pursuant to clause 8.2 for all Items of Work or evidence that the each of the Items/Activities identified in Annexure C have been Completed;
 - itemised cost schedule detailing any variations to the agreed costings and whether these variations have been approved by Council; and
 - c. copies of receipts of confirmation that all of the costs have been paid by the Developer.
- (4) Council must notify the Developer of its acceptance or refusal of the Developer's claim for payment made under clause 5.3(2), within 7 days of the claim.
- (5) If Council refuses a claim, it must provide the Developer with detailed reasons for that refusal at the time of notifying the Developer under clause 5.3(4).
- (6) Council will be deemed to have accepted a claim for payment by the Developer under clause 5.3(2) if it has not validly refused the claim within 7 days after the date on which the claim is made by the Developer.
- (7) Council must reimburse the Developer the amount of each claim under clause 5.3(2) within 60 days of actual or deemed acceptance, as the case may be, of the relevant claim.
- (8) If Council fails to reimburse the Developer within the required time under clause 5.3(8), Council must pay interest on the amount outstanding at a rate of 13% per annum, calculated daily on the amount outstanding until the date of payment.

5.4 Council's obligations under Construction Contract

The parties acknowledge and agree that:

- (1) Council will not be a party to the Construction Contract;
- (2) Council's obligations under this document with respect to the Construction Contract (other than as Consent Authority) will be limited to:
 - a. the obligations to pay Council's share of the Final Cost of Works as set out in clause
 5.3 as a reimbursement; and
 - the provision of access to the Council Land on the terms set out in clause 19, for the purposes of allowing the Works to be carried out in accordance with the terms of the Construction Contract.





(3) The Council Representative will be invited by the Developer to be a part of the roundabout construction tender selection process and may provide a recommendation to the Developer with respect to the appointment of the builder within 5 business days of the tender appointment meeting. The Developer must consider Council's recommendation however is under no obligation to accept the Council's recommendation.

REGISTRATION OF THIS DOCUMENT

6.1 Registration

Prior to the issue of a Construction Certificate for the Works, this document must be registered on the title of the Developer Land pursuant to section 93H of the Act.

6.2 Obligations of the Developer

The Developer must:

- do all things necessary to allow the registration of this document to occur, including but not limited to obtaining the consent of any mortgagee registered on the title of the Developer Land; and
- (2) pay any reasonable costs incurred by Council in undertaking that registration.

6.3 Removal from title of the Developer Land

- (1) Council will do all things necessary to allow the Developer to promptly remove the registration of this document from the title of the Developer Land where:
 - a. the Developer has Completed the Works; or
 - b. this document has ceased to operate pursuant to clause 3.3(2).
- (2) The Developer must pay any reasonable costs incurred by Council in undertaking that discharge.

7. PROVISION OF CONTRIBUTIONS

7.1 Works

The Developer must:

- (1) if necessary, obtain any consents, approvals or permits required by a relevant Authority, for the conduct of the Works:
- (2) carry out and complete each Item of Work by the date specified in the Final Timetable;
- (3) carry out and complete the Works:
 - (a) in accordance with the requirements of, or consents issued, by any Authority;
 - in accordance with the Final Design, the reasonable requirements of Council and any applicable Development Consent;
 - (c) in accordance with the Testing, Reporting and Hold Points requirements of Council's Subdivision Policy 2016 as contained at Annexure C and as conditioned by the Development Consent; and
 - in a proper and workmanlike manner complying with current industry practice and standards, including applicable Australian standards.

7.2 Works Design Development

(1) Prior to the issue of a Construction Certificate for construction of the warehouse component of the Development the Developer must prepare detailed design and engineering drawings for the construction of the Works (the **Proposed Construction Drawings**), and a proposed timetable



vollongong



PLANNING AGREEMENT

for the construction of the Works (Proposed Timetable) and must submit the Proposed Construction Drawings and the Proposed Timetable to Council for approval.

- The Proposed Construction Drawings must be substantially in accordance with the Concept
- (3)Within 60 days of receiving the Proposed Construction Drawings, the Council must either:
 - confirm in writing that it approves the Proposed Construction Drawings (Final Design) and the Proposed Timetable (Final Timetable); or
 - (ii) provide the Developer with written notice of the amendments required to be made to the Proposed Construction Drawings or the Proposed Timetable, or both, to render them acceptable to Council, acting reasonably. Council shall not be entitled to request amendments to the Proposed Road Construction Drawings which are inconsistent with the Concept Design.
- Where Council requires amendments to the Proposed Construction Drawings or the Proposed Timetable, or both pursuant to clause 7.2(3), the parties shall repeat the process set out in clause 7.2(1) to 7.2(3) until Council approves the Proposed Construction Drawings and the Proposed Timetable.
- If Council wishes to amend the Proposed Road Construction Drawings in a manner which is consistent with the Concept Design but will have the effect of increasing the Final Development Cost, the parties must meet and negotiate in good faith in relation to Council's desired amendments in an attempt to reach agreement as to those amendments and any adjustment to the Final Development Cost, but Bunnings shall be under no obligation to agree to Council's desired amendments.
- The failure by the Council to comply with clause 7.2(3) constitutes a trigger for the dispute resolution mechanism contained at clause 15.

7.3 Testing, Reporting and Hold Points

- The Developer agrees to invite the Council Representative to each of the Item/Activities identified in Annexure C, and, as part of that invitation, provide the Council Representative with the corresponding notice required for each Item/Activity.
- Where the Council Representative gives a direction in relation to the Item/Activity as part of their inspection, the Developer agrees to act in accordance with that direction.
- The failure by the Developer to comply with a direction given under clause 7.3(2) constitutes a (3)trigger for the dispute resolution mechanism contained at clause 15.

Appointment of Council as Principal Certifying Authority

The Developer agrees to appoint Council as the Principal Certifying Authority under the Act for the Works. For the avoidance of doubt, the Developer is not required to appoint Council as the Principal Certifying Authority under the Act for the warehouse component of the Development.

8. COMPLETION OF WORKS

Issue of Completion Notice

If the Developer considers that an Item of Work is Complete it must serve a notice on Council within fourteen (14) days of Completion of that item which:

- (1)is in writing; and
- specifies the date on which the Developer believes the Works were Completed.

8.2 Notice by Council

Within the earlier of:

seven (7) days of inspecting the Item of Work set out in a Completion Notice; and





(2) fourteen (14) days from the receipt of the Completion Notice,

Council must provide notice in writing to the Developer that the relevant Item of Work:

- (3) has been Completed; or
- (4) has not been Completed, in which case the notice must also detail:
 - (a) those aspects of the Item of Work which have not been Completed; and
 - (b) the work Council requires the Developer to carry out in order to rectify those deficiencies.

8.3 Deemed Completion

If Council does not provide the Developer with notice within the time specified in clause 8.2, the Item of Work subject of a Completion Notice will be deemed to have been Completed on the date nominated in the Completion Notice.

8.4 Effect of Council notice

- (1) Where Council serves notice on the Developer pursuant to clause 8.2(4), the Developer must:
 - rectify the deficiencies in that item in accordance with that notice within a reasonable time (not being less than fourteen (14) days from the date it is issued by Council); or
 - (b) serve a notice on Council that it disputes the matters set out in the notice.
- (2) Where the Developer:
 - serves notice on Council in accordance with paragraph 8.4(1)(b) the dispute resolution provisions of this document apply; or
 - (b) rectifies the Works in accordance with paragraph 8.4(1)(a) it must serve upon Council a new Completion Notice for the Works it has rectified (New Completion Notice).

8.5 New Completion Notice

The provisions of clauses 8.1 to 8.4 (inclusive) apply to any New Completion Notice issued by the Developer.

8.6 Timing of Completion

The Developer must Complete the Works prior to the issue of any Occupation Certificate for the Development.

9. DEFECTS LIABILITY

9.1 Defects Notice

- (1) Where any Item of Work is Complete but that item contains a defect which:
 - (a) adversely affects the ordinary use and/or enjoyment of that item; or
 - (b) will require maintenance or rectification works to be performed on it at some time in the future as a result of the existence of the defect,

(**Defect**) Council may issue a notice to the Developer (**Defects Notice**) concerning that Item of Work but only during the Defects Liability Period.

- (2) A Defects Notice must contain the following information:
 - (a) the nature and extent of the Defect;
 - (b) the work Council requires the Developer to carry out in order to rectify the Defect; and
 - (c) the time within which the Defect must be rectified by the Developer (which must be a reasonable time and not less than twenty eight (28) days).

9.2 Developer to rectify Defects





- (1) The Developer must rectify the Defects contained within a Defects Notice prior to the date specified in that notice.
- (2)The Developer must follow the procedure set out in clause 8 in respect of the completion of the rectification of any Defect as if a reference in that clause to an Item of Work is a reference to the relevant Defect.

9.3 Right of Council to step-in

Council may, at its absolute discretion, enter upon the Land for the purpose of rectifying a Defect set out in the Defects Notice where the Developer has failed to comply with a Defects Notice, but only after giving the Developer fourteen (14) days written notice of its intention to do so.

Consequence of step-in

If Council elects to exercise the step-in rights granted to it under clause 9.3 then:

- Council may:
 - enter upon any part of the Land reasonably required to exercise those step-in rights; and (a)
 - (b) rectify the relevant Defects in accordance with the Defects Notice,
- (2)the Developer must not impede or interfere with Council in exercising those rights; and
- Council may claim any reasonable costs incurred by it in doing so from the Developer as a (3)liquidated debt.

9.5 Costs of Council

Where Council exercises its step-in rights under clause 9.4, it may:

- call upon the Bank Guarantees provided by the Developer pursuant to clause 14 to meet any costs for which the Developer is liable under clause 9.4(3); and
- (2)recover as a debt due in a court of competent jurisdiction any difference between the amount of the Bank Guarantees and the costs incurred by Council in rectifying the Defects.

10. PROJECT MANAGER

10.1 Appointment

The Developer shall appoint a project manager.

10.2 Responsibilities

The Project Manager shall have the following roles and responsibilities:

- act as agent of the Developer during construction and as the superintendent under the Construction Contract with the builder;
- (2)certify all claims for payment, variations, and extensions of time;
- (3) give directions on behalf of the Developer; and
- (4)assess defects.

10.3 Payment of Project Manager

The Developer will be responsible for the Project Manager's fee, to be paid at the times and in the manner set out in the Project Management Agreement.

11. WARRANTIES AND INDEMNITIES

11.1 Warranties

The Developer warrants to Council that:





- (1) it is able to fully comply with its obligations under this document;
- (2) it has full capacity to enter into this document; and
- (3) there is no legal impediment to it entering into this document, or performing the obligations imposed under it.

12. NOT USED

13. DETERMINATION OF THIS DOCUMENT

13.1 Determination

This document will determine upon the Developer and Council satisfying all of their obligations under the document.

13.2 Effect of determination

Upon the determination of this document Council will do all things necessary to allow the Developer to remove this document from the title of the whole or any part of the Land as quickly as possible.

14. SECURITY

14.1 Prohibition

Except as provided in clause 14.2, neither party may Assign their rights under this document without the prior written consent of the other party, which must not be unreasonably withheld.

14.2 Assignment of Land

The Developer may Assign its interest in the Developer Land, provided that the proposed assignee:

- enters into the Deed of Novation that includes Council as a party, under which the assignee agrees to be bound by the terms of this document; and
- (2) if practical Completion of the Works has not yet occurred, satisfies Council (acting reasonably) that the proposed assignee is financially able to undertake and complete the obligations set out in this document.

14.3 Delivery to Council of Bank Guarantee

Prior to commencement of the Works the Developer must deliver to Council one or more unconditional bank guarantees from an Australian bank (Bank Guarantee):

- (1) in a form acceptable to Council;
- (2) for Security Amount A; and
- (3) without an expiry date.

14.4 Council may call on Bank Guarantee

- (1) If the Developer does not comply with the terms of this document with respect to the provision of the Works, Council may issue the Developer with a notice requiring the Developer to rectify the relevant default within fourteen (14) days from the date of that notice.
- (2) If the Developer fails to comply with a notice issued under paragraph (1) to the reasonable satisfaction of Council, Council may, without limiting any other avenues available to it, call on the relevant Bank Guarantee to the extent necessary to reimburse Council for any costs incurred by it in rectifying the relevant default of the Developer.

14.5 Top up of Bank Guarantee





Within fourteen (14) days of being requested to do so by Council the Developer must ensure that the amount secured by any Bank Guarantee is returned to Security Amount A.

14.6 Security during Defects Liability Period

- Upon the commencement of the Defects Liability Period, Council must return any Bank Guarantees held by it with respect to the Works.
- In exchange, the Developer must provide the Council with one (1) or more Bank Guarantees in a form acceptable to Council for an amount equal to Security Amount B.

14.7 Return of Bank Guarantee

Council must return the remaining Bank Guarantees (if any) to the Developer within 30 days from the expiration of the Defects Liability Period.

15. DISPUTE RESOLUTION

15.1 Notice of dispute

- If a dispute between the parties arises in connection with this document or its subject matter (Dispute), then either party (First Party) must give to the other (Second Party) a notice which:
 - is in writing; (a)
 - (b) adequately identifies and provides details of the Dispute;
 - stipulates what the First Party believes will resolve the Dispute; and (c)
 - (d) designates its representative (Representative) with the necessary authority to negotiate and resolve the Dispute.
- The Second Party must, within five (5) Business Days of service of the notice of dispute, provide a notice to the First Party designating as its representative a person with the necessary authority to negotiate and settle the Dispute (the representatives designated by the parties being together, the Representatives).

15.2 Conduct pending resolution

The parties must continue to perform their respective obligations under this document if there is a Dispute but will not be required to complete the matter the subject of the Dispute.

15.3 Further steps required before proceedings

Subject to clause 15.12 and except as otherwise expressly provided in this document, any Dispute must, as a condition precedent to the commencement of litigation, mediation under clause 15.5 or determination by an expert under clause 15.6, first be referred to the Representatives. The Representatives must endeavour to resolve the dispute within five (5) Business Days of the date a notice under clause 15.1 is served.

15.4 Disputes for mediation or expert determination

If the Representatives have not been able to resolve the Dispute, then the parties must agree within five (5) Business Days to either refer the matter to mediation under clause 15.5 or expert resolution under clause 15.6.

15.5 Disputes for mediation

- If the parties agree in accordance with clause 15.4 to refer the Dispute to mediation, the mediation must be conducted by a mediator agreed by the parties and, if the parties cannot agree within five (5) Business Days, then by a mediator appointed by the President of the Law Society of New South Wales for the time being.
- If the mediation referred to in paragraph (1) has not resulted in settlement of the Dispute and has been terminated, the parties may agree to have the matter determined by expert determination under clause 15.6.





15.6 Choice of expert

- If the Dispute is to be determined by expert determination, this clause 15.6 applies. (1)
- The Dispute must be determined by an independent expert in the relevant field: (2)
 - agreed between and appointed jointly by the parties; or (a)
 - (b) in the absence of agreement within five (5) Business Days after the date that the matter is required to be determined by expert determination, appointed by the President of the Law Society of New South Wales for the time being
- If the parties fail to agree as to the relevant field within five (5) Business Days after the date that the matter is required to be determined by expert determination, either party may refer the matter to the President of the Law Society of New South Wales for the time being whose decision as to the relevant field is final and binding on the parties.
- The expert appointed to determine a Dispute:
 - must have a technical understanding of the issues in dispute;
 - (b) must not have a significantly greater understanding of one party's business, functions or operations which might allow the other side to construe this greater understanding as a bias; and
 - must inform the parties before being appointed of the extent of the expert's understanding (c) of each party's business or operations and, if that information indicates a possible bias, then that expert must not be appointed except with the written approval of the parties.
- The parties must promptly enter into an agreement with the expert appointed under this clause setting out the terms of the expert's determination and the fees payable to the expert.

15.7 Directions to expert

- In reaching a determination in respect of a dispute under clause 15.6, the independent expert must give effect to the intent of the parties entering into this document and the purposes of this document.
- (2)The expert must:
 - act as an expert and not as an arbitrator; (a)
 - (b) not accept verbal submissions unless both parties are present;
 - on receipt of a written submission from one party, ensure that a copy of that submission is (c) given promptly to the other party;
 - take into consideration all documents, information and other material which the parties (d) give the expert which the expert in its absolute discretion considers relevant to the determination of the Dispute;
 - not be expected or required to obtain or refer to any other documents, information or (e) material (but may do so if the expert so wishes);
 - issue a draft certificate stating the expert's intended determination (together with written (f) reasons), giving each party ten (10) Business Days to make further submissions;
 - issue a final certificate stating the expert's determination (together with written reasons); (g)
 - act with expedition with a view to issuing the final certificate as soon as practicable. (h)
- The parties must comply with all directions given by the expert in relation to the resolution of the Dispute and must within the time period specified by the expert, give the expert:
 - (a) a short statement of facts:
 - a description of the Dispute; and (b)
 - any other documents, records or information which the expert requests. (c)

15.8 Expert may convene meetings





- (1) The expert must hold a meeting with all of the parties present to discuss the Dispute. The meeting must be conducted in a manner which the expert considers appropriate. The meeting may be adjourned to, and resumed at, a later time in the expert's discretion.
- 2) The parties agree that a meeting under paragraph (1) is not a hearing and is not an arbitration.

15.9 Other courses of action

If:

- the parties cannot agree in accordance with clause 15.3 to refer the matter to mediation or determination by an expert; or
- (2) the mediation referred to in clause 15.5 has not resulted in settlement of the dispute, the mediation has been terminated and the parties have not agreed to refer the matter to expert determination within five (5) Business Days after termination of the mediation,

then either party may take whatever course of action it deems appropriate for the purpose of resolving the Dispute.

15.10 Final determination of expert

The parties agree that the final determination by an expert will be final and binding upon them except in the case of fraud or misfeasance by the expert.

15.11 Costs

If any independent expert does not award costs, each party must contribute equally to the expert's costs in making the determination.

15.12 Remedies available under the Act

This clause 15 does not operate to limit the availability of any remedies available to Council under sections 123, 124 and 125 of the Act.

15.13 Urgent relief

This clause 15 does not prevent a party from seeking urgent injunctive or declaratory relief concerning any matter arising out of this document.

16. POSITION OF COUNCIL

16.1 Consent authority

The parties acknowledge that Council is a consent authority with statutory rights and obligations pursuant to the terms of the Planning Legislation.

16.2 Document does not fetter discretion

This document is not intended to operate to fetter:

- (1) the power of Council to make any Law; or
- (2) the exercise by Council of any statutory power or discretion, (Discretion).

16.3 Severance of provisions

- (1) No provision of this document is intended to, or does, constitute any unlawful fetter on any Discretion. If, contrary to the operation of this clause, any provision of this document is held by a court of competent jurisdiction to constitute an unlawful fetter on any Discretion, the parties agree:
 - they will take all practical steps, including the execution of any further documents, to ensure the objective of this clause 16 is substantially satisfied;





- in the event that paragraph (a) cannot be achieved without giving rise to an unlawful fetter (b) on a Discretion, the relevant provision is to be severed and the remainder of this document has full force and effect; and
- to endeavour to satisfy the common objectives of the parties on relation to the provision of this document which is held to be an unlawful fetter to the extent that it is possible having regard to the relevant court judgment.
- Where the Law permits Council to contract out of a provision of that Law or gives Council power to exercise a Discretion, then if Council has in this document contracted out of a provision or exercised a Discretion under this document, then to the extent of this document is not to be taken to be inconsistent with the Law.

16.4 No obligations

Nothing in this document will be deemed to impose any obligation on Council to exercise any of its functions under the Act in relation to the Development Consent, the Land or the Development in a certain manner.

17. CONFIDENTIALITY

17.1 Document not Confidential

The terms of this document are not confidential and this document may be treated as a public document and exhibited or reported without restriction by any party.

18. GST

18.1 Definitions

In this clause 18 the terms "Taxable Supply", "GST", "Tax Invoice" and "Input Tax Credit" have the meaning given to them in the GST Law.

18.2 Non-monetary supplies

- The parties agree that any non-monetary supplies made by one party to the other pursuant to this agreement (including Works and the dedication of land) will be exempt from GST pursuant to Division 82 of the GST Law.
- In the event that one party reasonably believes that the non-monetary supply it makes to the other is a Taxable Supply then the parties agree to negotiate in good faith to agree to the GST inclusive market value of that Taxable Supply as follows:
 - The party making the Taxable Supply will issue a Tax Invoice to the other as soon as practicable after agreeing to the GST inclusive market value and will disclose the amount of GST included in the GST inclusive market value.
 - The recipient of the Taxable Supply will pay to the other party the amount of the included (b) GST within fifteen (15) days of receiving the Tax Invoice.
- In the event that both parties reasonably believe that each make a non-monetary Taxable Supply to the other, any GST payable by one party to the other will be off-set against each other and any net difference will be paid by the party with the greater obligation.

18.3 Supply expressed in terms of money

- If any party reasonably believes that it is liable to pay GST on a supply expressed in terms of money (or where the consideration for the supply is expressed in terms of money) and made to the other party under this document and the supply was not expressed to include GST, then:
 - the recipient of the supply must pay an amount equal to the GST on that supply to the (a) other party:
 - the party making the supply will issue a Tax Invoice to the other party; and





(c) the recipient of the supply will pay the amount of the GST to the supplier within fifteen (15) days of receiving the Tax Invoice.

18.4 Expenses and costs incurred

- (1) If any expenses or costs incurred by one party are required to be reimbursed by the other party under this document, then the amount of the reimbursement will be calculated as follows:
 - (a) The amount of the cost or expense incurred by the party seeking reimbursement will be initially calculated excluding any Input Tax Credit to which that party is entitled to claim.
 - (b) This amount initially calculated will be increased by the applicable rate of GST to equal a GST inclusive reimbursement amount and this amount will be paid by the party liable to make the reimbursement.
 - (c) The party being reimbursed will issue a Tax Invoice to the other at the GST inclusive reimbursement amount prior to being reimbursed.

18.5 Survival of clause

This clause 18 continues to apply after the expiration or termination of this agreement.

ACCESS TO LAND

19.1 Application of clause

This clause applies if the Developer accesses, uses and/or occupies any land owned by Council in performing its obligations or exercising its rights under this document (Necessary Access).

19.2 Terms of Licence

The terms of Schedule 2 apply to any Necessary Access.

20. LEGAL COSTS

Each party shall pay its own costs and disbursements with respect to the preparation, negotiation, formation and implementation of this document.

21. ADMINISTRATIVE PROVISIONS

21.1 Notices

- (1) Any notice, consent or other communication under this document must be in writing and signed by or on behalf of the person giving it, addressed to the person to whom it is to be given and:
 - (a) delivered to that person's address;
 - (b) sent by pre-paid mail to that person's address; or
 - (c) sent by email to that person's email address.
- (2) A notice given to a person in accordance with this clause is treated as having been given and received:
 - (a) if delivered to a person's address, on the day of delivery if a Business Day, otherwise on the next Business Day;
 - (b) if sent by pre-paid mail, on the third Business Day after posting; and
 - (c) if sent by email to a person's email address and a conformation of receipt can be retrieved, on the day it was sent if a Business Day, otherwise on the next Business Day.
- (3) For the purpose of this clause the address of a person is the address set out in this document or another address of which that person may from time to time give notice to each other person.





21.2 Entire agreement

This document is the entire agreement of the parties on the subject matter. All representations, communications and prior agreements in relation to the subject matter are merged in and superseded by this document.

21.3 Waiver

The non-exercise of or delay in exercising any power or right of a party does not operate as a waiver of that power or right, nor does any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right. A power or right may only be waived in writing, signed by the parties to be bound by the waiver.

21.4 Counterparts

This document may be executed in any number of counterparts and all of those counterparts taken together constitute one and the same instrument.

21.5 Unenforceability

Any provision of this document which is invalid or unenforceable in any jurisdiction is to be read down for the purposes of that jurisdiction, if possible, so as to be valid or enforceable, and is otherwise capable of being severed to the extent of the invalidity or enforceability, without affecting the remaining provisions of this document or affecting the validity or enforceability of that provision in any other jurisdiction.

21.6 Power of Attorney

Each attorney who executes this document on behalf of a party declares that the attorney has no notice of:

- the revocation or suspension of the power of attorney by the grantor; or (1)
- (2)the death of the grantor.

21.7 Governing law

The law in force in the State of New South Wales governs this document. The parties:

- submit to the exclusive jurisdiction of the courts of New South Wales and any courts that may hear appeal from those courts in respect of any proceedings in connection with this document;
- may not seek to have any proceedings removed from the jurisdiction of New South Wales on the (2)grounds of forum non conveniens.





EXECUTED AS AN AGREEMENT EXECUTED by and on behalf of **WOLLONGONG CITY COUNCIL** by its Authorised Officer: Signature of Authorised Person Signature of Witness [Print] Name of Authorised Officer [Print] Name of Witness Office Held Date Date EXECUTED by BUNNINGS PROPERTIES PTY LTD in accordance with section 127(1) of the Corporations Act by authority of its directors. **Director/Secretary Signature** Signature of Witness [Print] Name of Director/Secretary [Print] Name of Director Date





SCHEDULE 1: REQUIREMENTS UNDER SECTION 93F OF THE ACT

THIS PLANNING AGREEMENT
(a) no
(b) yes
(c) no
Refer to clause 1 and 3.2 of the Planning Agreement
Not applicable
Refer to clause 4.1 of the Planning Agreement.
Refer to clause 4.1 of the Planning Agreement.
Not applicable
Refer to clause 15 of the Planning Agreement.
Refer to clauses 6 and 14 of the Planning Agreement.
Refer to clause 16 of the Planning Agreement.



wollongong

PLANNING AGREEMENT

SCHEDULE 2: TERMS OF LICENCE

DEFINITIONS 1.

For the purposes of this Schedule 2:

- the Land is the land being accessed under the Licence; (1)
- (2) the Licence means the licence of the Land to which this Schedule applies;
- (3)the Licensee is the party accessing the Land; and
- (4) the Licensor is the owner of the Land.

2. LICENCE

2.1 **Personal Rights**

- The Licence is personal to the Licensee. (1)
- (2)The Licensee may not encumber, assign or transfer (either directly or indirectly) the Licence without the prior written consent of the Licensor.
- The Licensor may refuse the granting of consent under paragraph (2) without reason and at its absolute discretion.

2.2 Leasehold interest

- This deed does not grant to the Licensee a leasehold interest in the Land. The parties agree that: (1)
 - the Licence does not confer exclusive possession of the Land on the Licensee; (a)
 - (b) the Licensee may not exclude the Licensor, its officers, employees and invitees from:
 - entry onto the Land: and/or
 - the performance of any works on the Land;

provided that such entry onto and/or performance of work on the Land does not unreasonably interfere with the activities being carried out on the Land by the Licensee,

- (2)the Licensee does not have any right to quiet enjoyment of the Land; and
- (3)the Licensee will not at any time seek to enforce an interest in the Land in competition with the interest held by the Licensor.

COMPLIANCE WITH AUTHORITIES 3.

No warranty as to suitability for use 3.1

The Licensee acknowledges and agrees that the Licensor has not made any representation or warranty to the Licensee regarding the suitability of the Land for the purposes of the Licensee.

3.2 Compliance with the terms of the consents

The Licensee must comply with the requirements of all Authorities in relation to its access to the Land and the conduct of any activities on it by the Licensee.

Compliance with directions from Authorities

The Licensee must comply with all notices, directions, orders or other requests served upon itself or the Licensor and which arise from the conduct of any activities on the Land by the Licensee.







3.4 Obtaining further consents

- If the Licensee requires further consents to conduct activities on the Land it must:
 - make such applications itself; and

Item 2 - Attachment 2 - Draft Planning Agreement

- (b) bear all costs incurred by it in relation to obtaining the relevant consent.
- The Licensor agrees that it will, where required, sign all authorities reasonably required by the Licensee to make any application to any Authority.

LIMITATION OF THE LICENSOR'S LIABILITY 4.

4.1 Insurances

- The Licensee must effect and keep current and in force the following policies of insurance: (1)
 - Broadform Public Liability Insurance policy with a reputable insurance company approved by the Licensor in an amount of \$20,000,000 for any one occurrence in respect of any liability for:
 - (i) personal injury or death of any person; and
 - loss or damage to property. (ii)
 - Workers compensation insurance under the Workers Compensation Act 1987 covering all (b) persons employed or deemed to be employed by the Licensee in connection with the conduct of the activities on the Land by the Licensee;
 - A comprehensive policy of motor vehicle insurance or an unlimited third party property (c) insurance policy in respect of all motor vehicles used in the performance of the activities on the Land by the Licensee; and
 - A contractor's risk policy of insurance in respect of all plant and equipment (including unregistered motor vehicles) used in the conduct of the activities on the Land by the Licensee
- (2)The policies referred to in paragraphs (1)(a), (1)(c) and (1)(d) must note the interest of the Licensor as principal.

4.2 Inspection of insurance

- (1)The Licensee must produce at the renewal of each policy a certificate of currency issued by the insurer establishing that the policy is valid.
- The licensor may carry out random audits to verify insurances held by the Licensee. The (2)Licensee will assist in any audit and provide evidence of the terms and currency of the insurance policies wherever requested by the Licensor.

Cancellation of insurance

If any policy is cancelled either by the Licensee or the insurer the Licensor must notify the Licensor immediately.

Risk

The Licensee uses and occupies the Land at its own risk.

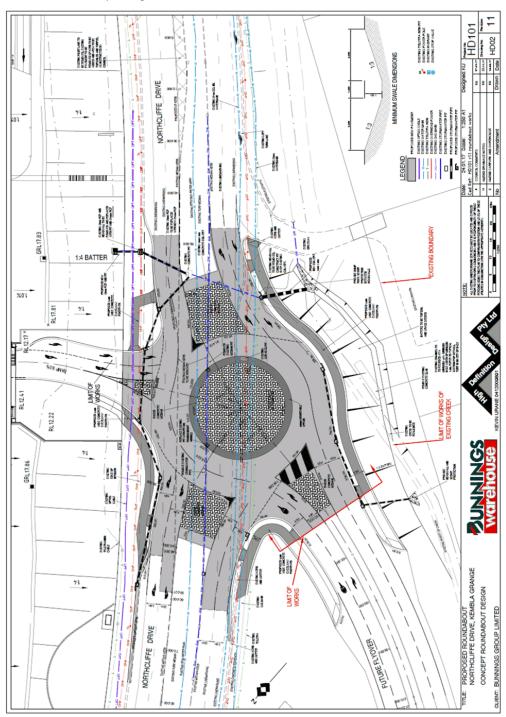
4.5 Indemnity

The Licensee indemnifies the Licensor against any Claim (of whatever nature) made in respect of the Licensee's use and/or occupation of the Land.



Item 2 - Attachment 2 - Draft Planning Agreement

Annexure A - Concept Design









Annexure B - Indicative Cost of Works Report

<u>*Ltd</u> <u>Bunnings Roundabout</u> : <u>*Northcliffe Drive, Kembla Grange</u> :CE\2017\Tenders 2017\17-017 Northcliffe Drive Roundabout\17-017gb\[17-017gb.xlsx]Budget Shee	t) <u>k</u>	KCE
12/04/2017 Description	Quantity	Unit		Rate		Budget
Revised Budget Construction Estimate for the Proposed Roundabout on Nort Based on drawings by HDD, drawings HD01 to HD06, rev. 8 dated 7/4/2017	thcliffe Drive	- Kembl	a Gra	nge		
General						
Site establishment	1	Item	\$	25,327.34	\$	25,32
Supervision, project management and site amenities	1	Item	\$	163,870.40	\$	163,87
Survey and setout of works, conformance surveys	1	Item	\$	40,016.00		40,01
Work as executed survey and drawings Geotechnical Compaction testing	1	Item Item	\$ \$	9,760.00 13,969.00		9,76 13,96
Concrete Tests	10	each	\$	305.00		3,05
CCTV inspections	10	cucii	9	505.00		No Allow
Benkelman beam (basecourse only)	4	each	\$	1,830.00	\$	7,32
Location of services	1	Item	\$	5,124.00		5,12
Traffic control	1	Item	\$	271,914.83		271,91
Sediment and Erosion Control						
Sediment fence	375	m	\$	9.15		3,4
Haybale sediment trap	4	each	\$	103.70	\$	4
Sand bag sediment trap	22	each	\$	54.90		1,20
Inlet pit sediment trap Construction exit	5 1	each Item	\$ \$	54.90 1,830.00		1,8
Maintenance and removal of sediment controls	1	Item	\$	5,154.50		5,1
Demolition						
Removal of existing asphalt offsite (assumed 100mm thick)	2,250	sq.m	\$	12.31	\$	27,69
Removal of existing concrete path offsite (assumed 100mm thick)	320	sq.m	\$	16.57	\$	5,30
Removal of existing kerb offsite	520	m	\$	26.65		13,8
Removal of existing concrete slab offsite (assumed 150mm thick)	1	item	\$	1,817.80	\$	1,81
Closure of Pharlap Avenue (removing existing pavement and turfing to centre median)						
Removal of existing kerb offsite	130	m	\$	26.65		3,4
Modify existing pit to grated surface inlet pit	1	item	\$	2,684.00		2,6
Construct new kerb inlet pit and lay pipe to existing pit	1	item	\$	4,362.37		4,3
Sawcut existing asphalt pavement and remove asphalt offsite (assume 100mm thick)	408	sq.m	\$	12.31	2	5,0
Boxout an extra 100mm thickness to allow for 200mm thickness of topsoil and turf and stockpile on site for reuse as select fill	1	item	\$	2,104.50	\$	2,1
SF Kerb layed on exisiting subgrade including AC infill	168	m	\$	91.42	\$	15,3
Cart and place site won topsoil 200mm thick to centre median area	408	sq.m	\$	5.43		2,2
Turfing to centre median area	408	sq.m	\$	7.32		2,9
Topsoil						
Strip topsoil 150mm thick and stockpile onsite	5,475	sq.m	\$	3.28	\$	17,9
Replace topsoil to disturbed areas	3,125	sq.m	\$	4.37	\$	13,6
Earthworks						
Cut to fill (includes some allowance for required double handling to suit staging)	2,600	cu.m	\$	31.16	S	81,0
Import, place, trim and compact select fill material	500 1	cu.m	\$ \$	100.89		50,4 10,0
Allowance for some works to address existing creek on southern side Prepare trim and compact footpaths, berms and batters.	3125	item sq.m	\$	10,000.00 3.86		12,0
	3123	sq.m	9	5.00	9	12,0
Pavement Construction Trim and compact subgrade	4,665	sq.m	\$	6.17	s	28,7
Supply, place, trim and compact select layer 200mm thick	3,610	sq.m	\$	30.75		111,0
Supply, place, trim and compact heavily bound layer 370mm thick	3,610	sq.m	\$	73.42		265,0
10mm Primer seal	3,220	sq.m	\$	7.89		25,4
60mm AC20 HD AR450	3,220	sq.m	\$	46.35	\$	149,2
40mm AC14 HD AR450 with Rhyolite	3,220	sq.m	\$	35.29	\$	113,6
Stormwater Excavate for, supply, bed, lay, joint and backfill the following:						
450mm dia. RRJ RCP class 2 (includes backfill and compaction up to underside of pavement)	185	m	\$	291.91	\$	54,0
Extend existing 900mm RCP						noved from
900mm dia. RRJ RCP class 2	13	m	\$	638.44	\$	8,2
Construct the following drainage structures						
900mm x 750mm KIP with 2.4m lintel	10	each	\$	3,194.74		31,9
1500mm x 1500mm KIP with 2.4m lintel	1	each	\$	4,587.20	\$	4,5
450mm headwall with scour protection	1	each	\$	1,525.00		1,5
900mm headwall with scour protection	1	each	\$	2,272.86		2,2
Extra scour rock between headwalls	1	item	\$	1,037.00	8	1,0
Subsoil Drainage						
Subsoil Drainage under kerb and gutter (aggregate backfill allowed)	465	m	\$	64.50		29,9
Flushing Points	10	Each	\$	244.00	S	2,4





Item 2 - Attachment 2 - Draft Planning Agreement

tion: Northcliffe Drive, Kembla Grange)K	() H
S:\KCE\2017\Tenders 2017\17-017 Northcliffe Drive Roundabout\17-017gb\[17-017gb.xlsx]Budget She	eet			(LII)	/572	برب
12/04/2017						
Description	Quantity	Unit		Rate		Budget
Concrete Works						
Roll kerb and gutter	365	m	S	71.08	S	25,94
SF Kerb	236	m	\$	53.59		12,64
Supply, place, form and pour reinforced concrete footpath including subbase layer	429	sq.m	\$	111.55		47,85
Pram Ramps	10	Each	\$	793.00		7,93
Type SM Mountable Kerb to medians	145	m	\$	50.74		7,35
Concrete infill to median (colored and stamped finish)	392	sq.m	\$	119.06		46,67
Type SM Mountable Kerb to annulus	82	m	\$	50.74		4.16
Concrete to outer annulus (colored and stamped finish, and subbase)	175	sq.m	\$	133.70		23,39
Concrete to inner annulus (plain concrete finish & subbase)	571	sq.m	\$	142.05		81,110
Services Relocation						
Relocation of 200mm watermain	1	Item	\$	50,000.00	\$	50,000
Relocation of 75mm gas main	1	Item	\$	100,000.00	\$	100,000
Relocation of NBN/Telstra	1	Item	\$	300,000.00	\$	300,000
Relocation of overhead power	1	Item	\$	100,000.00	\$	100,000
Provision for New Lighting	1	Item	\$	60,000.00	\$	60,000
Revegetation						
Strip turf behind kerbs	350	sq.m	\$	7.32		2,56
Turf adjacent footpaths and other areas	750	sq.m	\$	7.32		5,49
Seeding to disturbed areas	2,700	sq.m	\$	0.43		1,16
Establishment of seeded & turfed areas	1	Item	\$	3,318.40	\$	3,31
Linemarking & Signage						
Line Marking	1	Item	\$	9,150.00		9,15
Signage	1	Item	\$	8,540.00	\$	8,54
TOTAL OF ALL WORKS AS DETAILED ABOVE EXCLUDING GST					s	2,551,20
GST COMPONENT OF ALL WORKS AS DETAILED ABOVE					S	255,12
TOTAL OF ALL WORKS AS DETAILED ABOVE INCLUDING GST					s	2,806,32





Annexure C - Testing, Reporting and Hold Points Requirements

SUBDIVISION COUNCIL POLICY

ANNEXURE CQC-A TESTING REPORTING AND HOLD POINTS

Serial	Item/Activity	Inspections / test results to be submitted to the PCA prior to approval to proceed to next activite		Notice Required
		COMMENCEMENT OF	F WORKS ON SITE	
1	Site establishment	Pre-Construction Meeting	PCA, Contractor, Developer's Project Manager to attend Pre-Construction meeting on site. The Contractor is to: a. nominate the site supervisor for the project, b. nominate sources and suppliers of all materials, and c. provide written evidence that the Contractor has current Public Liability Insurance and Workers Compensation Insurance with Council nominated as in interested party.	2 days
2	Commencement of earthworks	Soil & Water Management Measures installed Soil & Water Management Measures inspected and approved by the PCA	Field inspection by PCA. (Contractor and Developer's Project Manager to attend)	1 day
		EARTHW	ORKS	
3	Placing fill on roads and/or lots	Stripped areas inspected and approved by PCA	Field inspection by PCA and Geotechnical Engineer	1 day
		ROAD CONS	TRUCTION	•
4	Subbase	Service Conduit Plan submitted to PCA Subgrade Approved by PCA	Subgrade CBR & Pavement Design Compaction Density Test results Proof Roll (Contractor's site supervisor shall be in attendance) Material grading results	3 days
5	Kerb & Gutter	Subbase Approved by PCA	Compaction Density Test results Proof Roll (Contractor's site supervisor shall be in attendance) Thickness check	2 days
6	Base	Kerb & Gutter Completed Subbase approved by PCA	Compaction Density Test results Proof Roll (Contractor's site supervisor shall be in attendance) Thickness check Material Grading results	2 days
7	Seal	Base Approved by PCA	Compaction Density Test results Proof Roll (Contractor's site supervisor shall be in attendance) Thickness check Benkelman Beam Testing	2 days

Adopted by Council: 25 July 2016 P a g e | 298 Trim No: Z15/205922





Annexure D – Deed of Novation

Deed dated

Parties

Wollongong City Council (ABN 63 130 525 939) of 41 Burelli Street, Wollongong in the State of New South Wales

(Council)

Bunnings Properties Pty Ltd (ABN 46 008 557 600) of 11 Shirley Street, Rosehill NSW 2142

(Developer)

[Insert full name of Purchaser] [Insert ABN or ACN] of [insert address of Purchaser] (Purchaser)

Introduction

Α The parties agree to novate the Planning Agreement on the terms of this Deed.

It is agreed

1 Definitions and interpretation

1.1 **Definitions**

In this Deed, unless the contrary intention appears:

- (1)Business Day means a day that is not a Saturday, Sunday or any other day which is a public holiday or a bank holiday in the place where an act is to be performed or a payment is to be made;
- Claim includes a claim, damage, Loss, cost, expense or liability incurred by or to or made or (2) recovered by or against any person, however arising, whether present, unascertained, immediate, future or contingent, and whether made by a party to the Contract or a third person;
- (3)Deed means this document, including any schedule or annexure to it;
- Effective Date means [insert the date on which the Purchaser takes over the rights, (4) obligations and liabilities of the Developer under the contract for the sale of the Sale Land];
- Loss includes any damage, loss, cost, liability (including a present, prospective or contingent (5) liability or expense);
- Planning Agreement means the Planning Agreement dated [insert date] between the (6)Developer and the Council which is governed by Subdivision 2 of Division 6 of Part 4 of the Act, including all amendments or supplements to, or replacements, assignments or novations of it; and
- Sale Land means [insert description of land being sold]. (7)





1.2 Interpretation

- (1) Unless the context otherwise requires, any term used in this Deed which is a defined term in the Planning Agreement has the same meaning in this Deed as in the Planning Agreement.
- (2) Reference to:
 - (a) one gender includes the others;
 - (b) the singular includes the plural and the plural includes the singular;
 - (c) a person includes a body corporate;
 - (d) a party includes the party's executors, administrators, successors and permitted assigns;
 - (e) a thing includes the whole and each part of it separately;
 - (f) a statute, regulation, code or other law or a provision of any of them includes:
 - (i) any amendment or replacement of it; and
 - (ii) another regulation or other statutory instrument made under it, or made under it as amended or replaced; and
 - (g) dollars means Australian dollars unless otherwise stated.
- (3) "Including" and similar expressions are not words of limitation.
- (4) Where a word or expression is given a particular meaning, other parts of speech and grammatical forms of that word or expression have a corresponding meaning.
- (5) Headings and any table of contents or index are for convenience only and do not form part of this Deed or affect its interpretation.
- (6) A provision of this Deed must not be construed to the disadvantage of a party merely because that party was responsible for the preparation of this Deed or the inclusion of the provision in this Deed.
- (7) If an act must be done on a specified day which is not a Business Day, it must be done instead on the next Business Day.

1.3 Parties

- (1) If a party consists of more than 1 person, this Deed binds each of them separately and any 2 or more of them jointly.
- (2) An obligation, representation or warranty in favour of more than 1 person is for the benefit of them separately and jointly.
- (3) A party which is a trustee is bound both personally and in its capacity as a trustee.

2 Novation of the Planning Agreement

2.1 On and from the Effective Date a reference in the Planning Agreement to the Developer must be read as a reference to the Purchaser in respect of rights and obligations under the Planning Agreement arising on and after the Effective Date.





3 Assumption of rights and liabilities by Purchaser

Item 2 - Attachment 2 - Draft Planning Agreement

- 3.1 On and from the Effective Date, the Purchaser:
 - (1) enjoys all the Developer's rights and benefits under the Planning Agreement;
 - (2) assumes all the Developer's obligations under the Planning Agreement arising on or after the Effective date; and
 - assumes all the Developer's liability for Claims under the Planning Agreement arising on or (3)after the Effective date, other than those arising out of acts or omissions of the Developer before the Effective Date.

in so far as the Planning Agreement applies to the Sale Land.

4 Release of the Developer from obligations

- 4.1 On and from the Effective Date:
 - the Council accepts the Purchaser's assumption of the Developer's obligations in accordance (1) with clause 3.1(2) and liability for Claims in accordance with clause 3.1(3);
 - each of the Council and the Developer releases the other from any obligations under the (2) Planning Agreement in connection with the Sale Land arising on or after the Effective date;
 - each of the Council and the Developer releases the other from any other Claims arising on or (3) after the Effective date in connection with the Sale Land arising under the Planning Agreement other than those arising out of acts or omissions of the other before the Effective date.

5 Representations and warranties

- 5 1 Each party represents and warrants to each other party that:
 - It has full power and authority to enter into and perform its obligations under this Deed, (1) whether express or implied;
 - (2) It has taken all necessary action to authorise the execution, delivery and performance of this Deed in accordance with its terms; and
 - this Deed constitutes its legal, valid and binding obligations and is enforceable in accordance (3)with its terms subject to any necessary stamping and registration and to equitable principles and laws generally affecting creditors' rights.

6 Costs and outlays

- 6.1 Each party must pay its own costs and outlays connected with the negotiation, preparation and execution of this Deed.
- 6.2 The Purchaser must pay all stamp duty and other government imposts payable in connection with this Deed.

7 Governing law and jurisdiction

- 7.1 The law of New South Wales governs this Deed.
- The parties submit to the non-exclusive jurisdiction of the courts of New South Wales and of the 7.2 Commonwealth of Australia.





8	[<mark>Limitation o</mark>	<mark>f liability</mark>]
---	-----------------------------	----------------------------

8.1 [insert Purchaser's limitation of liability clause, if applicable]

Executed as a deed and delivered on the date s	hown on the first page.
Signed sealed and delivered for and on behalf Wollongong City Council (ABN 63 130 525 939) by its Authorised Officer in the presence of:	Signature of Authorised Officer
Signature of witness	Name of Authorised Officer (BLOCK LETTERS)
Name of witness (BLOCK LETTERS)	
Address of witness	
Executed by Bunnings Properties Pty Ltd (ABN 46 008 557 600) in accordance with section 127 of the <i>Corporations Act 2001:</i>	
Director/company secretary	Director
Name of director/company secretary (BLOCK LETTERS)	Name of director (BLOCK LETTERS)
Executed by [Insert name of Purchaser] [Insert ACN/ABN] in accordance with section 127 of the <i>Corporations Act 2001:</i>	
Director/company secretary	Director
Name of director/company secretary (BLOCK LETTERS)	Name of director (BLOCK LETTERS)

Item 2 - Attachment 3 - Explanatory Note

DRAFT BUNNINGS KEMBLA GRANGE PLANNING AGREEMENT

EXPLANATORY NOTE

INTRODUCTION 1.

Clause 25E of the Environmental Planning and Assessment Regulation 2000 (the Regulation) requires a planning authority proposing to enter into a voluntary planning agreement under Section 93F of the Environmental Planning and Assessment Act 1979 (the Act) to prepare an explanatory note about the planning agreement.

This explanatory note relates to the Planning Agreement proposed to be entered into by the Parties described below in respect of a public road known as Northcliffe Drive, Kembla Grange.

This explanatory note has been prepared jointly by the Parties as required by Clause 25E of the Regulation.

2. **PARTIES**

The parties to the planning Agreement are:

- Wollongong City Council (a)
- Bunnings Properties Pty Ltd (Applicant & Developer) (b)

DESCRIPTION OF SUBJECT LAND 3.

Bunnings is proposing a development on:

1-3 Canterbury Road, Kembla Grange (Lot 50 DP 879625) 9 Canterbury Road, Kembla Grange (Lot 52 DP 879625) 638 Northcliffe Drive, Kembla Grange (Lot 1 DP 1118629) 642 Northcliffe Drive, Kembla Grange (Lot 2 DP 1118629) 644-650 Northcliffe Drive, Kembla Grange (Lot 51 DP 879625)

The Planning Agreement relates to a section of Northcliffe Avenue (public road reserve) which will provide access to the proposed development - refer to the Concept Plan at Appendix A of the Draft Planning Agreement.

DESCRIPTION OF PROPOSED CHANGE TO ENVIRONMENTAL PLANNING INSTRUMENT/DEVELOPMENT APPLICATION

Bunnings (the Applicant) has lodged a development application for the construction of a hardware and building supplies development at the Site which includes a proposed vehicular access to/from Northcliffe Drive. Council is assessing the Development Application. As the value of the proposed development is greater than \$20 million the application will be determined by the Southern Joint Regional Planning Panel (JRPP).

Wollongong City Council and the NSW Roads and Maritime Service (RMS) have long term regional road network plans to provide access to the northern part of the West Dapto Release Area to the west of the Site, which include a roundabout on Northcliffe Drive near the proposed access to the Bunnings Site

As a consequence of these plans, the Applicant has offered to construct the roundabout, which will be co-funded by Council, so that the proposed Bunnings vehicular access dovetails with the future regional road network.

5. SUMMARY OF OBJECTIVES, NATURE AND EFFECT OF THE DRAFT PLANNING AGREEMENT

The Planning Agreement sets out the delivery responsibilities for the proposed works and the funding agreement between Council and the Applicant in respect of the proposed road works.

6. ASSESSMENT OF THE MERITS OF THE DRAFT PLANNING AGREEMENT

The Planning Purposes Served by the Draft Planning Agreement

In accordance with Section 93F(2) of the Act, the VPA facilitates the following public purposes:-

a. the provision of transport or other infrastructure relating to land.

How the Draft Planning Agreement Promotes the Objects of the Environmental Planning and Assessment Act 1979

The provision of the Contribution Amounts and Road Works pursuant to the Planning Agreement will promote the objects of the Act by delivering a community asset ahead of planned delivery and at a reduced cost. The proposal is consistent with objects 5(a)(ii) the promotion and co-ordination of the orderly and economic use and development of land, and 5(a)(iii) the protection, provision and co-ordination of communication and utility services.

How the Draft Planning Agreement Promotes the Public Interest

The Planning Agreement promotes the public interest by the delivery of planned road works ahead of schedule with costs of construction co-funded by the Developer and Council.

(a) How the Draft Planning Agreement Promotes the Elements of Council's Charter

The VPA promotes elements of Council's Charter by:-

- a. providing infrastructure for the community;
- ensuring the infrastructure provided under the Planning Agreement is transferred to and managed by Council or otherwise subject to the Council's control;
- by providing a means for the private funding of public facilities for the benefit of the wider community; and
- d. providing a means that allows the wider community to make submissions to the Council
 in relation to the agreement.

The planning agreement is consistent with the goal of: "We have sustainable, affordable and accessible transport" indicated in the Community Strategic Plan

(b) Whether the Draft Planning Agreement Conforms with Council's Capital Works Program

The proposal is consistent with Council's Long Term Capital Works Program. The connection of Northcliffe Drive to West Dapto has been planned for over 20 years.



The Impact of the Draft Planning Agreement on the Public or Any Section of the Public Other Matters

The proposed roadworks will close the gap in the medium strip at the intersection of Northcliffe Drive and Phar Lap Avenue, which will prevent right turn movements into/out of Phar Lap Avenue. Vehicles will have to turn at the roundabouts to the east or west, which will increase trip distance, and improve safety.

The Planning Agreement excludes the application of Section 94A of the Act to the development and no further development contributions will be sought to be levied on the development.

Signed and Dated by All Parties	
WOLLONGONG CITY COUNCIL	
Signature of Authorised Person	Signature of Witness
[Print] Name of Authorised Officer	[Print] Name of Witness
Date	Date
BUNNINGS PROPERTIES PTY LTD	
Director/Secretary Signature	Signature of Witness
[Print] Name of Director/Secretary	[Print] Name of Director
Date	-



File: LM-911.05.002 Doc: IC18/8

ITEM 3 ILLAWARRA SHOALHAVEN JOINT ORGANISATION

On 15 December 2017, the NSW Parliament passed the Local Government Amendment (Regional Joint Organisation) Bill 2017.

Wollongong City Council has been invited to nominate to form a Joint Organisation within the Illawarra Shoalhaven region. Following the success of the Illawarra Shoalhaven Joint Organisation pilot, this report seeks Council's agreement to form a Joint Organisation with Shellharbour City Council, Kiama Municipal Council and Shoalhaven City Council and advise the Minister for Local Government accordingly by 28 February 2018.

RECOMMENDATION

In accordance with Part 7 of Chapter 12 of the *Local Government Act 1993 (Act)* Wollongong City Council (Council) resolves:

- 1 That the Council inform the Minister for Local Government (Minister) of the Council's endorsement of the Minister recommending to the Governor the establishment of a Joint Organisation (Joint Organisation) in accordance with this resolution.
- 2 To approve the inclusion of Council's area in the Joint Organisation's area.
- That the Joint Organisation be established to cover the Council's area and any one or more of the following council areas: Shellharbour City Council, Kiama Municipal Council and Shoalhaven City Council.
- 4 That, on the expiry of 28 days from the making of this resolution, the General Manager provide the Minister:
 - a With a copy of this resolution, including the date on which Council made this resolution; and
 - b Inform the Minister that this resolution has not been rescinded for the purpose of the Minister issuing a certificate under section 400P of the Act.

REPORT AUTHORISATIONS

Report of: Clare Phelan, Manager Governance and Information (Acting)

Authorised by: David Farmer, General Manager

ATTACHMENTS

- 1 ISJO Charter
- 2 ISJO Constitution
- 3 ISJO Strategic Plan

BACKGROUND

In 2014, the NSW Government announced the establishment of Joint Organisations as part of the *Fit for the Future* reform program, to strengthen the way councils and state agencies collaborate, plan, set priorities and deliver projects in regional NSW.

The Illawarra Shoalhaven Joint Organisation (ISJO) was one of the five regions in which Joint Organisations were piloted in 2015 as a new way for local councils to work together in collaboration with the NSW Government. The ISJO consists of four members, including Wollongong City Council, Shellharbour City Council, Kiama Municipal Council and Shoalhaven City Council.

The ISJO's vision for the region is: "A confident, vibrant, safe and productive region that optimises the potential of its people and environment now and into the future". The functions of ISJO include: regional strategic planning, inter-governmental collaboration, regional leadership and advocacy, enhancing strategic capacity and service delivery.



ISJO has been a very successful model and has achieved a number of important activities and projects, including:

- The Illawarra Youth Employment Strategy (YES), now coordinated through an officer at the Illawarra Business Chamber;
- The Southern NSW Marine Strategy, in conjunction with the NSW Government, Bega Valley Shire Council and Eurobodalla Shire Council (still underway);
- 2017-2021 Regional Waste Strategy and Coordinator for Southern Region Waste Group, in conjunction with Wingecarribee Shire Council;
- Regional Illegal Dumping Program (RID), in conjunction with Wingecarribee Shire Council, Wollondilly Shire Council, Bega Valley Shire Council and Eurobodalla Shire Council;
- The Regional Procurement Program; and
- The Illawarra District Weeds Authority.

PROPOSAL

On 15 December 2017, the NSW Parliament passed the Local Government Amendment (Regional Joint Organisation) Bill 2017. The aim of the Joint Organisation (JO) model is to create a forum for stakeholders to work together on regional issues, including boosting economies, creating jobs and improving transport, community infrastructure and services. JOs are voluntary to join and are to be developed in consultation with neighbouring councils.

A JO is established as a new entity under the Local Government Act 1993 comprising member councils in regional NSW. The previous Pilot Joint Organisations (and regional organisations of councils) were not recognised under the Act. The Act now sets out the principal functions of JOs; the composition and role of the JO Board; exercise of functions; the role of the Executive Officer; and a range of other provisions.

Each JO is required to have at least 3 member councils and align with one of the State's strategic planning regions.

Wollongong City Council has been invited to nominate to form a JO within the Illawarra Shoalhaven region. Following the success of the Illawarra Shoalhaven Joint Organisation pilot, this report seeks Council's agreement to form a JO with Shellharbour City Council, Kiama Municipal Council, and Shoalhaven City Council.

The Office of Local Government has provided guidance to councils, setting out the required process to be followed in order to successfully nominate to a JO. Council must resolve to inform the Minister of – its endorsement of the Minister recommending to the Governor the establishment of a Joint Organisation; the area to be covered by the Joint Organisation; and its approval of inclusion in said area.

The Minister for Local Government needs to be informed of Council's decision by 28 February 2018, with a copy of the resolution to be provided. The legislation provides a fixed 28-day period for councils to rescind such a resolution. Therefore, after the expiry of a period of 28 days, the General Manager must inform the Minister in writing that Council's resolution has not been rescinded.

The recommendation in this report reflects these requirements.

Once the resolutions have been made by councils the Minister must wait at least 28 days before recommending the Joint Organisation to the Governor. Each JO will then be established by proclamation, which operates to constitute the joint organisation as a body corporate. A joint organisation as so constituted, has the legal capacity and powers of an individual, both in and outside the State. The NSW Government will request the Commonwealth to endorse each Joint Organisation as a non-national system employer to ensure that any staff of a Joint Organisation, with the exception of the Executive Officer, are employed under the State local government award.



The Government has announced \$3.3 million in seed funding to support establishment of Joint Organisations. The Office of Local Government (OLG) has advised that funding will be based on the number of councils that choose to form a Joint Organisation, with maximum funding provided to regions where all councils in a region choose to be members of the new regional body. All Joint Organisations, whether they were pilot regions or not, will be provided with seed funding. Funding allocations will be finalised in March 2018.

The JO's will commence under the Act in July 2018. By this time, ISJO's structure and governance framework will need to be reviewed and the transition of operations to the new legislation undertaken.

A workshop was held with the ISJO Board and General Managers on 1 December 2017 to review and refresh the ISJO Strategic Plan (see attached). The ISJO Charter and Constitution which will be subject to review are also attached for information.

CONSULTATION AND COMMUNICATION

ISJO Board and General Managers (Wollongong City Council, Shellharbour City Council, Kiama Municipal Council and Shoalhaven City Council).

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal "We are a connected and engaged community". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
4.4.1 Positive leadership and governance, values and cultures are built upon	4.4.1.2 Ensure appropriate strategies and systems are in place, monitored and reviewed	Participate in the Illawarra Joint Organisation Pilot.

FINANCIAL IMPLICATIONS

The NSW Government has announced \$3.3 million in seed funding to support establishment of Joint Organisations. The Office of Local Government (OLG) has advised that funding will be based on the number of councils that choose to form a Joint Organisation, with maximum funding provided to regions where all councils in a region choose to be members of the new regional body. All Joint Organisations, whether they were pilot regions or not, will be provided with seed funding. Funding allocations will be finalised in March 2018.

CONCLUSION

This report is seeking the endorsement of Council to enter into a Joint Organisation with Shellharbour City Council, Kiama Municipal Council and Shoalhaven City Council and to notify the Minister for Local Government accordingly.







ILLAWARRA PILOT JOINT ORGANISATION - CHARTER

INTRODUCTION

Joint Organisations (JOs) provide a new way for local councils and the NSW government to work together to deliver things that matter the most to regional communities.

They represent a commitment to collaborate in the long term to develop and support a shared vision for the region.

It is anticipated that JOs will be enabled through changes to the Local Government Act and other relevant legislation in 2016. Prior to legislative change, a pilot program with five regional JOs is operating to test and refine the JO model. The Illawarra Pilot JO (IPJO) is one of the five pilots.

The operation of the IPJO is guided by this Charter, which may be further developed by the organisation during the pilot project.

The Charter for the IPJO is based on the conversations which occurred, and the pilot Model which was developed collaboratively, during the Joint Organisations Pilot Central Workshop held on 17 November 2014 and the Illawarra Workshop held on 1 December 2014.

OBJECTIVES AND FUNCTIONS

- 1. The core functions of the IPJO will be:
 - Regional strategic planning.
 - Inter-governmental collaboration.
 - Regional leadership and advocacy.
- 2. The optional functions for the IPJO will include:
 - Creating or enhancing regional strategic capacity.
 - Regional service delivery.

RELATIONSHIPS AND BOUNDARIES

- 3. The boundaries of the IPJO will provide the strategic capacity to engage effectively, reflect a strong community of interest, and not adversely impact other councils.
- 4. The following councils will be members of the IPJO:
 - Wollongong
 - Shellharbour
 - Kiama
 - Shoalhaven
- 5. The boundary of the councils above forms the boundary of the IPJO.
- 6. The IPJO membership and boundary will not alter without strong justification.



ІРЈО

ILLAWARRA PILOT JOINT ORGANISATION - CHARTER

GOVERNING BODY

- 7. Minimum governance standards will be maintained by the IPJO, including regular meetings.
- Each member council will have two representatives on the IPJO, one being the Mayor of that council or Mayoral delegate; the second position will be determined by each Council.
- If a Council decides the second position will be an officer, it will be the General Manager or Acting General Manager.
- 10. Alternates will be appointed by resolution of each member Council of the IPJO.
- 11. There will be no sitting fees paid to representatives during the pilot.
- 12. The IPJO will elect its Chair for the duration of the pilot.
- 13. Representatives are authorised by their Councils to make decisions in respect of the JO's governance and the discharge of its functions.
- 14. Representatives will act in the interests of the region, rather than representing an individual local government area.
- 15. Each Council will have one vote for the election of the IPJO Chair, being the Mayor or Mayoral delegate. On all other matters each Council will have two votes. Where only one delegate of a Council is present at a meeting that delegate will have a proxy vote for the absent delegate.
- 16. The IPJO will appoint or secure access to a suitably skilled Executive Officer.

RESOURCING

- 17. Employees of the IPJO will be direct employees under the Local Government Award.
- 18. The NSW Government will contribute \$300,000 to the operations of each pilot JO, including Illawarra. An audited statement acquitting these funds will be provided to the Office of Local Government.
- Member councils will make equal contributions to the IPJO for operating costs associated with its core functions.
- 20. The IPJO will determine during the pilot process, and possibly on a case by case basis, the way in which other regional funding and grants will be managed.
- 21. The host council shall provide resources and support on a fee-for-service basis.

PLANNING AND COLLABORATING

- 22. The IPJO will finalise a Work Plan in the first quarter of the pilot process to guide its operations.
- 23. The IPJO will prepare a succinct Statement of Regional Strategic Priorities during the first quarter of the pilot project, including a shared Regional Vision.





ILLAWARRA PILOT JOINT ORGANISATION - CHARTER

- 24. The Statement of Regional Strategic Priorities will draw from the Community Strategic Plans of member councils, as well as NSW Government regional plans and strategies, including the Regional Action Plan and the Regional Growth and Infrastructure Plans, and any other documents relevant to the region.
- 25. All JO participants will demonstrate a strong commitment to acting with goodwill in the spirit of friendship, respect and trust, operating with transparency and openness between councils and others.
- The DPC Regional Coordinator and pilot JO EO and Chair will attend and engage actively in each other's meetings in an ex officio capacity.
- 27. Appropriately senior representatives of other councils, NSW Government agencies, Australian Government agencies, and other partners and key stakeholders will be invited to attend and engage in relevant meetings.

OTHER ISSUES

- 28. The IPJO will not impose significant red tape or cost.
- 29. The IPJO will not be a fourth tier of government.
- 30. Transition planning from Southern Councils Group to the IPJO needs to support a 30 June 2015 cessation of the Southern Councils Group. The Southern Councils Group will continue as a Pilot Joint Organisation until JOs are enabled through changes to the Local Government Act and other relevant legislation.



1. CONSTITUTION

1.1 This is the constitution of Illawarra Shoalhaven Joint Organisation (the Joint Organisation).

2. BACKGROUND

- 2.1 The Joint Organisation is a Voluntary Regional Organisation of Councils referred to in section 355 of the Local Government Act 1993 (LGA 1993).
- 2.2 The Joint Organisation was first established in 1975 as a voluntary grouping of councils called the Illawarra Region of Councils.
- 2.3 More recently the Joint Organisation has been known as the Southern Councils Group.
- 2.4 The constitution of the Joint Organisation was most recently amended on 21 July 2017.
- 2.5 Effective from 21 July 2017 the name of the Pilot Joint Organisation is changed to Illawarra Shoalhaven Joint Organisation.
- 2.6 Effective from 21 July 2017 the Illawarra Shoalhaven Joint Organisation will conduct itself in accordance with the provisions of this constitution.

3. OBJECTIVES OF THE JOINT ORGANISATION

3.1 Regional Strategic Planning

3.2 To provide a forum for better regional planning, undertaken consistently and collaboratively with State Government.

3.3 Intergovernmental Collaboration

- (a) To interact strongly with other spheres of government and other regional groupings
- (b) To provide for the exchange and recognition of information and ideas amongst member Councils and other agencies.

3.4 Regional Leadership & Advocacy

To identify and address emerging issues of regional significance where benefits may be gained for local communities.

3.5 Regional Strategic Capacity

To place emphasis on the design and enhancement of mutually beneficial policies, processes and procedures across member Councils and in collaboration with other regional entities and agencies where appropriate.

3.6 Regional Service Delivery

To meet major identified regional needs with agreed regional local government-led programs and projects.

3.7 Efficient Joint Organisation

To provide a cost-effective results-driven service for member Councils.

 $sou-0014-0002 \backslash 2698597. doc\ v5\ 21\ July\ 2017$

Item 3 - Attachment 2 - ISJO Constitution

4. MEMBERS

- 4.1 The members of the Joint Organisation are the Councils constituted under the LGA 1993 holding membership of the Joint Organisation from time to time.
- 4.2 The members of the Joint Organisation at the adoption of this Constitution are:

The Council of the Municipality of Kiama

The Council of the City of Shellharbour

The Council of the City of Shoalhaven

The Council of the City of Wollongong

5. **REPRESENTATION**

- 5.1 Each member Council will be represented by two (2) delegates entitled to vote.
- 5.2 The delegates of each member Council will be the Mayor (or Mayoral delegate) of the member Council and another nominated representative of the member Council or that nominated representative's alternate delegate.
- 5.3 The nominated representative of a member Council and any nominated alternate representative delegate must be a Councillor, or the General Manager or the Acting General Manager of the Council which they represent.
- 5.4 The office of a delegate becomes vacant if the delegate
 - (a) ceases to hold office as a member of the member Council of the Joint Organisation;
 - (b) resigns by letter addressed to the Council of which a delegate is a member or is employed;
 - is absent from three (3) consecutive meetings of the Joint Organisation without having obtained leave of absence from the Joint Organisation;
 - (d) is removed by resolution of the member Council which the delegate represents; or
 - (e) is the delegate of a council which ceases to be a member of the Joint Organisation.
- 5.5 Where the office of a delegate becomes vacant (other than by operation of clause 5.4(e)) the member Council concerned at its first convenient meeting held after the vacancy occurs must appoint a replacement delegate.
- Where a delegate of a member Council is unable to attend a meeting of the Joint Organisation, the Council may be represented by the alternate delegate or another nominated representative of the Council appointed for the purpose. That representative may, during the absence of the delegate of the Council, act in the delegate's place and will be subject to vacation of office under clause 5.4.
- 5.7 Although each member Council is entitled to have two (2) delegates each member Council only has one (1) vote at a meeting of the Joint Organisation.

6. OFFICIALS OF THE JOINT ORGANISATION

- 6.1 The officials of the Joint Organisation will be the Chairman and Deputy Chairman.
- 6.2 The officials will be elected from among the elected representative delegates every second year at the Annual General Meeting.
- 6.3 An election must be held at a Special General Meeting to fill any casual vacancy occurring among the officials. The official elected to fill a casual vacancy will hold office until the next election of officials.
- 6.4 Only the Mayor or Mayoral delegate of each Member Council may vote in the election of the officials.

STAFF

- 7.1 The Joint Organisation will have an Executive Officer and other staff that the Joint Organisation may appoint.
- 7.2 The staff will be taken to be employees of at least one member Council as determined by the Joint Organisation.
- 7.3 The continued employment of staff of the Joint Organisation is conditional on available funding sufficient to support their employment.

8. THE TREASURER

8.1 The Treasurer of the Joint Organisation will be the General Manager of the Managing Council.

9. ADVISORY SUB-COMMITTEES

9.1 The Joint Organisation may, from time to time, appoint sub-committees in connection with any work, activity or object of the Joint Organisation.

10. **MEETINGS**

- 10.1 The delegates must hold a meeting of the Joint Organisation at least every three (3) months. The Chairman may convene a special meeting of the Joint Organisation.
- 10.2 The place and times for meetings will be determined by the Joint Organisation from time to time.
- 10.3 The Executive Officer must notify each Member Council and delegates of meetings not less than seven (7) days before each meeting and the Executive Officer must circulate the nature of the business to be dealt with at the meeting to the delegates at least four (4) days prior to the meeting.
- 10.4 The Executive Officer must forward the minutes of each meeting to each member and delegate not more than one (1) fortnight after the meeting.
- 10.5 At every meeting of the Joint Organisation the Chairman will preside, but if the Chairman is not present, or is unwilling to act, the Deputy Chairman will preside, or if the Deputy Chairman is not

- present or is unwilling to act, the member Councils must elect a chairman to preside at that meeting, subject to a quorum being present.
- 10.6 The Department of Premier and Cabinet or the Secretary's representative and the Executive Officer of the Joint Organisation will attend and contribute at each meeting of the Joint Organisation, but may not vote.

11. QUORUM

11.1 A quorum consists of a majority of member Councils. A delegate cannot be represented by a proxy, but may be represented by an alternate delegate or nominated representative appointed under clause 5.6.

12. BUSINESS OF MEETINGS

- 12.1 The business conducted at a meeting of the Joint Organisation will consist of -
 - (a) matters of which notice has been given by a member Council or delegate;
 - (b) matters which the Chairman thinks fit to submit to the meeting;
 - (c) consideration of reports by any staff of the Joint Organisation;
 - (d) consideration of any recommendation or report by any sub-committee;
 - (e) matters of which verbal late notice is given by a member Council or delegate at the commencement of business of the meeting, but only with the agreement of a majority of the member Councils and only if a matter of urgency;
 - (f) matters of which written late notice has been given by the Secretary no later than close of business on the day preceding the meeting only, but only with agreement of a majority of the member Councils and only if a matter of urgency; and
 - (g) otherwise as the Joint Organisation decides.
- 12.2 Meetings must be conducted in accordance with the provisions of the Local Government Act 1993 where these do not conflict with this Constitution.
- 12.3 The Chairman will have both a deliberative and, in the event of an equality of votes, a casting vote at meetings.
- 12.4 Any member Council has the right to withdraw from any particular issue on which the other member Councils wish to proceed.

13. POWERS OF THE JOINT ORGANISATION

- 13.1 The Joint Organisation will, for the mutual benefit of the areas of the member Councils, have power to
 - make submissions to the Australian and New South Wales Governments or any department of those Governments in respect of the areas of the member Councils;
 - (b) carry out the objects of the Joint Organisation, and
 - (c) receive funds in respect of -

- (i) Secretariat of the Joint Organisation;
- (ii) Carrying out of the projects or studies agreed by the Joint Organisation.
- 13.2 The Joint Organisation will at its meetings determine the control, regulation and method of exercise of these powers.
- Nothing in clause 13.1 will affect the right of a member Council to act in its own right on these 13.3

14. **OFFICE**

The office of the Joint Organisation will be located at a place appointed by the Joint Organisation from time to time

FINANCIAL YEAR 15.

The Joint Organisation's financial year will commence on 1 July in each year and terminate on 30 June of the following year.

16. **FINANCE**

- 16.1 Before the end of each financial year the Joint Organisation must prepare estimates of
 - the amount of proposed expenditure by the Joint Organisation for Secretariat and (a) associated costs;
 - (b) the amount in hand available for the expenditure; and
 - any additional amount required to be raised to meet the expenditure. (c)
- 16.2 If the Joint Organisation becomes likely to incur any extraordinary expenditure not covered by the estimates, the Joint Organisation must prepare a statement showing
 - (a) the amount and nature of the extraordinary expenditure;
 - (b) the amount in hand available to meet the expenditure after allowing for estimated ordinary expenditure for the balance of the year; and
 - (c) any additional amount required to be raised to meet the extraordinary expenditure.
- 16.3 The Joint Organisation must levy each Member Council for its proportion of any proposed expenditure referred to in clauses 16.1 and 16.2 in equal amounts.
- Normally no financial policy will be implemented by the Joint Organisation without the consent of 16.4 all Member Councils but non-contributing Councils will be excluded from any benefits which may accrue to contributing Councils.
- The Joint Organisation may also levy member Councils their agreed contributions to project and 16.5 programs funds to achieve the objectives of clause 3.5
- The Joint Organisation must pay all moneys received by it into a bank account held in the name 16.6 of the Managing Council and it must use those moneys for the purpose of and subject to the terms of this Constitution. This clause is complied with if the Managing Council pays these funds

- into its general account provided they are posted into a separate ledger clearly identified in the name of the Joint Organisation.
- 16.7 The Joint Organisation may from time to time determine how and by whom its bank account is operated.
- 16.8 The Joint Organisation must keep its accounts according to the same principles as the accounts of a member Council and in books and form as are approved by the auditors of the Joint Organisation.
- 16.9 The Managing Council must appoint an auditor who must annually audit the accounts of the Joint Organisation.
- 16.10 The Treasurer must present the audited accounts to a meeting of the Joint Organisation within four (4) months after the end of the Local Government year.

17. ANNUAL REPORT[KD1]

The Secretary must submit an annual report to each of the member Councils with the notice of the Annual General Meeting.

CO-OPERATION[KD2] 18.

- For the purpose of performing any powers, duties or functions, the Joint Organisation may use the services of an employee of a member Council if prior approval of that Council is obtained.
- The member Councils must deal with any matters referred to them by the Joint Organisation for 18.2 decision as far as practicable within two (2) months of the reference and must make a decision on the reference and communicate that decision to the Joint Organisation as soon as possible.

19. WITHDRAWAL FROM MEMBERSHIP [KD3]

- A member Council may withdraw from membership of the Joint Organisation by giving twelve (12) months written notice to the Joint Organisation.
- 19.2 The notice of withdrawal from membership will take effect at the commencement of the next meeting of the Joint Organisation held after the expiration of the notice.
- 19.3 The member Councils may by unanimous agreement waive or reduce the period of notice to be given under clause 19.1.
- 19.4 After a Council has withdrawn from membership of the Joint Organisation, this constitution will continue in force among the remaining member Councils of the Joint Organisation.

20. **ALTERATIONS TO CONSTITUTION**[KD4]

This constitution may only be altered or amended by the unanimous agreement of the member 20.1 Councils.

21. TERMINATION OF THE JOINT ORGANISATION[KD5]

Upon the termination of the Joint Organisation, the debts and liabilities of the Joint Organisation must be discharged out of the assets of the Joint Organisation.



21.2 Normally any surplus assets of the Joint Organisation after discharge of its debts and liabilities will be distributed (in cash or in kind) equally between those Councils which were member Councils immediately before the termination of the Joint Organisation, but surplus assets may be distributed among those member Councils in any other manner determined by unanimous agreement at the final meeting of the Joint Organisation.

22. APPOINTMENT AND DUTIES OF MANAGING COUNCIL

- 22.1 Subject to the provisions of clause 22.4 and clause 22.5 the Council of the Municipality of Kiama is appointed the Managing Council of the Joint Organisation.
- 22.2 Subject to the timely provision of funds by the Member Councils, the Managing Council must, either itself or through agents or employees it engages, do all things necessary or advisable for the efficient and economic administration of the Joint Organisation.
- 22.3 The Managing Council must carry out its duties and obligations in accordance with:
 - (a) this constitution;
 - (b) good management methods and the requirements of the LGA 1993; and
 - (c) instructions it receives by resolutions of the Joint Organisation.
- 22.4 The Managing Council can retire from the position of Managing Council on the expiration of 6 months' notice in writing to the other member Councils.
- 22.5 The Managing Council can be removed from the position of Managing Council on the expiration of 6 months' notice from all of the other member Councils.
- 22.6 If at the expiration of the notice under clause 22.4 or clause 22.5 the member Councils have not agreed to the appointment of a new Managing Council then the position of Managing Council will be decided by lot except that the member Council which has retired or been removed from the position may not be a candidate for the position of the new Managing Council.

23. POWER OF MANAGING COUNCIL

- 23.1 The Managing Council is to have possession and control but not ownership of the Joint Organisation's assets and have charge of, and responsibility for, the administration of the Joint Organisation.
- 23.2 The Managing Council is to have the powers, functions and authority from the member Councils as are necessary to enable the Managing Council to carry out its duties and obligations set out in clause 22 including but not limited to the power of:
 - (a) repair and maintain the Joint Organisation's assets;
 - (b) employ, engage, appoint and contract with economists, solicitors, barristers and other professional or technical advisers, consultants, contractors and experts to do all things usual or desirable to be done for the purpose of exercising the Joint Organisation's functions;
 - (c) negotiate and enter into (and renew, extend or vary) agreements for the supply (by purchase or lease) of materials, equipment and services in connection with those functions:
 - (d) dispose of the Joint Organisation's assets whether by sale or otherwise in accordance with prior authorisation from the Joint Organisation;

- (e) in the case of an emergency or accident, take action as is necessary for the protection of life and property; and
- (f) do any other act or thing which may be required of the Managing Council by this constitution or which the Joint Organisation may by resolution authorise or require.
- 23.3 The grant of powers, functions and authority under clause 22.2 is not revocable or variable except on the unanimous resolution of the member Councils.
- 23.4 Except as authorised or required by the member Councils the Managing Council must not encumber any of the Joint Organisation's assets.

24. PROGRESS REPORTS

- 24.1 The Managing Council must deliver to the member Councils, within 25 days following the end of each March, June, September and December, a progress report:
 - (a) outlining the work performed on behalf of the Joint Organisation during the period of 3 months to the end of those respective months;
 - (b) summarising all expenses incurred or accrued during that period;
 - comparing that work and those expenses with estimates made in any relevant annual program; and
 - (d) outlining the plans for the further work to be performed in the current Financial Year.
- 24.2 Each progress report must contain the detail necessary for an adequate analysis and be prepared in such a way as to meet the reasonable requirements of the member Councils.
- 24.3 If requested by the Joint Organisation, the Managing Council must prepare and submit the following reports on a quarterly basis which must include but not be limited to:
 - (a) industrial relations;
 - (b) Government affairs;
 - (c) staff organisation;
 - (d) all agreements which the Managing Council has entered into; and
 - (e) matters relating to the Joint Organisation which have been reasonably requested by a member Council.
- 24.4 In addition to the reports referred to in clauses 24.1 and 24.3, the Managing Council must provide to the Joint Organisation all statements and other information relating to the Joint Organisation as the Joint Organisation may reasonably request from time to time.

25. RECORDS AND ACCOUNTS

- 25.1 The Managing Council must:
 - (a) keep or cause to be kept comprehensive, true and accurate records and accounts of the Joint Organisation and of the Managing Council's performance of its duties, and of all property belonging to, and of all transactions entered into by, or on behalf of, the

- member Councils in connection with the Joint Organisation (so far as known to the Managing Council) and of the costs and expenses of those transactions;
- (b) maintain proper systems of internal control to enable the Joint Organisation's assets to be adequately controlled and accounted for and to provide reasonable control of transactions;
- (c) ensure that all invoices and financial settlements, financial reports and billings rendered by the Manger to the member Councils reflect properly the facts of all activities and transactions handled for the account of the member Councils; and
- (d) keep all records and accounts in accordance with generally accepted accounting principles in Australia, consistently applied, and in particular for Local Government.
- Upon not less than 14 days' prior notice to the Managing Council, a Council can, by its servants or agents and at its sole cost, inspect and obtain copies of all documents, records and accounts under the control of the Managing Council relating to the Joint Organisation.
- 25.3 The Managing Council must furnish to the member Councils within 2 months after the end of each Financial Year, a statement of account audited by the Managing Council's auditor, reflecting for that Financial Year:
 - all transactions in connection with the Joint Organisation during the Financial Year, as (a) disclosed by the records and accounts kept or caused to be kept by the Managing Council under clause 25.1;
 - (b) all expenses incurred or accrued by the Joint Organisation during the Financial Year;
 - all the Joint Organisation assets in the custody or control of the Managing Council as at (c) the end of the Financial Year.

REMUNERATION AND EXPENESE OF MANAGING COUNCIL 26

- Except as provided for in clause 26.2, the Managing Council is not entitled to claim or receive any remuneration, management or other fee or other profit for, or in connection with, the administration of the Joint Organisation and its services, and the payments referred to in clauses 26.2 and 26.3 constitute full and complete compensation for the Managing Council's services under this constitution.
- 26.2 The member Councils must pay to the Managing Council for the Managing Council's services a fee as determined by the Joint Organisation from time to time.
- 26.3 The member Councils must pay or reimburse the Managing Council for all expenses incurred on behalf of the Joint Organisation.

LIABILITY AND INDEMNITY 27.

The Managing Council is not responsible to the member Councils for any liability, loss, harm, damage, cost or expense (including legal fees) that the member Councils may suffer, incur or sustain and arising out of the activities of the Managing Council in performing its duties or obligations under this constitution, except to the extent that the liability loss, harm, damage, cost or expense arises directly from the Managing Council's wilful misconduct or bad faith.

- 27.2 The member Council's irrevocably and unconditionally indemnify and undertake to keep indemnified and saved harmless the Managing Council from and against any and all liability, loss, harm, damage, cost or expense (including legal fees) that the Managing Council suffers, incurs or sustains as a result of any suit, claim or demand brought or made against the Managing Council arising out of the activities of the Managing Council in performing its duties or obligations under this constitution, except to the extent that such liability, loss, harm, damage, cost or expense arises from the Managing Council's wilful misconduct or bad faith.
- 27.3 In this clause 27 references to the "Managing Council" include references to the servants, employees and sub-contractors of the Managing Council.
- 27.4 The Managing Council must effect professional indemnity insurance for an amount not less than the amount specified by resolution of the member Councils from time to time and the premiums for that insurance are to be part of the Joint Organisation's expenses.

28. NOTICES

- 28.1 Any notice, request, consent or other communication ("Communication") to be given to a member Council under this constitution must be in writing addressed to the address of that Council's administration centre appearing on its website or to any other address for that Council as is notified in writing by that Council to the Managing Council and to the other member Councils.
- 28.2 Each Communication must be delivered by hand or pre-paid post, or sent by facsimile or by email provided that a Communication sent by facsimile or by email is immediately confirmed in hard copy by sending to the Council by hand delivery or pre-paid post
- 28.3 A Communication is taken to be received:
 - (a) if hand delivered, on the next following business day;
 - (b) if posted, on the second business day after posting;
 - if sent by facsimile, on the next following business day unless the receiving Council has requested re-transmission before the end of that business day;
 - (d) if sent by email, on the next following business day, unless it is not received; and
 - (e) at the earliest time it can be taken to be received, if it is served more than once.

29. GOVERNING LAW AND INTERPRETATION

- 29.1 This constitution is to be governed by and construed in accordance with the law for the time being in force in New South Wales and the member Councils, by becoming members of the Joint Organisation, are taken to have submitted to the non-exclusive jurisdiction of the courts of that State.
- 29.2 In this constitution, except to the extent that the context otherwise requires:
 - (a) any term defined in a clause of this constitution has the meaning there defined;
 - reference to any legislation or any provision of any legislation includes any modification or re-enactment of the legislation and statutory instruments and regulations issued under the legislation;

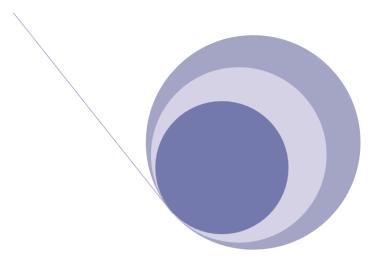
- words denoting the singular include the plural and vice versa; (c)
- (d) words denoting individuals or persons include bodies corporate and trusts and vice
- headings are for convenience only and do not effect interpretation; (e)
- (f) reference to a clause or sub-clause is a reference to a clause or a sub-clause in this constitution;
- (g) reference to any document or agreement includes reference to that document or agreement as amended, novated, supplemented, varied or replaced from time to time;
- words denoting any gender include all genders; (h)
- (i) where any word or phrase is given a definite meaning in this constitution any part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning:
- where, by virtue of the provisions of the constitution, the day on or by which any thing is (j) to be done is a Saturday, a Sunday or a public holiday in the place in which that thing is to be done, then that thing must be done on the next succeeding day which is not a Saturday, a Sunday or a public holiday.

30. **DISPUTE RESOLUTION**

- If a dispute arises out of or relates to this constitution, including any dispute as to breach or termination of this constitution or as to any claim in tort, in equity or under any statute ("Dispute"), a member Council cannot commence any court or arbitration proceedings relating to the Dispute unless that member Council has complied with the following sub-clauses, except where that member Council seeks urgent interlocutory relief.
- 30.2 A member Council claiming that a Dispute has arisen must give notice to the other member Councils specifying the nature of the Dispute.
- 30.3 On receipt of that notice by those other member Councils, the member Councils must endeavour in good faith to resolve the Dispute expeditiously using informal dispute resolution techniques such as mediation, expert evaluation or determination or similar techniques agreed by them.
- 30.4 If the member Councils do not agree within 7 days of receipt of the notice or such further period as agreed in writing by them, as to:
 - (a) the dispute resolution technique and procedures to be adopted;
 - (b) the timetable for all steps in those procedures; and
 - the selection and compensation of the independent person required for that technique; (c)

the member Councils must mediate the Dispute in accordance with the Mediation Rules of the Law Society of New South Wales and must request the President of the Law Society of New South Wales or the President's nominee to select the mediator and determine the mediator's remuneration.





Amendments to Constitution

Board Meeting Date	Item/ Resolution	Version	
5 June 2015	Item 3.3 Resolution: 34	2	Southern Councils Group to become a Pilot Joint Organisation under NSW Government trial – to be known as Illawarra Pilot Joint Organisation.
5 May 2017	Item 4.2 Resolution: 35	4	Item: 16.10 Auditing of financial statements to be within four (4) months after the end of the financial year.
21 July 2017	Item 2.1 Resolution: 43	5	Amend IPJO name to Illawarra Shoalhaven Joint Organisation.



Illawarra Shoalhaven Joint Organisation

Organisational Strategic Plan 2015-18

What is the Illawarra Shoalhaven Joint Organisation?

The Illawarra Shoalhaven was one of five regions in which joint organisations (JOs) were piloted in 2015 as a new way for local councils to work together in collaboration with the NSW Government. ISJO continues to operate under the agreed model.

The Illawarra Shoalhaven Joint Organisation (ISJO) consists of four members:

- · Kiama Municipal Council
- · Shellharbour City Council
- · Shoalhaven City Council
- · Wollongong City Council.

The councils have a combined area of some 5,800 square kilometres and a population of approximately 370,000 people.

What is the timing for this plan?

This plan covers three phases:

- Pilot: The piloting of JOs commenced in November 2014 and is expected to be completed in December 2015. During the pilot phase the establishment of the IPJO and provision of input to the legislative model will be critical activities.
- Enablement: There is widespread consensus across the local government sector that JOs will need to be enabled in legislation. The NSW Government is aiming to having legislation enacted in order to roll out JOs across the state. The ISJO will continue to operate between the end of the pilot phase and the enablement of JOs in legislation.
- Post enablement: The ISJO structures and governance frameworks will need to be reviewed at enablement.

What was the process for preparing this plan?

The process included review of a wide range of relevant documents, phone interviews with each Council and discussion at workshops with the General Managers and the IPJO. ISJO has continued to review and update this document to keep it contemporary.

When will this plan be reviewed?

The Organisational Strategic Plan will be reviewed regularly. In particular, it will be important for the plan to be reviewed at the time JOs are enable through legislation.

Vision for the Illawarra Shoalhaven

The ISJO's vision for the region is:

A confident, vibrant and productive region that maximises it's potential and looks after its people and environment

Mission statement

The ISJO will:

Lead, advocate and collaborate to maximise the region's potential and serve the interests of regional communities

Functions

Three core functions and two optional functions were piloted by JOs. The functions of the ISJO are:

- regional strategic planning, including high level planning across the quadruple bottom line
- inter-governmental collaboration, working closely with the NSW Government as well as the Australian Government and other councils and JOs
- regional leadership and advocacy, as the preeminent regional voice for councils and communities
- enhancing regional strategic capacity, to support member councils to deliver services to their communities
- regional service delivery, to provide services directly to communities within the region.

Operating principles

The ISJO will be:

- Cohesive: speaking with one voice on regional issues and valuing equal representation
- Respectful: of local autonomy on local issues
- Collaborative: by working across member councils, communities, governments, and with a wide range of partners in the spirit of friendship and trust
- Aligned: with consistency between member councils and NSW Government on regional strategies and policies
- Efficient: by avoiding duplication and using resources within and available to member Councils wherever possible
- Evidenced based: when introducing or transitioning programs and shared services
- Transparent: in its operations between member councils and other partners

Themes and actions

This plan builds on the Statement of Regional Strategic Priorities which was prepared early in the pilot process to help guide the establishment of the ISJO. The plan contains five theme areas, linked to high level actions. The key partners and regional documents are also recognised, listed in alphabetical order. In addition to the regional documents noted below, there are also a large number of relevant documents prepared by each member Council, including Community Strategic Plans, Local Environmental Plans and a wide range of strategies, plans and policies. The phases referenced in the plan relate to the three phases described in the introductory section above.

Economy and education

This theme includes tourism, primary industries and tertiary and vocational education

Key partners:

- Illawarra and Far South Coast Regional Development Authorities
- Illawarra District Weeds Authority
- NSW Department of Planning and Environment
- NSW Department Primary Industries
 NSW Trade and Investment
- NSW Trade and Invel
 Property Council
- . Urban Development Institute of Australia (UDIA)

- South East Local Land Services
- TAFE NSW
- University of Wollongong
- Key regional documents:
- Economic Development Review Report
 Illawarra Regional Foods Strategy
- Illawarra Regional Foods Strateg
 Illawarra Regional Growth Plan
- Transitioning Illawarra
- Illawarra YES

No.	High level actions			
		0	0	•
1.1	Review existing economic strategies and identify gaps and opportunities – Federal programs			
1.2	Collaborate with partners to develop a framework that drives a regional approach to regional economic development activity – 360 Economic Outlook	-		
1.3	Work with NSW government and other partners to support the priority economic sectors identified in the Illawarra Shoalhaven Regional Plan - Marine Tourism ,		•	•
1.4	Partner with NSW , Commonwealth Government, and other organisations to deliver the Youth Employment Strategy - Illawarra #YES		•	
1.5	Promote the region as a superior business location for both government and industry Port Kembla Employment Lands		•	•
1.6	Work together with the University of Wollongong campuses, TAFE campuses and other key education institutions to ensure the region's future skills needs are met. LG Skills Strategy		٠	



5.11

Infrastructure This theme includes actions relating to road, rail, maritime and air transport, as well as telecommunications infrastructure Key partners: Key regional documents: · NSW Department of Planning and Environment Illawarra Regional Growth Plan South East Australian Transport Strategy (SEATS) Illawarra Regional Transport Strategy Transport for NSW No. High level actions Phase 0 0 0 21 Work with Transport NSW and other partners to deliver the Illawarra Regional Transport Strategy - TfNSW Future Transport NSW Freight Strategy • . Work with relevant partners to plan for and deliver improved telecommunications infrastructure - ENERGY? . . . Housing, Communities and lifestyle This theme includes actions relating to housing, education, health, culture and recreation Key partners: NSW Department of Planning and Environment · Australian Government Department of Human Services NSW Health and Illawarra and Shoalhaven Local Health District Australian Government Department of Social Services NSW Land and Housing Corporation · Healthy Cities Illawarra Key regional documents: NSW Department of Education Age Friendly Illawarra - Statement of Intent . NSW Department of Families and Communities Illawarra Regional Growth Plan The Greater Illawarra: Smart Growth Agenda No. High level actions Phase 2 6 3.1 Work with the NSW Government to implement the Illawarra Shoalhaven Regional Plan - Coordination & Monitoring Committee Support the delivery of actions in the Regional Growth Plan by identifying value-add opportunities such as shared resourcing and policy development – SIERA project, Affordable housing, MoU with Healthy Cities Illawarra 3.2 • 3.3 Share information to increase understanding of regional land use planning challenges, opportunities and responses - crown lands legislation, planning • ٠ 3.4 Retain membership and influence on regional Boards and Committees in key areas, such as multicultural affairs, health and education, urban property . . 3.5 Work with State and Federal Agencies during the transitioning of the region into the National Disability Insurance Scheme (NDIS) . **Environment** This theme includes actions relating to the natural environment Key partners: NSW Office of Environment and Heritage Illawarra District Weeds Authority South East Local Land Services NSW Department of Primary Industries Key regional documents: NSW Department of Planning and Environment Illawarra Biodiversity Strategy · NSW Environmental Protection Authority (EPA) Illawarra Regional Growth Plan Waste Less Recycle More Strategy No. High level actions Phase 0 0 0 41 Coordinate the Regional Waste Strategy under NSW Waste Less Recycle More-Plan for new State Strategy in 2017 Deliver the Litter Prevention Program & Waste Education Action Plan under the Better Waste & Recycling Program. Plan for new State Strategy in 2017 . 4.2 4.3 Continue the Regional Illegal Dumping prevention program.- Plan for new State Strategy in 2017 4.4 Work with SE Local Land Services on development of the SE Regional Weeds Strategy. Assist review of the regional delivery model Deliver the Illawarra District Noxious Weeds Authority services on behalf of 3 member Councils -Plan for new Biosecurity Legislation 4.5 Work with State Government on development of the Clean Air for NSW Strategy Governance and administration This theme includes actions relating to the establishment and embedding of a capable and robust organisation Key partners: Key regional documents: Local Government NSW Other pilot JOs ISJO Charter ISJO Statement of Regional Strategic Priorities Local Government Professionals NSW NSW Department of Premier and Cabinet Procurement Roadmap, Spend Analysis and Dashboard NSW Office of Local Government (OLG) High level actions Phase No. 0 0 6 5.1 Establish a strong structure and governance model for the ISJO Review the structure and governance model for the ISJO Commence to address ISJO staff and across-Council resourcing 5.2 5.3 Transition successfully from the Southern Councils Group to the IPJO, including transitioning relevant programs to appropriate partners 5.4 Maintain Kiama as the host Council for the ISJO 5.5 Review the hosting arrangements for the ISJO 5.6 Prepare and implement a Communication and Engagement Strategy for the ISJO 5.7 Measure and communicate the way in which the ISJO adds value to member Councils 5.8 Work with the OLG and other pilot JOs to help develop the legislative model for JOs 5.9 Reach a common understanding of what the enhancing regional strategic capacity function means for the ISJO, as well as opportunities and priorities 5.10 Use regional procurement in agreed areas to enhance the strategic capacity of member councils Reach a common understanding of opportunities and priorities for the ISJO in the regional service delivery function



File: IW-911.01.171 Doc: IC18/10

ITEM 4 CITY OF WOLLONGONG TRAFFIC COMMITTEE STRUCTURE REVIEW

The purpose of this report is to review and determine a committee structure and charter for the City of Wollongong Traffic Committee.

RECOMMENDATION

Council adopt the City of Wollongong Traffic Committee structure and meeting Charter Option 2, whereby Council staff Chair the meetings and have voting rights on behalf of Council, and there are no Councillor members.

REPORT AUTHORISATIONS

Report of: Peter Nunn, Manager Infrastructure Strategy and Planning (Acting)

Authorised by: Mike Dowd, Director Infrastructure and Works - Connectivity Assets and Liveable City

(Acting)

ATTACHMENTS

Option 1: City of Wollongong Traffic Committee Charter
Option 2: City of Wollongong Traffic Committee Charter

BACKGROUND

At the Council Meeting of 9 October 2017, when Council considered Councillor appointments to external organisations and Section 355 Committees, it was resolved to defer appointment of Councillor representatives to the City of Wollongong Traffic Committee until after a Councillor Briefing that covers the Charter and decision-making process for that Committee.

Following the Councillor Briefing held on 23 October 2017, this report is presented to allow Council to determine an approach for the City of Wollongong Traffic Committee structure and charter.

The previous Council resolved on 10 October 2016 to adopt the current arrangements for the City of Wollongong Traffic Committee (Option 1), in which one Councillor per Ward was nominated to attend the City of Wollongong Traffic Committee meetings, without Councillors having voting rights and with Council staff chairing the meeting and having voting rights on behalf of Council. The General Manager has the delegation to approve all traffic matters with the exception of proposed road closures (other than for road works), which need to be reported to Council for adoption, as these matters cannot be delegated.

Prior to 10 October 2016, the City of Wollongong Traffic Committee operated under a structure where Councillors were not official members and Council staff had voting rights. The General Manager had the power to approve all traffic matters under delegation with the exception of proposed road closures (other than for road works) which needed to be reported to Council for adoption, as by law these matters cannot be delegated. In this report, this option is Option 2 (2018).

What is the City of Wollongong Traffic Committee?

The City of Wollongong Traffic Committee is a Technical Committee of NSW Roads and Maritime Services (RMS) and not a Committee of Wollongong City Council. The Committee operates under the authority conferred to Council by the RMS under the Transport Administration Act 1988.

Council has been delegated certain powers from the RMS with regard to traffic matters upon its local roads. A condition of this delegation is that Council must take into account Traffic Committee recommendations. The Traffic Committee does not have any decision making authority, rather it makes recommendations which then need to be approved by Council before any action can take place. Currently most of the recommendations of the Traffic Committee are reported to the General Manager for approval under delegation; however, proposed road closures (other than for road works) need to be reported to Council for adoption, as these matters cannot be delegated.



The principal function of the Traffic Committee is to make recommendations on the installation of 'prescribed traffic control devices' which are typically signs including Give Way, Stop and timed parking signs; line markings such as centre lines and stop lines as well as constructed facilities including roundabouts, traffic calming devices, pedestrian crossings, traffic islands and traffic signals.

The Traffic Committee does not set, guide or influence Council's traffic management policy or strategy in any way.

Strategic policy and supporting programs for traffic and transport planning initiatives are developed by a team of experienced staff for inclusion in the traffic facilities and transport management programs considered by Council and the community through the development and exhibition of Council's Delivery Plan, Annual Plan and related supporting documents such as:

- Public Spaces Public Life
- Wollongong City Centre Access and Movement Strategy
- Keiraville and Gwynneville Access and Movement Strategy (currently under way)
- City of Wollongong Bike Plan
- City of Wollongong Pedestrian Plan

Prioritised traffic facilities within identified programs are ranked on the basis of factors such as crash rates, vehicle volumes and speeds and the proximity of the project to centres of pedestrian activity.

Membership and Terms of the City of Wollongong Traffic Committee:

There are four permanent members of the Traffic Committee, each of whom has a single vote only:

- NSW Police representative
- NSW Roads and Maritime Services representative
- Local State Member of Parliament representative (location of the issue to be voted upon)
- Wollongong City Council representative

In cases where the RMS or NSW Police disagree with any Traffic Committee recommendation, or Council's resolution on any Traffic Committee recommendation, that member may lodge an appeal with the Regional Traffic Committee for determination. The appeal must be lodged in writing within 14 days of Council's resolution. Any action relative to any issue under appeal must cease until the matter is determined. The Regional Traffic Committee is chaired by an independent chairperson with submissions and representations welcomed from all interested parties.

This appeal mechanism can effectively give RMS or NSW Police the power to veto any changes to the operation of traffic on local roads, which is an indication of the extent of delegation which RMS has given Councils. A more detailed summary of Traffic Committee functions, delegation and operations is available in the RMS document 'A Guide to the Delegation to Councils for the Regulation of Traffic, including Local Traffic Committees'.

How the City of Wollongong Traffic Committee Currently Operates:

The conduct of Traffic Committee meetings is at the discretion of the Council in relation to the frequency and format, with the Council representative chairing the meeting. However the Traffic Committee is not a policy setting committee and therefore has strict guidelines on its role and powers, focussing almost entirely on technical matters.

The City of Wollongong Traffic Committee currently meets once a month during business hours to facilitate the attendance of full time staff from Council, NSW Police, NSW Roads and Maritime Services and local State MP representatives (generally staff). Meetings are between 3 and 4 hours in duration with Council's representative currently an experienced Traffic Engineer from Council's Traffic Unit.

Traffic Committee representatives also meet the week prior the Traffic Committee meeting during normal work hours to inspect relevant sites on the draft Agenda. Site inspections are an important part of the



process and generally well attended by voting members, and depending on the size of the draft Agenda site inspections can take up to a full working day.

Items are only placed on the Traffic Committee agenda after a substantial amount of background work has been undertaken. This can often involve master planning such as a town centre masterplan or an access and movement strategy. It also typically involves community consultation and Councillor input prior to capital works designs being completed for presentation to the Traffic Committee for formal endorsement of technical matters.

Late Items are commonly presented to the Traffic Committee for consideration. These are frequently due to last minute requests in relation to public events. It is common for public events organised by private organisations to be publicly advertised for months and tickets sold, with a last minute approach by the organisers to Council seeking approval of their traffic management plans. These issues are dealt with by way of Extraordinary Electronic Meetings, hence the need for Council staff to retain delegation to consider late items.

Public Involvement in the City of Wollongong Traffic Committee:

The RMS document 'A Guide to Delegations to Councils for the Regulation of Traffic, including Local Traffic Committees' permits members of the public to attend Traffic Committee meetings. Council can determine what format of public attendance is permissible. From time to time, members of the Traffic Committee meet informally on site with residents to discuss significant concerns. In particular, sites of frequent motor vehicle accidents are treated in this way.

Where the issues are the regulation of traffic and road closures, the members of the Traffic Committee are involved in a range of stakeholder meetings to resolve any differences and provide advice to applicants and other stakeholders. Items are only placed on the Traffic Committee Agenda after a substantial amount of background work has been undertaken.

Any Council capital works item that needs Traffic Committee endorsement to legally approve a 'prescribed traffic control device' has already undergone the appropriate public consultation, including Councillor consultation. Where necessary, the scope of work or the design is modified.

It is only after the community has been consulted and all technical matters are addressed that it is reported to the Traffic Committee as this is the formal legal process required for approving prescribed traffic control devices such as signs and lines, roundabouts and similar traffic control devices.

Councillors and the community are given visibility to the recommendations of the Traffic Committee through the following mechanisms:

- Councillors are provided with the completed Minutes of Traffic Committee meetings by way of their Portal via the Information Folder, and the 'Other Committees' tab.
- An email at the end of each day is sent to Councillors advising them of what documents have been published to their Portal.
- A complete copy of the Traffic Committee Minutes and recommendations is placed on Council's website.
- The Minutes of the Traffic Committee are reported to Council.

Adoption of City of Wollongong Traffic Committee Recommendations:

The Traffic Committee does not have any decision making authority, rather it makes recommendations which then need to be approved (or otherwise) by Council before any action can take place. Currently, most of the recommendations of the Traffic Committee are reported to the General Manager for approval under delegation. However proposed road closures (other than for road works) need to be reported to Council for adoption, as these matters cannot be delegated.

This report does not consider changing the current delegation arrangements.



PROPOSAL

Options for City of Wollongong Traffic Committee Structure and Membership:

Two options are presented in relation to proposed changes to membership and voting delegations. A draft Meeting Charter has been developed for each option (which sets the legal framework for the meeting) to support consideration of the options.

There are three main decision points in considering how the City of Wollongong Traffic Committee operates. These are: Councillor attendance, whether Council staff or a Councillor has the Council voting rights, and who has final approval to consent to changes to *'prescribed traffic control devices'* and road closures which have been considered by the Traffic Committee.

Option One - The current arrangement since October 2016

- 1 Council nominates one Councillor per Ward to attend the Traffic Committee meetings to contribute to the meeting but without voting rights.
- 2 Council staff have voting rights and chair the Traffic Committee meetings.
- 3 The General Manager has the power to approve all traffic matters under delegation with the exception of proposed road closures (other than for road works) which need to be reported to Council for adoption, as these matters cannot be delegated.

Option Two (2018) - The recommended option and arrangement prior to October 2016

- 1 Councillors do not attend the Traffic Committee meetings.
- 2 Council staff have voting rights and chair the Traffic Committee meetings.
- 3 The General Manager has the power to approve all traffic matters under delegation with the exception of proposed road closures (other than for road works) which need to be reported to Council for adoption, as these matters cannot be delegated.

For both options, it is proposed that Traffic Committee meetings continue to be held during normal business hours.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal under the objective Community Goal 6 – We have sustainable, affordable and accessible transport. It specifically delivers on core business activities as detailed in the Transport Services Plan 2017-2018.

FINANCIAL IMPLICATIONS

Should Councillors seek to change the time of Traffic Committee meetings to enable Councillor attendance after hours, meetings held outside business hours would incur additional costs to Council in relation to staff costs for the Civic Attendant and two Council staff, as well as additional costs for NSW Police and RMS staff attendance.

It is estimated that the additional (unbudgeted) costs to Council for a cycle of monthly meetings held outside normal business hours would be at least approximately \$12,000 per year.

CONCLUSION

The City of Wollongong Traffic Committee is a Technical Committee of the Roads and Maritime Services (RMS) and not a Committee of Wollongong City Council. The Committee operates under the authority conferred to Council by the RMS under the Transport Administration Act 1988. The Committee does not set, guide or influence Council's traffic management policy or strategy in any way.

Councillors can influence traffic and transportation policy and matters through a wide range of ways. These generally are as follows:



- Customer requests for specific and non-specific issues that can be referred to Traffic Committee
 if necessary.
- Notices of Motion for specific and non-specific issues that can be referred to Traffic Committee if necessary.
- Council's Delivery Program and Annual Plan (eg. Capital Works Program) with traffic facilities referred to Traffic Committee if necessary.
- During the process of the development of supporting documents such as:
 - Public Spaces Public Life
 - Wollongong City Centre Access and Movement Strategy
 - Keiraville and Gwynneville Access and Movement Strategy (currently under way)
 - City of Wollongong Bike Plan
 - City of Wollongong Pedestrian Plan

Generally, items are only presented to the formal Traffic Committee as part of the final approval process. For example, a shared path only needs to go to the Traffic Committee as part of the process to designate it as a share path as this is a *'prescribed traffic control device'*. The shared path would have been placed in the Capital Works Program following inclusion in Council's Bike Plan and Annual Plan, both of which have community and Councillor input. Footpaths do not go to the Traffic Committee for any form of approval.

Recommendations of the Traffic Committee are non-binding on the Council, however must be considered by Council before consent is given for changes to traffic arrangements. This is done through either Council or General Manager Approval (under delegation).

As the Traffic Committee is a technical committee and does not influence policy or strategic direction, it is recommended that the Councillors do not need to attend the Traffic Committee meetings, and therefore Option 2 (2018) is recommended.

In this option:

- Councillors do not attend the Traffic Committee meetings.
- Council staff have voting rights and chair the Traffic Committee meetings.
- The General Manager has the authority to approve all traffic matters under delegation with the
 exception of proposed road closures (other than for road works). These items need to be
 reported to Council for adoption, as they cannot be delegated.

CITY OF WOLLONGONG COUNCIL

CITY OF WOLLONGONG TRAFFIC COMMITTEE CHARTER - OPTION 1 (2018)

PREAMBLE:

The City of Wollongong Traffic Committee is not a Committee of Wollongong City Council however a Technical Committee of the Roads & Maritime Services (RMS). The Committee operates under the authority conferred to Council by the RMS under the Transport Administration Act 1988, and in accordance with the powers delegated to Council by the Road Transport Act 2013 and the Roads Act 1993, as outlined in the RMS document 'A guide to the Delegation to Councils for the Regulation of Traffic – including the operation of Traffic Committees'

a) Council has been delegated certain powers, from the RMS, with regard to traffic matters upon its local roads. A condition of this delegation is that Council must take into account the Traffic Committee recommendations.

There are four permanent members of the Traffic Committee, each of whom has a single vote only.

- a) The members are representatives of the NSW Police Force, the Roads & Maritime Services, the Local State Member of Parliament (for the location of the issue to be voted upon), and a representative of Wollongong City Council.
- b) If the RMS or NSW Police Force disagrees with any Traffic Committee recommendation, or Council's resolution on any Traffic Committee recommendation, that member may lodge an appeal with the Regional Traffic Committee for determination. The appeal must be lodged in writing within 14 days of Council's resolution. Any action relative to any issue under appeal must cease until the matter is determined. The Regional Traffic Committee is chaired by an independent chairperson and submissions and representations are welcomed from all interested parties.

COUNCIL VOTING REPRESENTATIVE:

The Council representative is to be Council's Manager Infrastructure Strategy & Planning or sub-delegate (As delegated by Council and sub-delegated by the General Manager), who will also chair the meeting.

NON-VOTING ATTENDEES:

- a) Nominated Councillors one from each Ward.
- b) Support staff from Council's Infrastructure and Planning Division
- c) Council Administration Officer
- d) Council Road Safety Officer
- e) One (1) representative from each bus operator

AGENDA:

The Agenda must be prepared no less than 7 days before the Committee meeting and distributed to members, including all elected Councillors, and posted on Council's website.

The Traffic Committee agenda will be divided into Wards.



The Traffic Committee agenda will state the community consultation that has occurred prior to the item being placed on the agenda.

Members of the public or Councillors who have initiated traffic enquiries will be notified when their issue has resulted in a traffic committee agenda item and the timing of the items consideration.

VOTING:

In the exercise of its powers pursuant to the Division 1 of Part 4 (Sections 50 to 55) of the Road Transport (Safety and Traffic Management) Act, 1999, Division 2 of Part 8 (Sections 116 to 119) of the Roads Act, 1993 and Division 2 of Part 5 (Clauses 122 and 123) of the Road Transport (Safety and Traffic Management) (Road Rules) Regulation, 1999 a decision of the Traffic Committee shall be determined by a vote of:

- a) The representative of Council;
- b) The representative of NSW Police Department;
- c) The representative of NSW Roads & Maritime Services; and
- d) The representative of the State Member of Parliament to whose electorate the matter relates.

The advice of the Traffic Committee to Council or its Sub-Delegate on a particular matter must record any dissenting vote and must be one of the following:

- a) Unanimous support;
- b) Majority support;
- c) Split vote;
- d) Minority support.

The Traffic Committee is not required to have a quorum and as the advice is in the form of a recommendation to Council to assist in the determination of the matter, the Chairperson does not have a casting vote.

ELECTRONIC MEETINGS:

As Council can only exercise its delegation after seeking the advice of the Police, RTA and the local MP, if a voting member cannot attend a meeting, they can be consulted via email or telephone and their advice will be included in the recommendation of the Traffic Committee. In cases of urgency, Council may consult via electronic means with the voting members of the Committee, for the purposes of seeking their advice, without the need for a face to face meeting.

PUBLIC PARTICIPATION:

The role of the Traffic Committee is to consider the technical aspects of each proposal. The Chairperson may allow residents or other interested stakeholders, to address the Committee on the technical merits only of a particular proposal. Residents or other non-member stakeholders are not allowed to remain at the meeting while a proposal is being debated and a vote being taken. Residents or other interested stakeholders may address the Committee on the following conditions:

a) Presentations should be limited to five (5) minutes;



Item 4 - Attachment 1 - Option 1: City of Wollongong Traffic Committee Charter

- Any person who has previously addressed the Committee on a subject must present new information only: and
- Groups wishing to present similar points of view should nominate a spokesperson to represent the views of that group.

INFORMAL ITEMS:

Council may wish to seek advice from the Committee with a view to proposing a formal item for a future meeting and informal matters can be raised at Committee meetings where time permits.

NOTICE OF LATE AGENDA ITEMS:

Members of the Committee will be given 24 hours notice, by facsimile or email, of any late agenda item and that such notice shall be accompanied by the relevant report. Notwithstanding the above, a Member of the Committee may raise any item during the course of a meeting. The committee will give consideration to such matters if the matter is deemed to be urgent business by a unanimous vote of members present.

PROCEDURAL MATTERS:

In relation to any procedural matter, the normal meeting rules will apply, as determined by the Chairperson.

30 January 2018

CITY OF WOLLONGONG COUNCIL

CITY OF WOLLONGONG TRAFFIC COMMITTEE CHARTER - OPTION 2 (2018)

PREAMBLE:

The City of Wollongong Traffic Committee is not a Committee of Wollongong City Council however a Technical Committee of the Roads & Maritime Services (RMS). The Committee operates under the authority conferred to Council by the RMS under the Transport Administration Act 1988, and in accordance with the powers delegated to Council by the Road Transport Act 2013 and the Roads Act 1993, as outlined in the RMS document 'A guide to the Delegation to Councils for the Regulation of Traffic – including the operation of Traffic Committees'

a) Council has been delegated certain powers, from the RMS, with regard to traffic matters upon its local roads. A condition of this delegation is that Council must take into account the Traffic Committee recommendations.

There are four permanent members of the Traffic Committee, each of whom has a single vote only.

- a) The members are representatives of the NSW Police Force, the Roads & Maritime Services, the Local State Member of Parliament (for the location of the issue to be voted upon), and a representative of Wollongong City Council.
- b) If the RMS or NSW Police Force disagrees with any Traffic Committee recommendation, or Council's resolution on any Traffic Committee recommendation, that member may lodge an appeal with the Regional Traffic Committee for determination. The appeal must be lodged in writing within 14 days of Council's resolution. Any action relative to any issue under appeal must cease until the matter is determined. The Regional Traffic Committee is chaired by an independent chairperson and submissions and representations are welcomed from all interested parties.

COUNCIL REPRESENTATIVE:

The Council representative is to be Council's Manager Infrastructure Strategy & Planning or sub-delegate (As delegated by Council and sub-delegated by the General Manager), who will also chair the meeting.

NON-VOTING ATTENDEES:

- a) Support staff from Council's Infrastructure and Planning Division
- b) Council Administration Officer
- c) Council Road Safety Officer
- d) One (1) representative from each bus operator

AGENDA:

The Agenda must be prepared no less than 7 days before the Committee meeting and distributed to members, and posted on Council's website.

The Traffic Committee agenda will be divided into Wards.



Item 4 - Attachment 2 - Option 2: City of Wollongong Traffic Committee Charter

The Traffic Committee agenda will state the community consultation that has occurred prior to the item being placed on the agenda.

Members of the public who have initiated traffic enquiries will be notified when their issue has resulted in a traffic committee agenda item and the timing of the items consideration.

VOTING:

In the exercise of its powers pursuant to the Division 1 of Part 4 (Sections 50 to 55) of the Road Transport (Safety and Traffic Management) Act, 1999, Division 2 of Part 8 (Sections 116 to 119) of the Roads Act, 1993 and Division 2 of Part 5 (Clauses 122 and 123) of the Road Transport (Safety and Traffic Management) (Road Rules) Regulation, 1999 a decision of the Sutherland Traffic Committee shall be determined by a vote of:

- a) The representative of Council;
- b) The representative of NSW Police Department;
- c) The representative of NSW Roads & Maritime Services; and
- d) The representative of the State Member of Parliament to whose electorate the matter relates.

The advice of the Traffic Committee to Council or its Sub-Delegate on a particular matter must record any dissenting vote and must be one of the following:

- a) Unanimous support;
- b) Majority support;
- c) Split vote;
- d) Minority support.

The Traffic Committee is not required to have a quorum and as the advice is in the form of a recommendation to Council to assist in the determination of the matter, the Chairperson does not have a casting vote.

ELECTRONIC MEETINGS:

As Council can only exercise its delegation after seeking the advice of the Police, RTA and the local MP, if a voting member cannot attend a meeting, they can be consulted via email or telephone and their advice will be included in the recommendation of the Traffic Committee. In cases of urgency, Council may consult via electronic means with the voting members of the Committee, for the purposes of seeking their advice, without the need for a face to face meeting.

PUBLIC PARTICIPATION:

The role of the Traffic Committee is to consider the technical aspects of each proposal. The Chairperson may allow residents or other interested stakeholders, to address the Committee on the technical merits only of a particular proposal. Residents or other non-member stakeholders are not permitted to remain at the meeting while a proposal is being debated and a vote being taken. Residents or other interested stakeholders may address the Committee on the following conditions:

a) Presentations should be limited to five (5) minutes;

Item 4 - Attachment 2 - Option 2: City of Wollongong Traffic Committee Charter

- Any person who has previously addressed the Committee on a subject must present new information only; and
- Groups wishing to present similar points of view should nominate a spokesperson to represent the views of that group.

INFORMAL ITEMS:

Council may wish to seek advice from the Committee with a view to proposing a formal item for a future meeting and informal matters can be raised at Committee meetings where time permits.

NOTICE OF LATE AGENDA ITEMS:

Members of the Committee will be given 24 hours notice, by facsimile or email, of any late agenda item and that such notice shall be accompanied by the relevant report. Notwithstanding the above, a Member of the Committee may raise any item during the course of a meeting. The committee will give consideration to such matters if the matter is deemed to be urgent business by a unanimous vote of members present.

PROCEDURAL MATTERS:

In relation to any procedural matter, the normal meeting rules will apply, as determined by the Chairperson.



File: IW-090.016 Doc: IC18/3

ITEM 5 FLOODPLAIN RISK MANAGEMENT COMMITTEES STRUCTURE

This report recommends Council adopt a new structure for its Floodplain Risk Management Committees.

RECOMMENDATION

- 1 Council adopt a structure of three Floodplain Risk Management Committees broken up into three areas, North, Central and South:
 - a The Northern area to cover the Hewitts Creek (Ward 1), Collins Creek (Ward 1) and Towradgi Creek (Ward 1) catchments;
 - b The Central area to cover Fairy and Cabbage Tree Creeks (both Ward 1 and 2), Wollongong City (Ward 2) and Allans Creek (Ward 2 and 3) catchments;
 - The Southern area to cover the Minnegang Creek (ward 3), Kully Bay (Ward 3), Mullet Creek (Ward 3), Brooks Creek (Ward 3), Lake Illawarra (Ward 3) and Duck Creek (Ward 3) catchments.
- 2 The revised Charter for Floodplain Risk Management Committees be adopted.
- 3 Three Councillors be elected to each of the above Floodplain Risk Management Committees.
- 4 A Chairperson be elected to each Floodplain Risk Management Committee from the Councillor representatives.
- 5 The election be undertaken by open means, on a show of hands.

REPORT AUTHORISATIONS

Report of: Peter Nunn, Manager Infrastructure Strategy and Planning (Acting)

Authorised by: Mike Dowd, Director Infrastructure and Works - Connectivity Assets and Liveable City

(Acting)

ATTACHMENTS

- 1 Revised Charter for Floodplain Risk Management Committees
- 2 Community engagement activities flood risk projects

BACKGROUND

Wollongong City Council has been very proactive in undertaking flood studies and floodplain risk management studies and plans to manage flood risk throughout its local government area. Council progressively implemented a prioritised program of flood studies for its catchments following widespread flooding in the city in 1998 and 1999. The program took many years to implement and historically a floodplain risk management committee was created to oversee individual catchment specific flood studies. The program culminated in 11 catchments being thoroughly investigated for their flood risk. Historically no more than 3 studies would generally be undertaken concurrently, which meant Council would operate no more than 3 floodplain risk management committees at any one time as the committees were only formed to service specific projects and did not provide any wider oversight of floodplain management issues or implementation of any plans.

In late 2016, Council adopted revised blockage factors and allocated funds to progress the review of all its flood studies. Council also established committees (Report to Council 21st November 2016, Minute No. 139) for individual catchments, adopted a revised Charter for Floodplain Risk Management Committees and resolved to seek other appropriate representation (including Council staff, State Government agencies, and local community members) on each of the identified Floodplain Risk Management Committees.

If Council kept the same model for its Floodplain Risk Management Committees (ie one committee per flood study review), Council would need to run 11 floodplain risk management committees concurrently.



This requires a large commitment for committee members and demand on resources for Council and state government agencies representative such as SES, RMS, and in particular the Office of Environment and Heritage which is Council's main financial and technical partner to implement the flood program.

There are benefits in consolidating the number of committees. These are:

- Members form a better understanding of flood risk issues across the entire LGA,
- The ability for members to assist with prioritising across catchments,
- The ability for members in sharing ideas across catchments,
- Better forums to discuss citywide issues (such as blockage policy, Australian Rainfall and Runoff, etc).

Council trialled a combined Flood Risk Committee meeting for the Southern Area in August 2017. The combined committee meeting was well attended by community members and agencies. The presentations by consultants on Brooks Creek Flood Study review and Mullet Creek Flood Study Review were well received. Committee members provided valuable feedback on community consultation material and supported the public exhibition of the Brooks Creek and Mullet Creeks Flood Study reviews.

PROPOSAL

It is proposed that in lieu of having a Floodplain Risk Management Committee for each catchment, Council create Floodplain Risk Management Committees for three geographical areas, North Central and South. It is noted that ward boundaries do not coincide with water catchments and the Central area would cover all three wards.

The Northern area would cover the Hewitts Creek (Ward 1), Collins Creek (Ward 1) and Towradgi Creek (Ward 1) catchments.

The Central area would cover the Fairy Creek (Ward 1 and 2), Cabbage Tree Creek (Ward 1 and 2), Wollongong City (Ward 2) and Allans Creek (Ward 2 and 3) catchments.

The Southern area would cover the Minnegang Creek (Ward 3), Kully Bay (Ward 3), Mullet Creek (Ward 3), Brooks Creek (Ward 3), Lake Illawarra (Ward 3) and Duck Creek (Ward 3) catchments.

CONSULTATION AND COMMUNICATION

During the interview of community members who expressed an interest to be part of the floodplain risk management committees, staff raised the possibility of running combined committees (subject to Council's endorsement). All community members received the proposal positively and some could clearly see the benefits in sharing ideas and learning from other projects.

When consulted, the state government agency representatives expressed their preference for running combined committees. This would ensure a better attendance rate at committee meetings. OEH, Council's main partner for its flood program, clearly indicated that due to staff resources it would be impossible for OEH to attend all 11 separate committees. The NSW State Government agency representatives also indicated that combined committees have been run successfully in other LGAs with extensive coastal and flood programs (e.g. Shoalhaven, Eurobodalla).

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal "We value and protect our Natural Environment". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
1.1.3 The potential impacts of natural disasters, such as those related to bushfire, flood and landslips are managed and risks are reduced to protect life, property and the environment	1.1.3.2 Implement a coordinated approach to floodplain and stormwater management	Implement Council's Floodplain Risk Management Plans



RISK ASSESSMENT

It is important to note that the Flood Risk Management Committees are not the only means for community members to be involved and have their say in the flood risk management process.

Council provides a minimum of 10 other community engagement activities throughout the flood risk management process as outlined in Attachment 1.

Historically Floodplain Risk Management Committees would only be active for the duration of the Flood Study or Floodplain Risk Management Study and Plan and would be disbanded at the completion of the study. This was not conducive to community and state government agency members being involved and aware of the flood mitigation works actively being implemented by Council. It is proposed that the new Floodplain Risk Management Committees be active for the duration of Council's term, this would be more conducive to the committees being involved in the planning and implementation of flood risk mitigation capital works.

FINANCIAL IMPLICATIONS

The staff cost associated with attendance and time taken to prepare business papers for a Floodplain Risk Management Committee is evaluated at \$4,000 per committee meeting. An average of 3 committee meetings per year is generally required. If Council keeps the same format, the total staff cost of running committees would approximately be \$132,000 per year. The proposed combined committees structure staff cost would be \$36,000 per year resulting in an average annual savings of \$96,000.

CONCLUSION

It is recommended that Council adopt a new structure for Council's Floodplain Risk Management Committees as it would provide many efficiencies and benefits as highlighted by this report.

The adoption of the new structure for Floodplain Risk Management Committees would require minor changes to the Charter as identified in Attachment 2.



Item 5 - Attachment 1 - Revised Charter for Floodplain Risk Management Committees

CHARTER FLOODPLAIN RISK MANAGEMENT COMMITTEE



1 INTRODUCTION

The Floodplain Risk Management Committee has been established to provide advice to Council on the preparation and implementation of flood management plans for catchments within the Wollongong Local Government Area (LGA). The Committee comprises people interested in the sustainable management of the floodplains within the Wollongong LGA.

2 AUTHORITY

The Floodplain Risk Management Committee will provide advice, feedback and support to Council in developing, implementing and monitoring flood studies and floodplain risk management plans and their associated projects.

The Committee does not have decision making authority, the power to bind the Council or the power to incur expenditure.

3 RESPONSIBILITIES AND FUNCTIONS

The responsibilities and functions of the Floodplain Risk Management Committee are to:

- assist Council to develop Floodplain Risk Management Plan or Plans in accordance with the NSW Government guidelines, as set out in the Floodplain Development Manual;
- develop a better understanding of floodplains and identify issues which need to be addressed;
- assist in developing suitable strategies to address floodplain management issues; and
- monitor and evaluate the implementation of Floodplain Risk Management Plan or Plans.

4 PRIORITIES

The priority of the Floodplain Risk Management Committee is to support the completion of Flood Studies and Floodplain Risk Management Studies and Plans and the implementation and review of these studies where appropriate for catchments located within the Wollongong LGA.

5 COMPOSITION OF THE FLOODPLAIN RISK MANAGEMENT COMMITTEE

The Floodplain Risk Management Committee is made up of:

- A maximum of two three (23) Councillors in total (one from each ward where the study is across two wards.
 In the event of the study covering more than two wards it is recommended that a Councillor from each ward be appointed to the committee);
- Council staff from engineering, planning and environmental disciplines to service the Committee and oversee the technical requirements of the studies, as and when required;
- Officers (representatives) from State Government Departments and Agencies, including the Office of Environment and Heritage, Roads and Maritime Services, State Emergency Services, Transport for NSW -Sydney Trains and the Department of Planning;
- Representatives of relevant industry bodies;
- An appropriate number of representatives of the local community (local flood affected landholders both residential and business), flood action groups and environmental groups;
- Guests as deemed necessary by the Committee to provide specialist advice outside the capabilities of the committee members (for example – The Bureau of Meteorology, representatives from Welfare Services).

The Chairperson will be appointed by Council from the Councillor representatives.

Vacancies that occur on the Committee will be filled by nomination.

Council staff may attend meetings as observers, to provide information to the Committee or to fulfil an administrative function (eg taking minutes). These individuals will act as ex-officio members.

The term of appointment for Committee members is to be for the duration of Council's term, unless Council decides to disband the committee earlier by Council's resolution for a period up to the completion of the



Item 5 - Attachment 1 - Revised Charter for Floodplain Risk Management Committees

CHARTER FLOODPLAIN RISK MANAGEMENT COMMITTEE



Floodplain Risk Management Study and the commencement or implementation of the Floodplain Risk Management Plan.

Where necessary the use of a 'Technical Sub-Committee' of the Floodplain Risk Management Committee should be used to enable the commit to fulfil its advisory role to council efficiently, confident that studies and option assessments are technically adequate and the options proposed are practical and feasible. The role of the technical sub-committee may include:

- Preliminary development of process and individual study objectives;
- Collection of background data for studies;
- Preparation of technical project briefs in consultation with the committee;
- Review of proposals from consultants in consultation with the committee;
- Review of modelling, management options, reports and presentations for technical adequacy prior to presentation and review by the full committee; and
- Advice on any other technical matters upon request by the committee.

The Technical Sub-Committee should have membership from Council staff (engineering, planning and environmental disciplines) and The Office of Environment and Heritage. Other technical government representative may be invited to the Sub-Committee as and when required.

6 OBLIGATIONS OF MEMBERS

Members of the Floodplain Risk Management Committee, in performing their duties, shall:

- Act honestly and in good faith;
- · Declare all conflicts of interests;
- Participate in the work of the Committee;
- Perform their duties in a manner that ensures public trust in the integrity, objectivity, and impartiality of the Committee:
- Exercise the care, diligence and skill that would be expected of a reasonable person;
- Comply with the Committee Charter; and
- Comply with Council's Code of Conduct.

7 MEETINGS AND MINUTES

The Committee shall meet as required to progress the work involved in the Floodplain Risk Management Process.

A quorum will consist of seven (7) five (5) of the Committee members.

Meetings will be chaired by the Council appointed Chairperson. If the Chairperson is absent from a meeting, the meeting will be chaired by the second nominated Councillor, or in their absence the most senior Council officer present.

The Floodplain Risk Management Committee has an advisory role to Council and will make recommendations by consensus. In the absence of consensus, advice from the Floodplain Risk Management Committee may be presented with supporting and dissenting views of members.

Meeting agendas will be distributed at least one week prior to the meeting.

8 REPORTS

The minutes of Floodplain Risk Management Committee meetings will be provided to Councillors and Council's Executive Management for information. Minutes will also be distributed to all Floodplain Risk Management Committee members an dposted on Council's website.



Item 5 - Attachment 1 - Revised Charter for Floodplain Risk Management Committees





Advice and recommendations of the Floodplain Risk Management Committee may be reported to Council by the Manager Infrastructure Strategy and Planning at their discretion.

9 EVALUATION AND REVIEW

A review of the Floodplain Risk Management Committee will be undertaken every 12 monthsafter each council election to ensure the purpose, membership and operation of the Committee is effective and to make appropriate changes.

10 REMUNERATION AND EXPENSES

There is no remuneration for members.

Reasonable expenses incurred by the Floodplain Risk Management Committee members in relation to their responsibilities as members of the Committee will be met by prior approval. These expenses should relate directly to tasks completed for Floodplain Risk Management Committee business and will be reimbursed at the discretion of Council.

11 FAILURE TO COMPLY WITH CHARTER

Failure to comply with the Floodplain Risk Management Committee Charter as set out above may terminate the member's membership of the relevant Floodplain Risk Management Committee.



Floodplain Risk Management - Community engagement activities

Data collection

1.survey/questionnaires to residents

2.consultation with Neighbourhood forums and Flood Committees

examples

500 residents/owners returned surveys for Collins Creek catchment (October 2017)

200 residents/owners returned surveys for Wollongong City Catchment (august/september 2017)

Flood study preparation/review

3.public exhibition - mail out to all flood affected properties

4.consultation with Neighbourhood forums and Flood Committees

5.drop in sessions

examples:

Brooks Creek exhibition-50+ residents provided feedback on draft flood study -20 residents attended drop in session september/october 2017

Mullet Creek flood model update exhibition-106 submissions were received

Floodplain risk management study and plan

6. questionnaires to all flood affected properties seeking input on flood mitigation options

7. Public exhibition-mail out to all flood affected properties

8.consultation with Neighbourhood forums and Flood Committees

9. drop in sessions/workshops

Examples:265 responses were received on flood mitigations option for Wollongong City catchment (2015)-57 submissions on the draft flood plan

Implementation

10.consultation -mail out-Have your say -site visitdrop in sessions

examples: Gurungaty causeway lowering- mail out to app 250 owners/residents

JJ Kelly Park swale: mail out to app 250 owners/residents

App 10 residents attended drop-in session on Gurungaty causeway (september 2017)

Coming consultation on: Ursula Road flood mitigation scheme, McMahons proposed detention basin, West st proposed detention basin

Method of communications: direct mail out, media release, formal advertisements in Newspapers, council's website (Have your say/flood information pages), emails, pamphlet with rate notices (April 2018), face to face (drop in sessions, workshops, site visits) display in library



File: CCL-160.25.20.009 Doc: IC18/11

ITEM 6 UNANDERRA SKATE PARK SAFETY REPORT

Council at its meeting of 29 May 2017 requested an investigation into appropriate actions and strategies to best ensure the safety of all users of Unanderra Skate Park. The resolution was:

Minute 53

- 1 a Council investigate appropriate actions and strategies to best ensure safety of all users of Unanderra Skate Park.
 - b This investigation to include consideration of implementing CCTV, tree plantings and picnic facilities and other measures that encourage more families to "stay and play" and provide positive active surveillance.
 - c A report return to Council with options for consideration.
- 2 Council also contact the Illawarra Local Area Command of the NSW Police Force informing them of our concerns and request their assistance by way of additional routine patrols in this area and any other service or program they provide to address youth and community safety.
- 3 In addition, Council consult with the broader community, as well as with the local Primary Schools and the local Neighbourhood Centre.

RECOMMENDATIONS

Council receive the report and note the following recommendations:

- 1 Prioritise the removal of graffiti and keep monitoring for regular removal.
- 2 Encourage the community to report graffiti and any acts of vandalism.
- 3 Encourage the community to report incidents of abuse or violence to police.

REPORT AUTHORISATIONS

Report of: Sue Savage, Manager Community Cultural and Economic Development (Acting)
Authorised by: Kerry Hunt, Director Community Services - Creative and Engaged City (Acting)

ATTACHMENTS

1 Unanderra Skate Park Community Safety Audit

BACKGROUND

A complaint was made to former Councillor Curran from a community member about bullying and abusive behaviour occurring at the Unanderra Skate Park. The community member requested CCTV be installed at the park to reduce antisocial behaviour. A motion was passed which requested an investigation into strategies and initiatives that could be deployed to improve safety for users of the skate park.

In response to the resolution of 29 May 2017, a community safety audit was conducted with Council's Community Safety Officer and the Police Youth Liaison Officer from Lake Illawarra Local Area Command at Unanderra Skate Park on 14 June 2017. As part of the community safety audit the Unanderra Neighbourhood Centre's Youth Coordinator was also consulted. The Youth Coordinator has strong links with the local schools and Church youth groups as well as the young people who frequent the skate park.

The key findings of the community safety audit are that the skate park is one of the facilities in this 'play' precinct. There are good sightlines into the precinct. There is passive surveillance from the street level but little in the way of other activities which would have people present who by their mere presence would deter potential offenders from committing a crime.



The Youth Coordinator from Unanderra Neighbourhood Centre is working with the local schools and Church youth group to improve behaviour in the precinct, which will act to increase activities and people being present at the site. The NSW Police advised that the incident such as the one reported to former Councillor Curran is a rare occurrence. The type of behaviour as reported is unlikely to be prevented by the installation of CCTV if it were to occur again.

Recommendations from the community safety audit include:

- Remove graffiti and keep monitoring it for regular removal.
- Encourage the community to report graffiti and other acts of vandalism.
- Encourage the community to report all incidents of abuse, violence or threatening behaviours to police.

For full details of the Community Safety Audit refer attachment: Unanderra Skate Park Community Safety Audit.

CONSULTATION AND COMMUNICATION

Consultation was conducted with:

- Unanderra Neighbourhood Centre's Youth Coordinator and Manager
- WCC Community Safety Officer
- Community and Cultural Development Manager
- Recreation and Open Space Project Officer
- Youth Liaison Officer Lake Illawarra Local Area Command.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal 5: 'We are a healthy community in a liveable city'. It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
5.4.2 Local crime continues to be prevented and levels of crime reduced.	5.4.2.2 Deliver projects and programs to reduce crime in the Wollongong Local Government Area.	Complete and finalise Safety Audits and relevant reports.

FINANCIAL IMPLICATIONS

The costs to conduct the community safety audit and graffiti removal are within the respective Council divisional operational budgets for 2017-2018.

CONCLUSION

The Unanderra Skate Park is in open parkland surrounded by sports fields, a children's playground and the local tennis club. The Lake Illawarra Local Area Command reported only two minor incidents were reported to them at this site over the last two years. As a result they do not consider this site a 'hot spot' and are not 'tasking' the skate park for special consideration or 'drive bys'.

The site does however look neglected due to the amount of graffiti covering signs, the skate bowl, children's playground equipment and the toilet. Rapidly removing graffiti and monitoring the site to keep it graffiti free would send a clear message the site feels safer which will in turn increase usage and active surveillance.



Item 6 - Attachment 1 - Unanderra Skate Park Community Safety Audit



COMMUNITY SAFETY AUDIT

INTERNAL ONLY

TITLE Unanderra Skate Park

DATE 14 June TIME

ADDRESS Unanderra Park, Central Road, UNANDERRA NSW 2526

ATTENDANCE Steve Maidment, Lori Hanley Lake Illawarra Local Area Command

AUTHOR Radda Jordan

Crime Prevention Through Environmental Design

Crime prevention through environmental design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. It reduces opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients (law, offender, victim or target, opportunity) from intersecting in time and space.

Predatory offenders often make cost-benefit assessment of potential victims and locations before committing crime. CPTED aims to create the reality (or perception) that the costs of committing crime are greater than the likely benefits. This is achieved by creating environmental and social conditions that:

- Maximise risk to offender (increasing the likelihood of detection, challenge and apprehension);
- Maximise the effort required to commit crime (increasing the time, energy and resources required to commit crime);
- Minimise the actual and perceived benefits of crime (removing, minimising or concealing crime attractors and rewards); and
- Minimise excuse making opportunities (removing conditions that encourage/facilitate rationalisation of inappropriate behaviour).

CPTED employs four key strategies. These are territorial re-enforcement, surveillance, access control and space/activity management. All CPTED strategies aim to create the perception or reality of <u>capable guardianship</u>.

PURPOSE

The purpose of this safety audit is to determine what physical amendments can be introduced that may reduce anti-social behaviours, reported at the skate park.

BACKGROUND

(eg Issues identified and any relevant additional notes)

A report of violence and intimidation has been made by a local resident whose children use the skate park. The report indicated the resident's children were being bullied, hurt and intimidated by other older children, while using the skate park. The resident requested if CCTV could be installed at the skate park, to reduce incidents of this nature continuing.





COMMUNITY SAFETY AUDIT

SITE INSPECTION



Skate bowl showing proximity to tennis courts and playground



From skate bowl across sports fields to closest neighbours





Directly opposite the skate park showing no natural surveillance from the street





COMMUNITY SAFETY AUDIT

OBSERVATION NOTES

Crime Levels (eg Nature, known methods)

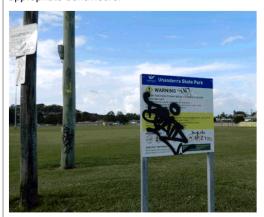
The Lake Illawarra Local Area Command Youth Liasion Officer attended the safety audit with Council officers. Lori Haney (YLO) checked police reports to see what levels of disturbance or crime is associated with this location. Lori reported there has only been one report in 2017 (recently) and one in November 2016, which was a minor incident. Lake Illawarra Local Area Command do not consider this location a hot spot and are not 'tasking' the skate park for special consideration or drive bys.

Surveillance (eg list site features)

The site includes the skate park, tennis centre and courts, an excelloo and children's playground. There are several sporting fields in the precinct and lighting for the tennis courts and sports fields.

Territorial Reinforcement (eg community guardians, place making, reputation, signage)

The site is marked by signs identifying the skate park as well as signs indicating appropriate behaviours.





Examples of signage at the park

Environmental Maintenance (eg Area image, ie graffiti, rubbish, decay, landscaping) There is an abundance of graffiti at this site.







 $Examples \ of \ graffiti \ across \ a \ number \ of \ facilities \ at \ the \ skate \ park \ location. \ Some \ of \ the \ graffiti \ is \ of fensive$





COMMUNITY SAFETY AUDIT

There is no rubbish bin within the precinct. The skate bowl has a number of cracks and is covered in graffiti. A drain for the skate bowl is cracked and raised, making it a dangerous hazard.





Drain covered in graffiti and creating a trip hazard.

Activity and Space Management (eg clarity of land use, street activity, proximity to other areas, displacement, neighbourhood)

Access Control (eg street type, linkages, access points and type, walking routes)

Design/Definition/Designation (eg design and purpose in harmony, responsibility of space, boundaries, social norms suit function, legal and administration requirements reinforced).

RECOMMENDATIONS

At the time of the audit there were a number of young boys using the skate park with their scooters. They are regular users. They indicated the playground was never used, the toilets were not used by them but by drug users and older boys mostly went to Berkeley skate park now.

The skate park is in close proximity to the train station and shopping precinct. It's an easy walk from the highway.

The skate park is one of the facilities in this 'play' precinct. There are no obstructions to prevent good sightlines into the precinct. There is passive surveillance from the street level but little in the way of capable guardianship. Opposite the skate bowl is the Wests Leagues Club wall and Unanderra fire station. Both are open for long periods but do not offer any connection to the skate park or any of the activities in the play precinct.

Recommendations include:

- · Remove graffiti and keep monitoring it for regular removal
- · Encourage the community to report graffiti and other acts of vandalism
- Encourage the community to report all incidents of abuse, violence or threatening behaviours to police

There is no indication the installation of CCTV will prevent abuse. The local youth worker at Unanderra Community Centre is aware of the issues and has been encouraged to work with the local high school and Church groups to deliver strategies to encourage more respectful behaviours



File: PR-195.006 Doc: IC18/5

ITEM 7

HELENSBURGH POOL - INVESTIGATION AND FEASIBILITY ASSESSMENT FOR HEATING AND POTENTIAL EXPANSION

At its meeting on 22 February 2016, Council resolved an investigation be undertaken to examine the feasibility of, and costs associated with, the heating of and potential expansion of Helensburgh Pool.

Subsequently in October 2017, an investigation and feasibility assessment report was finalised by the consultancy firm Otium Planning Group which is summarised in, and attached, to this report.

RECOMMENDATION

- 1 The Helensburgh War Memorial Pool Investigation and Feasibility Assessment Final Report and Attachments are noted by Council and the findings considered in future delivery programs.
- 2 Council prioritise further investigative studies to inform future delivery program expenditure on maintaining and enhancing existing water treatment, plant and filtration systems to ensure the Helensburgh facility continues to operate in accordance with NSW Public Health guidelines.

REPORT AUTHORISATIONS

Report of: Peter Coyte, Manager Property and Recreation

Authorised by: Kerry Hunt, Director Community Services - Creative and Engaged City (Acting)

ATTACHMENTS

- 1 Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning Group) Final Report
- 2 Helensburgh Pool Upgrade Report on Geotechnical Investigation
- 3 Helensburgh Pool Preliminary Cost Plan
- 4 Project Brief Investigation and Feasibility Assessment for Heating and Potential Expansion Helensburgh Pool
- 5 Councillor Brief Draft Consultants Preliminary Findings Helensburgh Pool Technical Assesssment Nov 2017

BACKGROUND

Helensburgh Pool is situated in Walker Street, Helensburgh and it is one of Wollongong City Council's three freshwater chlorinated facilities offered to the public free of charge and open during the designated swimming season. The pool is one of 18 pool facilities provided for Wollongong residents and one of the nine supervised pools in the Local Government Area.

Helensburgh Pool first opened on 6 December 1969, at a cost of \$87,500. Construction of the pool was funded in part by the community and business contributions, raising a total of \$34,500 (Helensburgh Pool Committee - \$11,500, Department Of Public Works - \$10,000, Joint Coal Board - \$4,000, Australian Iron & Steel - \$4,000, Helensburgh Workers' Club - \$5,000) with the remaining \$53,000 of project costs funded by Council.

Following Council's adoption of the "Future of Our Pools Strategy" in June 2014 and Council's determination on the Stanwell Park Rock Pool Reserve, community members at Helensburgh sought Council's support to undertake preliminary investigations into the feasibility of either/both heating and extending the pool.

Subsequently, at the ordinary meeting of Council on 22 February 2016 (Item A), Council resolved that:

1 Council:

a. Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool, and/or extending the pool length to 50 metres and the number of lanes to eight.



- b. Investigate what would be the expected catchment area of residents who might make use of the Pool when heated.
- c. Investigate what catchment area of schools might make use of the Pool after it is heated and what purposes it could be utilised for.
- d. Include in the report what would be the charge for entry after the heating works have been finished and would that fee also be charged during the summer period.
- e. Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool.
- The above investigations be the subject of a report which is to be finalised and presented to the newly-elected Council not later than four months of that Council being elected.

To satisfy the requirements of Council's resolution, a scope of work was developed to undertake the investigation and feasibility of heating and/or potential expansion of Helensburgh Pool. The successful consultant was Otium Planning Group Pty Ltd (Otium). The Otium Report was finalised in October 2017 and a summary of this report is outlined below in response to Council's Resolution.

The recommended strategic direction for Helensburgh Pool, based on findings and facility trends along with the current usage trends, indicate the need to ensure future improvements that in the longer term:

- Encourages greater family/child entries by adding more leisure water, play and fun water features and some interactive water. This would include the development of an outdoor splash pad with a range of features suitable for varying age groups. This type of facility could be developed in the north-west corner of the site adjacent to the 25m pool. The ground level at this location is lower than around the 25m pool and the level difference may provide some advantage in the design of a splash pad.
- Continues to monitor and review the plant and equipment to ensure the water turnover rates and technical requirements are achieved.
- Provides the facility with a general upgrade to improve the amenities and customer comfort including refurbishing the change rooms and resurfacing the concourse.
- Installs a PV solar panel system to the change rooms' roof to help offset utility costs.
- Separates the water filtration system to assist with better meeting the health standards.
- Initiates additional direct programming opportunities to continue to attract usage of the facility including learn to swim and holiday program activities ie inflatables.
- a. Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool, and/or extending the pool length to 50 metres and number of lanes to eight.

From the objectives set out in the Brief provided, the consultancy firm developed four options for heating and expansion of Helensburgh Pool. These options include:

- 1 The retention and heating of the existing 25m pool and toddler pool. This option would also include the provision of a new water treatment plant.
- The retention and heating of the existing 25m pool and the demolition of the toddler pool and replacement with a free form splash pad/aquatic play structure. The option would also include the provision of a new water treatment plant.
- The demolition of the existing 25m pool and the development of a new outdoor heated 50m pool. This option considers either retaining and heating the existing toddler pool (Option 3A) or demolishing it and replacing it with an interactive splash pad/aquatic play structure (Option 3B). The option would also include the provision of a new water treatment plant.



Incorporates the retention and heating of the existing 25m pool, the demolition of the toddler pool and replacement with a free form splash pad/aquatic play structure and enclosure of both pools with a permanent structure to enable 12 month of the year access. The option would also include the provision of a new water treatment plant.

TABLE 1
PRELIMINARY COST ESTIMATES FOR OPTIONS 1- 4

	ESTIMATED TOTAL PROJECT COSTS* (Turner & Townsend July 2017) *Includes Contingencies Design 10%. Construction 5%, Profession Fees including Project Management 8%)						
	Option 1:	Option 2:	Option 3A:	Option 3B:	Option 4:		
	Existing 25m and Toddler - All Outdoor	Existing 25m and New Leisure Water /Splash Zone - All Outdoor	New 50m and Existing Toddler - All Outdoor	New 50m and New Leisure Water / Splash Zone - All Outdoor	Existing 25m Indoor and New Leisure Water / Splash Zone Indoor		
TOTAL	\$819,500	\$2,139,000	\$6,974,500	\$8,181,000	\$8,159,700		
	As existing	As existing	As existing	As existing			
Operational Period*	30 weeks	30 weeks	30 weeks	30 weeks	52 weeks		
TOTAL PROJECT O	TOTAL PROJECT COSTS						

Note: The report identifies that the catchment is not large enough to warrant extension of the operational period with the exception of an indoor option, where the facility can be programmed.

b. Investigate what would be the expected catchment area of residents who might make use of the Pool when heated.

A previous informing study for pools was undertaken by the Strategic Leisure Group (SLG) in 2014. This report, "The Future Options and Strategic Plan for Council's Public Swimming Pools", was utilised to develop Council's endorsed "Future of our Pools Strategy 2014 -2024".

The SLG report noted that Helensburgh Pool had a comparatively low catchment population of 8,231 within a 5km radius and the pool serviced the far northern suburbs. The SLG report notes there is minimal projected growth and the catchment area does not have a high index of disadvantage.

The OTIUM report (pp 38-44) identified the following potential impacts on the expected catchment area resulting from options 1-4:

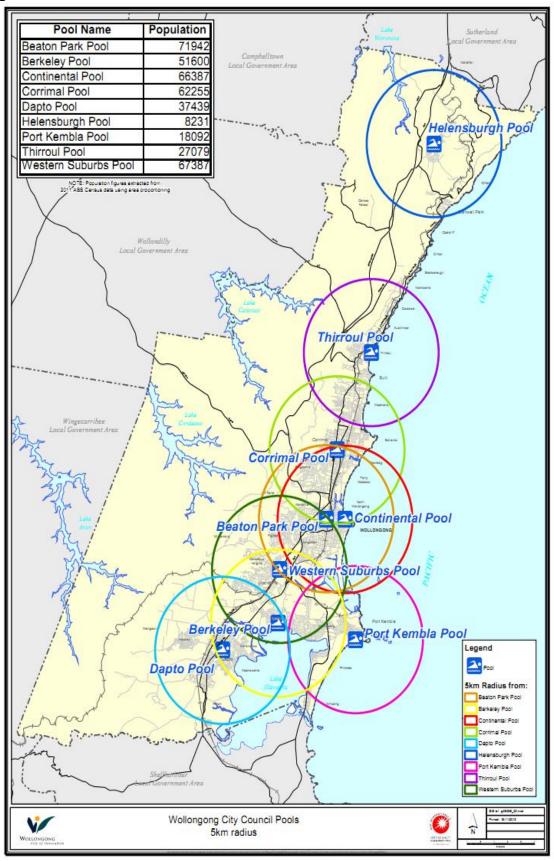
- It is anticipated that the majority of pool users (70% 80%) will come from within a 5 km catchment of the facility. However, the interactive play structure may attract users from a wider catchment 5km 15km.
- The heating of the existing 25m pool will not have a significant impact on the facility catchment, however, the provision of a new aquatic play structure will have an impact on the catchment of users. Aquatic Industry facility trends indicate that between 60% and 70% of users access these types of facilities for fun and social interaction.



- The introduction of heating of the pools will trigger an entry fee (in accordance with Council's Policy) to be charged which may have a negative impact on those people that travel to the facility to gain free access.
- The report notes access to an enclosed facility that is open for 12 months of the year has the potential to increase usage as a result of the extended opening period. However given the large number of both indoor and outdoor pools provided within Wollongong and surrounding areas, and the close proximity to indoor pools at Beaton Park and the Sutherland Leisure Centres, there is not strong evidence to indicate that there will be a large increase in the catchment numbers.
- The replacement of the existing 25m pool with a heated 50m pool will not have a significant impact on the facility catchment, however, there may be some increase by people who wish to swim/train in a 50m lap or competitive swimming clubs.



Pool Catchment 5km References from "The Future Options and Strategic Plan for Council's Public Swimming Pools"





c. Investigate what catchment areas of schools might make use of the Pool after it is heated and what purposes it could be utilised for.

The Otium Report (pp 18) noted that a 10 minute drive is the usual maximum driving threshold for schools to access swimming pools. Schools within a maximum 15 minute driving distance from the pool were identified. These are identified in the following table, a figure can be found on pp18 of the Otium report.

TABLE 2
SCHOOLS UTILISING HELENSBURGH POOL

School	Local Government Area	Distance from Helensburgh Pool	Driving Time from Helensburgh Pool
Holy Cross School	Wollongong City Council	900m	2 minutes
Helensburgh Public School	Wollongong City Council	1.2km	3 minutes
Otford Public School	Wollongong City Council	3.9km	8 minutes
M.E.T School	Wollongong City Council	7.7km	9 minutes
Stanwell Park Public School	Wollongong City Council	6.9km	11 minutes
Scarborough Public School	Wollongong City Council	12km	15 minutes
Waterfall Public School	Wollongong City Council	12.6km	12 minutes

Whilst the Department of Education primary schools listed above utilise Helensburgh Pool for the Government Funded Department of Education Special Swimming Scheme (SSS) and annual school swimming carnivals, past practice of heating of other pools (Corrimal and Dapto) has not led to any increase in school usage.

It is anticipated that schools in the Sutherland Shire would continue to utilise the already heated pools, viz Sutherland, Engadine and Caringbah pools, rather than travel to a heated facility at Helensburgh.

d. Include in the report what would be the charge for entry after the heating works have been finished, and would that fee also be charged during the summer period.

The Otium report noted (pp 48-49) that the current Council Policy indicates that the heating of a pool is the trigger for Council to begin charging an entry fee.

The 'Community Use of Council Swimming Pools Management Policy' states that "Council will maintain free entry for patrons at Council's non-heated swimming pools" and "Swimming pool entry fees will only be considered at these sites if additional facilities and services are offered where Council incurs additional costs (eg heated water other than solar heating)".

The Policy also states that "Fees and charges at Council's public swimming pools are in accordance with Council's current schedule of fees and charges. A review of the Fees and Charges for Council swimming pools will be undertaken annually and benchmarked against similar facilities."

As the four options examined in the Otium report included heating of either or both of the formal pool (25m or 50m) and the toddler pool or splash pad, the report recommends that should Council consider supplementary heating that Council introduce an entry fee.

The introduction of the fee would assist to aid Council in the cost recovery of the additional running costs (such as electricity) and those fees and charges are in line with existing Council heated Council facilities. These suggested fees would apply irrespective of the season length.

A review of fees and charges for similar facilities in proximity to the Helensburgh catchment has been undertaken and is presented in Table 3.



TABLE 3 BENCHMARK CASUAL RATE FEES AND CHARGES AT SIMILAR FACILITIES WITHIN THE CATCHMENT

	Engadine Pool	Sutherland Pool	Caringbah Pool	UOW Aquatic Centre	Wollongong City Council (Corrimal & Dapto)
Adult	\$7.30	\$8.00	\$7.30	\$5.50	\$5.00
Concession	\$5.60	\$6.00	\$5.60	\$4.50	\$3.30

e. Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool

The OTIUM report notes that additional operational expenditure maintaining the current operational season would primarily be associated with electricity costs. The actual power costs will though be dependent upon various variables including:

- Operating period;
- Operating pool/pool shelter temperature;
- Usage of pool covers;
- Efficacy of control implementation;
- Ambient conditions;
- Bather/visitor numbers and level of activity;
- Extent of water loss/make up into the pool;
- Existing Solar Heating Contribution/Loss; and
- Level and quality of ongoing preventive maintenance.

An annual allowance for ongoing maintenance for the heating plant is suggested to be 4% of the system capital cost. The cost will be much lower in the early life, rising as the plant ages. It is acknowledged within the industry that electric heat pumps accompanied by solar energy remain as the most effective and efficient heating option

For the electric heat pumps, the economic life expectancy is about 15 years.

TABLE 4
ESTIMATED ANNUAL ELECTRICITY COSTS ASSOCIATED WITH HEATING ONLY

Pool Water Heating Electricity Cost Estimates	Option 1: Existing 25m and Toddler - All Outdoor	Option 2: Existing 25m and New Splash Zone - All Outdoor	Option 3A: New 50m and Existing Toddler - All Outdoor	Option 3B: New 50m and New Splash Zone - All Outdoor	Option 4: Existing 25m Indoor and New Splash Zone Indoor - Including Enclosure HVAC**
Cost \$ per annum	\$31,000 (7 month) / \$50,000 (12 month)	\$31,000 (7 month) / \$50,000 (12 month)	\$76,000	\$76,000	\$84,000

Testing of the above costs can be done through examination of the actual costs at Council's two existing heated pools. Their actual costs are Dapto \$108,000 per annum and Corrimal \$121,000 per annum. Those costs are for 12 months and the costs above are for the current seven months' swim season, except Option 4, which is an indoor facility which would have much lower heat loss than the two outdoor pools.



The above does not allow for any contribution from the existing solar heating plant since this contribution can be very indeterminate and heat losses could far outweigh the gains unless the solar plant control can ensure satisfactory isolation during cold (eg overnight) periods.

The contribution from the solar plant could apply for the outdoor pools option and savings could be of the order of \$2,000 per annum if operated and controlled appropriately.

Given the recommendations of the consultancy do not favour extending the pool operational season and hours, there is no provision for additional labour costs. However, there would be additional costs in respect to cash collections (based on other pools \$80,000) and maintenance of the heat pumps.

In the case of option 4, there would be additional labour costs of approximately \$150,000.

PROPOSAL

The findings of the OTIUM Report outlined in Table 1 indicate that there are significantly high capital costs associated with all of the options (1 to 4) that have been presented. These preliminary capital budget estimates are conservative and coupled with the OTIUM findings indicate that when considered together with the low catchment population, minimum projected population growth and the number of existing heated facilities within a catchment area, it would be difficult for Council to prioritise the required expenditure to heat the Helensburgh Pool, expand it to a 50 metre pool or enclose the pool to create an all year round facility.

Council should though prioritise further investigative studies to inform future delivery program expenditure on maintaining and enhancing existing water treatment, plant and filtration systems to ensure the Helensburgh facility continues to operate in accordance with NSW Public Health guidelines.

CONSULTATION AND COMMUNICATION

Infrastructure Strategy and Planning Division in respect to consideration of further capital and ongoing costs; and

Property and Recreation Division - Recreation and Pool staff in regard to operational matters.

As this has been a technical assessment, there has not been wide community consultation. Should any of the options need to be further investigated, a community consultation plan would be developed and implemented.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal "We are a healthy community in a liveable city". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18	
Strategy	5 Year Action	Annual Deliverables	
5.1.4 Flexible services are provided and can adapt to changing community needs and service demands.	5.1.4.3 Investigate the future provision of Aquatic Services across the local government area and implement improvements.	Implement program opportunities and innovative activity options to encourage healthy living, enhance user experience and increase patronage and new revenue streams at our supervised public swimming pools.	

FINANCIAL IMPLICATIONS

Reference has been made to the financial implications throughout this report, however, the following table identifies the preliminary costs subject to the site costs:



	Option 1:	Option 2:	Option 3A:	Option 3B:	Option 4:
	Existing 25m and Toddler - All Outdoor	Existing 25m and New Leisure Water /Splash Zone - All Outdoor	New 50m and Existing Toddler - All Outdoor	New 50m and New Leisure Water / Splash Zone - All Outdoor	Existing 25m Indoor and New Leisure Water / Splash Zone Indoor
CAPITAL	\$819,500	\$2,139,000	\$6,974,500	\$8,181,000	\$8,159,700
OPERATING	\$31,000	\$31,000	\$76,000	\$76,000	\$84,000

At this stage should any option proceed, funding sources have not been identified.

CONCLUSION

A comprehensive technical assessment has now been undertaken by the Otium Planning Group for Council investigating the possible heating and/or expansion of Helensburgh Pool. The report identifies the following preliminary costs subject to site costs:

	Option 1:	Option 2:	Option 3A:	Option 3B:	Option 4:
	Existing 25m and Toddler - All Outdoor	Existing 25m and New Leisure Water /Splash Zone - All Outdoor	New 50m and Existing Toddler - All Outdoor	New 50m and New Leisure Water / Splash Zone - All Outdoor	Existing 25m Indoor and New Leisure Water / Splash Zone Indoor
CAPITAL	\$819,500	\$2,139,000	\$6,974,500	\$8,181,000	\$8,159,700
OPERATING	\$31,000	\$31,000	\$76,000	\$76,000	\$84,000

The report also identifies that Helensburgh Pool has a much lower catchment at 8,231 compared to Corrimal Pool with 62,255 and the next lowest [to Helensburgh] being Port Kembla at 18,092. It also identifies that there is low potential for population growth in the area or catchment from other areas due to supply of heated pools.

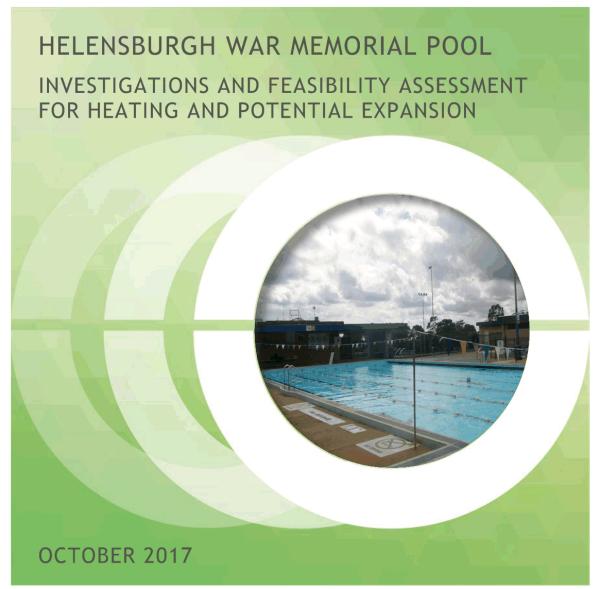
The report cites significant capital investment needed and increased operational costs without increased patronage. It does suggest that a fee for use might, in fact, have a negative effect on patronage.

The finalised report provides Council with a strategic direction for future use of Helensburgh Pool and will contribute to informing future delivery programs.











Prepared by Otium Planning Group Pty Ltd

In conjunction with JWC Engineers and Turner & Townsend Quantity Surveyors



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning Group) Final Report

OTIUM PLANNING GROUP PTY LTD



Head Office:

Level 6

60 Albert Road

South Melbourne VIC 3205 Phone: (03) 9698 7300

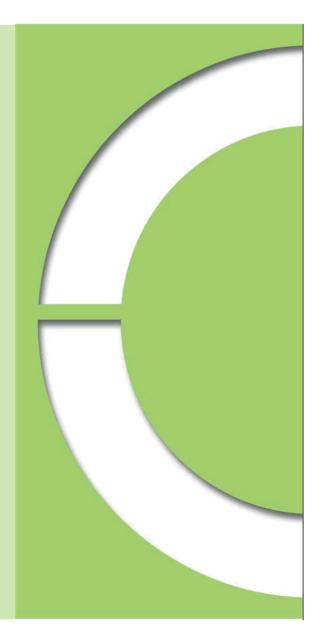
Email: vic@otiumplanning.com.au Web: www.otiumplanning.com.au

ABN: 30 605 962 169 CAN: 605 962 169

Otium Planning Group has offices in:

- Auckland
- Brisbane
- Cairns
- Christchurch
- Darwin
- Melbourne
- Perth
- Sydney

OPG, IVG and PTA Partnership has offices in Hong Kong, Shenzhen, Shanghai and Beijing





Document History					
Document Version	Date	Checked	Distribution	Recipient	
© 2017 Otium Planning Group Pty. Ltd. This document may only be used for the purposes for which it was commissioned and in accordance with the terms of engagement for the commission.					







TABLE OF CONTENTS

Exe	cutive Su	mmary	1
	Introd	uction	1
	Projec	t Purpose and Objectives	1
	Facilit	y Option Assessment Summary	1
	Option	Two	2
	Option	Three A and B	2
	Capita	l Cost	4
1.	Introduc	tion	5
	1.1	Study Background	5
	1.2	Project Purpose and Objectives	5
	1.3	Project Methodology	ϵ
2.	Helensb	urgh Pool - The Facility	7
	2.1.1	Pool Geometry	8
	2.2	Operational Review	8
	2.2.1	Usage Review	ç
	2.2.2	Program Usage	10
	2.2.3	Financial Review	11
	2.3	Interview with Facility Manager	11
3.	Project	Area and Facility Catchments	13
	3.1	Population Profile	13
	3.1.1	Population and Growth	13
	3.1.2	Diversity	13
	3.1.3	Disadvantage and Social Capital	13
	3.1.4	Housing, Homelessness and Transport	14
	3.1.5	Future Population Growth	14
	3.1.6	Implications for the Helensburgh Pool	14
	3.2	Wollongong Aquatic Facilities	14
	3.2.1	Aquatic Facilities within Helensburgh Pool Catchment	14
	3.2.2	Aquatic Facilities in Wollongong City Council	14
	3.2.3	Private Facilities within Wollongong LGA	16
	3.3	Regional Aquatic Facilities	16
	3.3.1	Private Facilities within Sutherland LGA	16
	3.4	Neighbouring Facilities	17
	3.5	Schools within Helensburgh Pool Catchment	18
	3.6	Helensburgh Pool Catchment Analysis	19
4.	Docume	nt Review	20
5.		Facility Trends	23
	5.1	Aquatic and Leisure Facility Trends	23
	5.1.1	Leisure and Aquatic Trends that Impact on Leisure Facilities	23
	5.1.2	General Aquatic Facility Trends	25
	5.1.3	Specific Aquatic Facility Trends	25
	5.1.4	Potential Future Aquatic Facility Trends	28



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning Group) Final Report

		_
.	Review of Heating and Expansion Options	29
	6.1 Option Descriptions	29
	6.2 Basis of Design	29
	6.3 Pool Water Heating Plant	32
	6.3.1 Plant Sizing	32
	6.3.2 System Descriptions	32
	6.4 Pool Structures	33
	6.4.1 New 50m Pool	33
	6.4.2 Asbestos Pipes	34
	6.5 Geotechnical Investigation	34
	6.6 Future Studies	34
	6.7 Cost Estimates for Mechanical Plant	34
	6.7.1 General	34
	6.7.2 Pool Water Heating	35
	Pool Water Treatment and Pool Hydraulics Notes;	36
	6.7.3 Indoor Option Pool Enclosure HVAC	36
	6.7.4 Associated Works by Other Trades	36
	6.8 Operational Cost Estimates for the Pool Water Heating Plant	37
	6.8.1 Estimated Annual Electricity Costs	37
	6.8.2 Ongoing Preventive Maintenance	38
	6.9 Facility Option Assessment Summary	38
	6.9.1 Option One	38
	6.9.1.1 Usage	38
	6.9.1.2 Catchment	38
	6.9.1.3 Capital Cost	38
	6.9.1.1 Operating Income	38
	6.9.2 Option Two	38
	6.9.2.1 Usage	39
	6.9.2.2 Catchment	39
	6.9.2.3 Capital Cost	39
	6.9.2.4 Operating Income	39
	6.9.3 Option Three A and B	41
	6.9.3.1 Usage	41
	6.9.3.2 Catchment	41
	6.9.3.3 Capital Cost	41 41
	6.9.3.4 Operating Income	
	6.9.4 Option Four 6.9.4.1 Usage	44
	6.9.4.2 Catchment	44
	6.9.4.3 Capital Cost	44
	6.9.4.4 Operating Income	44
	6.10 Recommended Strategic Direction	44
	6.10.1 Capital Cost	46
7.	Review of Fees and Charges	48
٧a	rranties and Disclaimers	50







DIRECTORY OF TABLES

Table 1 Options Summary	2
Table 2 Helensburgh Swimming Pool Key Facility Components	2 7
Table 3 Pool Geometry Details	
Table 4 Helensburgh Pool Operating Hours	8
Table 5 Corrimal Memorial Pool	10
Table 6 Dapto Olympic Pool	10
Table 7 Current and Projected Population of Helensburgh Pool Catchment by Suburb	14
Table 8 Summary of Supervised Pools in Wollongong LGA	15
Table 9 Main Private Aquatic Facilities in Wollongong	16
Table 10 Aquatic Facilities in Sutherland Shire	16
Table 11 Private Swim Centres in Sutherland Shire	17
Table 12 Schools within 15-minute drive of Helensburgh Pool	18
Table 13 Review of Documents Relating to Helensburgh Pool Upgrade/Expansion	20
Table 14 Options Summary	29
Table 15 Pool Water Temperatures	29
Table 16 Pool Shell Sizes and Building Enclosure	30
Table 17 Pool Water Plant Size	32
Table 18 Pool Water Heating Cost	35
Table 19 Pool Water Treatments and Pool Hydraulics Costs	36
Table 20 Pool Water Heating Electricity Cost Estimates	37
Table 21 Proposed Fees and Chargers Helensburgh Pool	48
Table 22 Additional fees that are applicable to 50m pools:	48
Table 23 Additional feels that are applicable to heated pools	48
Table 24 Population Age Profile of Helensburgh Pool Catchment Area	51
Table 25 Helensburgh Pool Catchment Gender Population	52
Table 26 Most Common Countries of Birth	52
Table 27 Summary of Diversity	53
Table 28 Weekly Individual Income Levels for the Helensburgh Pool Catchment Area	53
Table 29 Vehicle Ownership	54

APPENDICES

Appendix One - Demographic Review	5
Appendix 2 - Geotechnical Report	5
Appendix Three - Capital Cost Estimate	56



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning Group) Final Report



Executive Summary

Introduction

A 2014 study undertaken by Strategic Leisure Group entitled "Future Options and Strategic Plan for Council's Public Swimming Pools" recommended the following in relation to the Helensburgh Pool:

- RECOMMENDATION #19 Address plant/maintenance issues as part of a rolling program across all
 pools
- RECOMMENDATION #20 Upgrade change rooms to more contemporary standard (short/medium term), and
- RECOMMENDATION #21 Upgrade heating of main pool and toddlers pool, explore options for low cost
 enclosure of main pool, install low key leisure water, and introduce entry fees (timing subject to
 availability and adequacy of existing Trust Fund and S94 funds).

Subsequently, community members at Helensburgh sought and obtained Council's approval to undertake preliminary investigations into the feasibility of either/both heating and extending the pool. In February 2016 Council resolved to:

- A. Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool, and/or extending the pool length to 50 metres and the number of lanes to eight.
- B. Investigate what would be the expected catchment area of residents who might make use of the pool when heated.
- C. Investigate what catchment area of schools might make use of the pool after it is heated and for what purposes it could be utilized.
- D. Include in the report what would be the charge for entry after the heating works have been finished, and would that fee also be charged during the summer period.
- E. Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool.

Project Purpose and Objectives

The objectives of this project were to provide Council with:

- A comprehensive investigation and feasibility assessment into the capital costs of heating and extending the pool, projected usage of an upgraded facility, suggested fees and ongoing operational costs in line with the Council resolution of 22nd February 2016 (including geotechnical studies).
- 2. Further information on the likely capital and operational costs/benefits of "installing a low cost enclosure of the main pool" and the "provision of low key leisure water" as per the recommendation #21 of the Future Options and Strategic Plan for Council's Public Swimming Pools.
- 3. Provide clear recommendation of priorities for future capital investment in new infrastructure at Helensburgh Pool.

Facility Option Assessment Summary

From the objectives set out in the Brief (with specific reference to February 2016 Council Resolution 'A'), a set of options for heating and expansion were developed with Council officers. Four basic options were identified with one of these having a sub-option, i.e. **five (5) options** in total. The basic components of these options are set out in the table below.



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning Group) Final Report



Table 1 Options Summary

Option	Outdoor or Indoor	Exist 25m pool (see Note 1)	Existing Toddlers (see Note 2)	Wading water / splash zone	New 50m Pool (see Note 3)	Low cost Roof Enclosure	Season (months)
1	Outdoor	Retain, + new heating	Retain, + new heating + separate WTP	n/a	n/a	n/a	7
2	Outdoor	Retain, + new heating	Demolish	New, including new WTP + heating	n/a	n/a	7
3A	Outdoor	Demolish	Retain, + new heating + separate WTP	n/a	New pool, including new WTP + heating	n/a	7
3B	Outdoor	Demolish	Demolish	New, including new WTP + heating	New pool, including new WTP + heating	n/a	7
4	Indoor	Retain, + new WTP + heating	Demolish	New, including new WTP + heating	n/a	Roof enclosure over both 25m pool and 'wading / splash zone'	12

WTP = Water Treatment Plant

Option One

The retention and heating of the existing 25m pool and toddler pool. This option would also include the provision of a new water treatment plant.

Option Two

The retention and heating of the existing 25m pool and the demolition of the toddlers pool and replacement with a free form splash pad/aquatic play structure. The option would also include the provision of a new water treatment plant.

Option Three A and B

The demolition of the existing 25m pool and the development of a new outdoor heated 50m pool. This option considers either retaining and heating the existing toddlers' pool (3A) or demolishing it and replacing it with an interactive splash pad/aquatic play structure (3B). The option would also include the provision of a new water treatment plant.

Option Four

Option for includes the retention and heating of the existing 25m pool, the demolition of the toddlers pool and replacement with a free form splash pad/aquatic play structure and enclosure of both pools with a permanent structure to enable 12 month of the year access. The option would also include the provision of a new water treatment plant.

Recommended Strategic Direction

The Study's market research, consultation and aquatic trend reviews indicate that there are a number of localised trends in relation to the Helensburgh Pool facility usage and aquatic activity participation.





These include the following broad trends that will impact on the future strategy for the centre:

- Helensburgh Swimming Pool was originally opened as a War Memorial pool in the 6 December 1969 and is therefore 48 years old.
- The pool is one of 18 pool facilities provided for Wollongong residents and one of the nine supervised
 pools. There are also a number of privately operated learn to swim facilities within the catchment
 area.
- The facility is highly valued by residents and is well used with visitations of the Centre over the past four years increasing. Total usage has increased from 55,907 visits in 2012/2013 to 71,480 in 2015/2016, an increase of 15,573 (27.8%).
- The operational performance review indicates that the facility is generating an increasing operational deficit due to the high cost associated with operating the facility (staffing, utilities, chemicals)
- Future demand will be affected by the ongoing pressure by residents to access quality and affordable sporting and leisure activities.
- The younger age profile of Helensburgh residents with the median age being 35 years should see current usage levels of the pools continue, particularly if improved facilities to attract the family market are provide, even though there will be a gradual ageing of the population over time.
- The resident population catchment for the pool is approximately 8,922 which is relatively small

The review findings indicate that the Helensburgh Pool is highly valued by residents. The cost to operate the facility however is increasing due to the high cost of staffing and operating outdoor aquatic facilities and the relatively small catchment population surrounding the facility.

A review of the usage data indicates that the pool is heavily used during the warmer summer months between November and February each year. This usage is predominantly the family/social market with some program occurring through the learn to swim operators.

Previous research conducted by the Otium Planning Team indicates that in many cases 60% to 70% of facility users come from the recreation/leisure sector with 20% to 30% coming from the competitive/training/fitness markets.

The 2014 Aquatic Strategy recommended the following for the Helensburgh Pool:

Given its comparatively low catchment population and low projected growth, upgrading of Helensburgh Pool is a lower priority than other pools. If funds held in the Stanwell Park Rock Pool Trust Fund are available, sufficient (together with S94 funds) to cover the cost of upgraded heating, and their use supported by the community for that purpose, then the timing of upgraded heating should be brought forward. The introduction of entry fees would be required to cover increased operational costs associated with heating.

The findings of this review indicate that the high cost associated with all of the options (1 to 4) investigated, coupled with the low catchment population and the large number of existing facilities within the catchment area cannot justify the required expenditure to heat the Helensburgh Pool, expand it to a 50 metre pool or enclose the pool to create an all year round facility.

The above findings and facility trends along with the current usage trends indicate the need to ensure future improvements that in the longer term:

- Encourages greater family/child entries by adding more leisure water, play and fun water features
 and some interactive water. This would include the development of an outdoor splash pad with a
 range of features suitable for varying age groups. This type of facility could be developed in the
 northwest corner of the site adjacent to the 25m pool. The ground level at this location is lower
 than around the 25m pool and the level difference may provide some advantage in the design of a
 splash pad.
- Continues to monitor and review the plant and equipment to ensure the water turnover rates and technical requirements are achieved.





- Provides the facility with a general upgrade to improve the amenities and customer comfort including refurbishing the change rooms and resurfacing the concourse.
- Installs a PV solar panel system to the change rooms roof to help offset utility costs.
- Separates the water filtration system to assist with better meeting the health standards
- Initiates additional direct programming opportunities to continue to attract usage of the facility including learn to swim and holiday program activities i.e. inflatables.

Capital Cost

As a stand-alone new water play area, this facility will include with the AP250:

- Dedicated water treatment plant
- Pumps and controls for leisure features
- Balance tank
- Building enclosure for plant
- Electrics and site power upgrade

No water heating is included but it is recommended that provision be made in pipework for future connections to either solar panels or a heat pump system.

Capital Cost: Order of Cost Estimate to +/-35% (Excl. GST) capital cost of the splash pad

÷ 1	То	tal	\$505,000
	•	Electricals	\$30,000
	•	Plant room building	\$60,000
	•	Plant room pipework	\$15,000
	•	Aquatic play structure AP250 White Water West or similar	\$400,000*

** WWW capex estimate

An allowance of between \$255,000 - \$480,000 could also be considered to improve the amenity of the facility

• Change room refurbishment \$50,000 - \$100,000

• Concourse \$50,000 - \$200,000 (depending on extent of surface replacement)

Plant and equipment \$50,000 - \$60,000
 Solar panel system \$20,000 - \$30,000
 Separate filtration system \$85,000 - \$90,000





1. Introduction

1.1 Study Background

A 2014 study undertaken by Strategic Leisure Group entitled "Future Options and Strategic Plan for Council's Public Swimming Pools" recommended the following in relation to the Helensburgh Pool:

- RECOMMENDATION #19 Address plant/maintenance issues as part of a rolling program across all
 pools
- RECOMMENDATION #20 Upgrade change rooms to more contemporary standard (short/medium term), and
- RECOMMENDATION #21 Upgrade heating of main pool and toddlers pool, explore options for low cost
 enclosure of main pool, install low key leisure water, and introduce entry fees (timing subject to
 availability and adequacy of existing Trust Fund and S94 funds).

Subsequently, community members at Helensburgh sought and obtained Council's approval to undertake preliminary investigations into the feasibility of either/both heating and extending the pool. In February 2016 Council resolved to:

- F. Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool, and/or extending the pool length to 50 metres and the number of lanes to eight.
- G. Investigate what would be the expected catchment area of residents who might make use of the pool when heated.
- H. Investigate what catchment area of schools might make use of the pool after it is heated and for what purposes it could be utilized.
- Include in the report what would be the charge for entry after the heating works have been finished, and would that fee also be charged during the summer period.
- J. Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool.

1.2 Project Purpose and Objectives

The objectives of this project were to provide Council with:

- 4. A comprehensive investigation and feasibility assessment into the capital costs of heating and extending the pool, projected usage of an upgraded facility, suggested fees and ongoing operational costs in line with the Council resolution of 22nd February 2016 (including geotechnical studies).
- 5. Further information on the likely capital and operational costs/benefits of "installing a low cost enclosure of the main pool" and the "provision of low key leisure water" as per the recommendation #21 of the Future Options and Strategic Plan for Council's Public Swimming Pools.
- 6. Provide clear recommendation of priorities for future capital investment in new infrastructure at Helensburgh Pool.





1.3 Project Methodology

The study was undertaken in four (4) stages:





wollongong





Helensburgh Pool - The Facility 2.

Wollongong City Council owns and manages 18 public swimming pools (9 supervised public swimming pools and 9 unsupervised tidal ocean rock pools). The Helensburgh Pool is one of the 9 supervised pools.

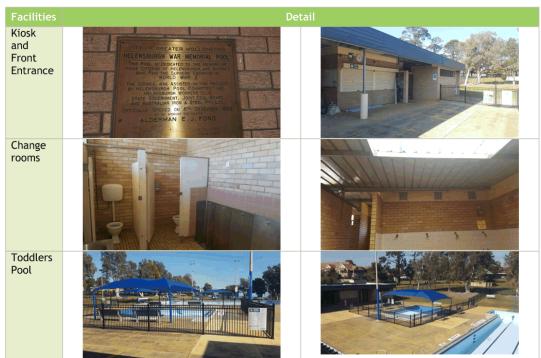
The Helensburgh Pool is situated in Walker Street, Helensburgh and is one of Wollongong City Council's three freshwater chlorinated facilities offered to the public free of charge and open during the designated swimming season.

Constructed in 1969, the facility is an 'older generation' pool comprising:

- Main 25m pool
- Toddlers pool
- Entry area, office, kiosk, etc
- Changerooms
- Plantroom
- Shade structures

The following photographs detail the key facility components provided at Helensburgh pool.

Table 2 Helensburgh Swimming Pool Key Facility Components









2.1.1 Pool Geometry

The pool geometry details are tabulated below:

Table 3 Pool Geometry Details

	Length(m)	Width (m)	Depth - Max/Min. (m)
Main pool	25	13.2	0.95 to 1.5
Toddlers Pool	9	6	0.48 to 0.28

Both pools operate on a combined single filtration/water treatment system. The filters are gravity sand type and typical of the era. There are 2 sand filter cells and a single pump for the twin filter cells, and this has recently been supplemented with a small booster pump for the toddler pool to increase flow rates specifically to that pool.

Calcium hypochlorite is used for chlorine dosing and hydrochloric acid for pH control. These are controlled by a modern electronic controller.

The pools are solar heated with main pool water temperatures typically ranging between 21-28 degrees in summer with an average of 23-25 degrees depending on sunshine hours. The main pool has solar blankets. This solar heating system is a recent addition and appears of good quality.

The pool shell has reportedly experienced some structural movement in the past 3-5 years that has led to issues with soiled water collection in the shallow end of the pool but this is the subject of a separate report by TERRA Design (see Section 2.2).

The facility has no complementary features such as health and fitness, leisure water or kiosk.

The change room and amenities is typical of the era being of brick construction with a flat iron roof slightly elevated above the walls to give natural ventilation into the change rooms. The change rooms are modest in size.

There are four (4) light towers located around the main pool.

2.2 Operational Review

The Helensburgh Pool is an outdoor seasonal pool that operates for a seven-month season between the months of September to March each year.

The outdoor pools operate from 1st Saturday of September school holidays (23 September for 2017) to ANZAC day following year (24 April for 2018).

The current operating hours for Helensburgh Pool are provided in the table on the following page.





Table 4 Helensburgh Pool Operating Hours

Day/s	September and March	October - February
Monday - Sunday	6.00am - 6.00pm	6.00am - 7.00pm

2.2.1 Usage Review

The figure below provides the total number of visits for the period 2012/13 to 2015/16.

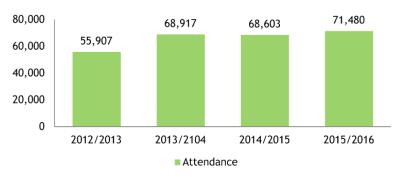


Figure 1 Helensburgh Pool Annual Visitation

The following figure provides the monthly visitation for over the four year review period 2012/2013 - 2015/2016.

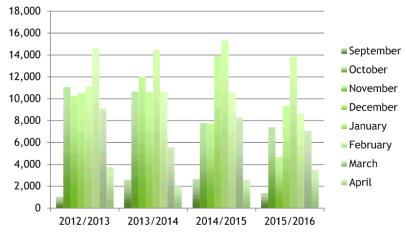


Figure 2 Monthly Visitations 2012/2013 - 2015/2016

A review of visitation by month clearly indicates the highest usage of the facility occurs over the summer months of December, January and February, with a steady drop off in March each year.

A review of the results indicates that over the four-year period visitation has increased each year peaking at 71,487.8 visits and achieving in overall increase of 21%.

When compared to industry benchmarks and averages these usage figures indicate an extremely high use of the pool per head of people in the primary catchment. Based on a seven month season the pool would be receiving 10,000 visits per month, which translates, to 2,500 visits per week and nearly 400 visits every day the pool is operating.





Industry benchmarks indicate that the average visits per annum is 6 to 9 visits per person in a catchment. The higher figure of 9 would relate to catchments that have access to indoor facilities or those with unique feature i.e. water slides etc.

A review of the attendance figures per month at the Corrimal Memorial and Dapto Olympic Pool indicates that these pools are not achieving the same results, which indicates the Helensburgh Pool may be optimistic.

Table 5 Corrimal Memorial Pool

Corrimal	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Total
2016/2017	5,085	4,446	7,310	13,827	17,562	14,450	21,159	19,656	9,533	6,014	6,496	5,145	130,683
2015/2016	1,733	4,416	6,579	15,385	16,252	12,460	17,009	21,086	12,264	6,645	5,492	4,706	124,027
2014/2015	4,716	2,750	9,502	14,334	16,307	11,495	15,930	17,113	9,564	5,724	4,902	2,850	115,187
2013/2014	3,533	3,492	7,620	14,503	14,034	12,530	18,819	16,994	11,047	5,595	5,940	4,776	118,883
2012/2013	3,910	3,066	6,746	13,729	13,190	11,866	16,247	19,078	10,983	4,372	1,571	4,019	108,777

Table 6 Dapto Olympic Pool

Corrimal	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Total
2016/2017	2,401	4,508	6,679	5,902	10,122	9,717	11,565	9,467	6,448	2,849	796	2,247	72,701
2015/2016	2,837	2,267	3,290	6,597	5,748	7,201	8,397	10,692	8,668	2,658	2,920	2,920	64,195
2014/2015	2,913	1,434	4,986	8,269	8,994	7,457	10,572	8,970	7,957	2,227	654	2,871	67,304
2013/2014	3,029	3,163	5,679	8,163	8,452	8,036	8,284	8,365	7,403	2,849	5,665	2,908	71,996
2012/2013	2,615	1,978	3,541	6,920	7,819	6,660	8,282	7,798	7,997	2,846	3,046	2,184	61,686

2.2.2 Program Usage

The Helensburgh Pool is used by a number of groups, organisations and schools on a regular basis for a range of learn to swim and squad swimming/training programs. The Centre Management does not directly run any programs. The following provides a summary of the current program use

Ocean swimmers - 15/20 participants 6am - 8am squads

Triathlete club - 20 people Tuesday/Thursday - 3 lanes 6 - 7 older children 7-8 young children

Northern Stars - Learn to Swim Contract

Monday - 1 lane

4/5 classes - 3.30pm - 5.30pm

Saturday - lane

9.00am - 11.30

Crawchys Swim School Squad - Contract Tuesday/Wednesday/Thursday - 2 lanes 3.30pm - 6.00pm

3 year contract

Friday - casual bookings only Birthday parties /recreation swimming

Sunday

Recreation swimming





2.2.3 Financial Review

A review of the financial performance of the facility over the past 12 months has been completed. The Helensburgh Pool is a free entry pool and income is derived from pool bookings only i.e. learn to swim contracts.

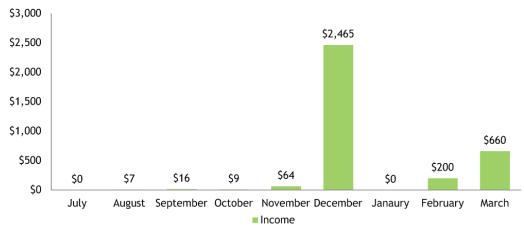


Figure 3 Helensburgh Pool Income



Figure 4 Helensburgh Pool Expenditure

The Centre receives limited income via the programmes resulting in net operating subsidy by Council of \$280,219 for the 2015/2016 year.

A review of the financial performance of the Centre indicates the highest expenditure occurred in the hotter summer months of November, December and January. This expenditure would be related to increased staffing for lifeguards and chemical cost during the heavy use periods.

2.3 Interview with Facility Manager

An interview was held with the current manager to identify any key issues and opportunities

• Over the past 8 years the usage of the pool has changed. As a result of the pool being free of charge there is a lot of usage by people residing outside of Helensburgh.





- The local Helensburgh people use the pool for lap swimming and recreational use.
- During periods of hot weather the pool is at capacity with up to 140 people in the pool on weekends.
- The swimming club disbanded 2 years ago.
- The Sutherland Leisure Centre and the Engadine Leisure Centre are approximately 20 minutes drive from Helensburgh these pools are used for learn to swim and swimming club
- The locals have indicated a desire to swim all year round, however the only way for this to occur
 would be to enclose the pool.
- The priorities would be for
 - o Young families recreation area
 - People would like swim club
 - o Training for surf club
 - o Water polo training
 - Aging population physio/rehabilitation







3. Project Area and Facility Catchments

3.1 Population Profile

The following provides a summary of the Wollongong demographic profile that may have an impact on the current and future use of aquatic and leisure facilities. For the purpose of this study, the catchment population analysis has also been done on the following profile areas, which make up the catchment of the Helensburgh Pool:

- Helensburgh Otford
- Stanwell Park, Stanwell Tops, Coalcliff

A detailed analysis of the demographics can be found in Appendix One.

3.1.1 Population and Growth

- The estimated resident population of Wollongong City as at 2016 was 211,213¹. This estimates an
 increase since 2011 of 9,145 when ABS census data calculated the population of Wollongong City at
 202.068.
- The estimated resident population of the catchment area for the Helensburgh pool as at 2016 was 8,922.
- The median age of the City of Wollongong in 2011 was 38 years. This is consistent with New South
 Wales as a whole (38 years) and lower than regional NSW (41). The catchment area for Helensburgh
 pool demonstrates a younger demographic, with the median ages of Helensburgh-Otford and Stanwell
 Park-Stanwell Tops-Coalcliff in 2011 being 35 and 39 respectively.
- The Helensburgh Pool catchment had more males than female residents which is the opposite to the Wollongong area population.

3.1.2 Diversity

- Cultural diversity is quite low in the Helensburgh Pool catchment area when compared to the Wollongong area with 3.9% being born in anon-English speaking country and only 3.6% speaking a language other English while at home, compared to 14.3% and 16.7% respectively for Wollongong.
- There were significantly fewer residents in the Helensburgh Pool catchment area speaking a language other than English at home. Only 3.6% of the catchment population speak another language compared to 16.7% in the Wollongong City area.

3.1.3 Disadvantage and Social Capital

 The Helensburgh Pool catchment has a lower level of disadvantage when compared to the Wollongong City area and NSW as a whole. The higher the score on the Index the lower the level of disadvantage

Stanwell Park, Stanwell Tops, Coalcliff 1100.9
 Helensburgh Orwell 1072.9
 NSW 995.8
 Wollongong City 979.8

• According to 2011 census data, 28.4% of households in the Helensburgh Pool catchment area earned a high income (\$2,500 or more per week) compared to 15.8% for Wollongong City as a whole. There was a significantly lower proportion of households earning a low income of less than \$600 per week (12.1%) than Wollongong City (26.0%).

¹ Wollongong City Community Profile, 2016. ProfileID (http://profile.id.com.au)





3.1.4 Housing, Homelessness and Transport

- There were significantly fewer social housing rentals in the Helensburgh Pool catchment area within 1.4% of households falling into this category compared to 8.3% in the Wollongong City area. This is also lower than the Regional NSW average of 4.8% of households.
- Wollongong City has a lower rate of vehicle ownership when compared to the Helensburgh Pool
 catchment area. 82.7% of Wollongong City households own one or more vehicles, compared to 91.5%
 of the Helensburgh Pool catchment.

3.1.5 Future Population Growth

- Population projections indicate that moderate growth is expected to continue with the population predicted to reach 232,566 by 2026 and 253,792 by 2036.
- Forecasts indicate that the catchment will experience minimal growth between 2016 and 2036 with a
 forecast population in 2036 of 9,666 as illustrated at Table 7 Current and Projected Population of
 Helensburgh Pool Catchment by Suburb.

Table 7 Current and Projected Population of Helensburgh Pool Catchment by Suburb

Suburb	Estimated 2016 Population	Pop Increase 2016-2026	Estimated 2026 Population	Pop Increase 2026-2036	Estimated 2036 Population
Helensburgh-Otford	6,475	+481	6,956	+270	7,226
Stanwell Park- Stanwell Tops- Coalcliff	2,447	-75	2,372	+68	2,440
Total	8,922	+406	9,328	+338	9,666

Source: ForecastID, 2016

3.1.6 Implications for the Helensburgh Pool

Possible implications of the demographic make-up of the Helensburgh Pool catchment for the potential upgrade/expansion of the Helensburgh Pool include:

- The large proportion of children in the catchment suggests there is likely to be demand for leisure water suitable for young children.
- Higher income levels suggest a low degree of price sensitivity and potential ability to pay for future aquatic services if required.
- The projected ageing population indicates there is likely to be a future demand for heated water.

3.2 Wollongong Aquatic Facilities

3.2.1 Aquatic Facilities within Helensburgh Pool Catchment

According to the Future Options and Strategic Plan for Council's Public Swimming Pools, 2014, the only other aquatic facility within the Helensburgh Pool catchment area is the Coalcliff Rockpool.

3.2.2 Aquatic Facilities in Wollongong City Council

Wollongong City Council owns and manages 18 public swimming pool facilities. Of these, nine are supervised public swimming pools and nine are unsupervised tidal rock pools. There are also 17 patrolled beaches throughout the municipality. Table 8 below provides a summary of the supervised pools².

² Information sourced from Future of Our Pools Strategy & Future Options & Strategic Plan for Council's Public Swimming Pools, 2014





Table 8 Summary of Supervised Pools in Wollongong LGA

				Core	Facility	Comp	onents	Driving		
Pool Name		50m	25m		Leisure Water	Heatin	Other	Distance & Time from H'burgh Pool	Catchment	
Beaton Park Leisure Centre	Indoor Leisure Centre		✓			✓	Adjoining program water	33km 30min	Broad - across LGA	
Berkeley Pool	Freshwater chlorinated	~		✓				42km 33min	Local	
Continental Pool	Outdoor salt water	✓		✓			45m pool	34km 31min	22% Local Remainder across LGA	
Corrimal Pool	Freshwater heated	✓	✓	✓		✓		27km 27min	Broad - across LGA	
Dapto Pool	Freshwater heated	✓		✓		✓	20m x 20m pool	46km 35min	44.6% Local 10.9% outside LGA	
Port Kembla Pool	Outdoor salt water	✓		✓	✓		20m x 7m pool	44km 36min	Broad 16% Local	
Thirroul	Outdoor salt water			✓			55 yard ocean pool	22km 20min	Mostly local (42%)	
Western Suburbs Pool (Unanderra)	Freshwater chlorinated	~	✓	✓		✓		39km 30min	Local & wider	

Figure 5 shows the location of the Wollongong City Council pools across the Wollongong LGA.



Figure 5 Pools within Wollongong LGA (Source: Future of Our Pools Strategy 2014-2024)

wollongong





3.2.3 Private Facilities within Wollongong LGA

There are a number of private aquatic facilities within the Wollongong LGA. These include a 50m pool at the University of Wollongong and a number of small learn-to-swim facilities. All are outside the catchment for Helensburgh Pool as indicated by Table 9.

Table 9 Main Private Aquatic Facilities in Wollongong

Facility	Main Components	Distance & Driving Time from Helensburgh Pool
McKeon's Swim Centre	Indoor heated 25m x 6 land pool 12m x 5m heated program pool	38.5km 32min
University of Wollongong	50m x 8 lane heated outdoor pool Large gymnasium	32km 25min
Wollongong Surf Leisure Resort	25m x 4 lane heated indoor pool	28.4km 27min
Northern Stars Swim School	25m x 4 lane heated indoor pool	25km 33min

3.3 Regional Aquatic Facilities

Neighbouring Sutherland Shire manages four aquatic facilities. Of these, Sutherland Leisure Centre and Engadine Leisure Centre are within a 25-minute drive of Helensburgh Pool and offer a number of heated pools and learn-to-swim programs as well as additional gymnasium and leisure centre facilities. The Sutherland Shire aquatic facilities are listed at Table 10.

Table 10 Aquatic Facilities in Sutherland Shire

Aquatic Centre	Main Components	Distance & Driving Time from Helensburgh Pool
Sutherland Leisure Centre Rawson Avenue Sutherland	50m heated outdoor pool Heated outdoor utility pool Heated indoor programs pool Heated indoor children's play area/pool Heated indoor 25m pool Spa, steam room, inflatables Gym/leisure centre facilities	24km 24min
Engadine Leisure Centre Anzac Avenue Engadine	50m heated outdoor pool Heated outdoor program pool Heated toddlers pool Gym/leisure centre facilities	20km 21min
Caringbah Leisure Centre Jacaranda Rd Caringbah	50m heated outdoor pool 25m heated outdoor program pool Toddlers pool	31km 34min
Como Swimming Complex Cremona Road Como	20m seasonal program pool	29km 32min

3.3.1 Private Facilities within Sutherland LGA

There are a number of privately operated swim schools within the Sutherland Shire LGA. As indicated by Table 11 all of these are greater than a 25-minute drive from the Helensburgh Pool.





Table 11 Private Swim Centres in Sutherland Shire

Swim School	Distance & Driving Time from Helensburgh Pool
Sutherland (Rice's) Swimming School	27km 27min
Shire Swim School	26.8km 27min
Little Fins Swim School	25.9km 26min
Little Fins Swim School (Bangor Shopping Centre)	29.7km 29min
Starting Blocks Swim School	29.9km 32min
Taren Point Swim School	30.9km 35min

3.4 Neighbouring Facilities

Figure 6 shows aquatic facilities within the Wollongong and Sutherland LGAs that are within a 10km and 20km radius of the Helensburgh Pool.

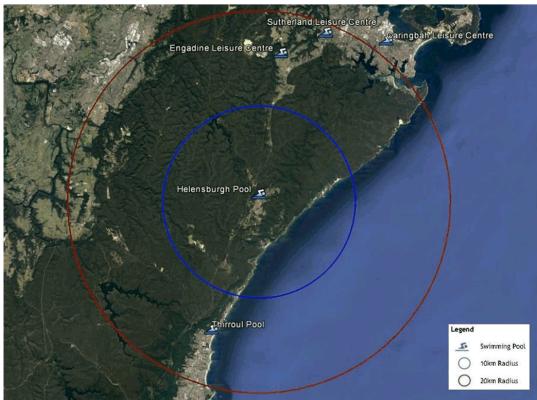


Figure 6 Aquatic Facilities within a 10km and 20km Radius of Helensburgh Pool

wollongong



3.5 Schools within Helensburgh Pool Catchment

Anecdotally, a 10-minute drive is the usual maximum driving threshold for schools to access swimming pools. Schools within a maximum 15-minute driving distance from the pool were identified. These are identified in the table and figure below.

Table 12 Schools within 15-minute drive of Helensburgh Pool

School	LGA	Distance from Helensburgh Pool	Driving Time from Helensburgh Pool
Holy Cross School	Wollongong City Council	900m	2 minutes
Helensburgh Public School	Wollongong City Council	1.2km	3 minutes
Otford Public School	Wollongong City Council	3.9km	8 minutes
M.E.T School (Darkes Forest Campus)	Wollongong City Council	7.7km	9 minutes
Stanwell Park Public School	Wollongong City Council	6.9km	11 minutes
Scarborough Public School	Wollongong City Council	12km	15 minutes
Waterfall Public School	Sutherland Shire Council	12.6km	12 minutes

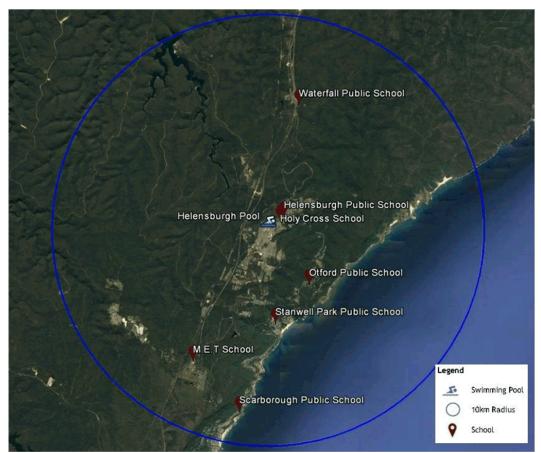


Figure 7 Schools within a 15 Minute Drive of Helensburgh Pool

wollongong



3.6 Helensburgh Pool Catchment Analysis

The Future Options and Strategic Plan for Council's Public Swimming Pools, 2014 determined that the catchment for the Helensburgh pool is comprised predominately of the northern suburbs of the Wollongong City Council local government area. The report noted that:

- The catchment has a relatively small population with minimal projected growth.
- The catchment area does not have a high index of disadvantage.
- There is a comparatively high proportion of young people (0-14 years) in the catchment compared to Wollongong as a whole.

The 2014 study found that nearly half (45.9%) of all patrons came from Helensburgh with a further 18.6% coming from nearby suburbs of Otford, Stanwell Park, Stanwell Tops, Coalcliff and Darkes Forest.

Figure 8 shows the catchment for the Helensburgh pool as determined by the Future Options and Strategic Plan for Council's Swimming Pools, 2014.

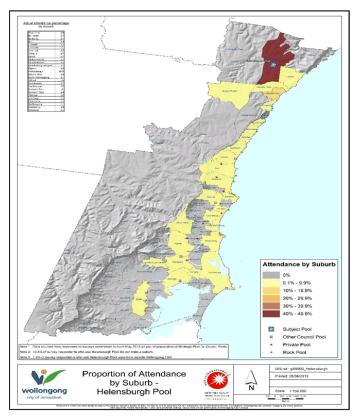


Figure 8 Helensburgh Pool Catchment (Source: Strategic Leisure Group, 2014)





4. Document Review

A review of literature of previous and existing policies and studies relating to the Helensburgh Pool was undertaken. Relevant key themes identified in the literature are summarised below.

Table 13 Review of Documents Relating to Helensburgh Pool Upgrade/Expansion

Table 13 Kevi	ew of bocuments Relating to netensburgh Pool opgrade/Expansion
Source	Key Themes relevant to this study
Wollongong 2022 Community Strategic Plan	Contains the community vision: "From the mountains to the sea, we value and protect our natural environment and we will be leaders in building an educated, creative and connected community." Supported by six community goals: 1. We value and protect our environment. 2. We have an innovative and sustainable economy. 3. Wollongong is a creative, vibrant city. 4. We are a connected and engaged community. 5. We are a healthy community in a liveable city. 6. We have sustainable, affordable and accessible transport. Goal 5 is most relevant to the potential heating and expansion of Helensburgh Pool, particularly Objective 5.5 - Participation in recreational and lifestyle activities is increased. Objective 5.5 contains Strategy 5.5.2 - A variety of quality public spaces and opportunities for sport,
The Future	leisure, recreation, learning and cultural activities in your community. Strategy developed using a combination of previous community feedback and work undertaken by
of Our Pools Strategy 2014-2024	Strategic Leisure Group in 2013. Contains the following vision: "Wollongong City is host to a variety of highly used diverse and appealing aquatic recreational opportunities that meet our community's needs of today and their desires of tomorrow". Contains six key principles: 1. DIVERSITY: A diverse range of aquatic recreation opportunities are available for all to enjoy, assisting in promoting healthy living. 2. ENGAGEMENT: Our community is involved in the planning, use and renewal of our aquatic facilities. 3. PROMOTION: Our community and visitors have access to current information on our city's aquatic recreation opportunities. 4. SUSTAINABILITY: A sustainable based approach is undertaken in the planning and management of our current and future aquatic facilities. 5. EFFECTIVE MANAGEMENT: Our pools are effectively managed with a strong focus on the customer's experience and public safety. 6. PARTNERSHIPS: We are open to exploring partnerships which value-add to our aquatic recreation opportunities.
	 Key Actions within these principles that relate to heating and/or expansion of Helensburgh Pool include: 1.4 Explore innovative and interactive water/leisure play options at existing pools where considered appropriate. 1.5 Maintain opportunities for lap swimming while encouraging events and activities that further activate facilities and establish them as community hubs for social interaction. 1.7 Explore new program opportunities and innovative activity options to encourage healthy living, enhance use experience and increase patronage and new revenue streams at our supervised swimming pools. Some of the key findings relevant to this study include: The community is seeking more contemporary aquatic recreation opportunities. Pools need to facilitate a wider range of leisure activities. 6 out of 9 pools (including Helensburgh) have no admission fees. If new infrastructure/services are provided fees may need to be introduced. Financial resources for new infrastructure are limited and commercial opportunities may offer
	 1.5 Maintain opportunities for lap swimming while encouraging events and activities that further activate facilities and establish them as community hubs for social interaction. 1.7 Explore new program opportunities and innovative activity options to encourage healthy living, enhance use experience and increase patronage and new revenue streams at our supervised swimming pools. Some of the key findings relevant to this study include: The community is seeking more contemporary aquatic recreation opportunities. Pools need to facilitate a wider range of leisure activities. 6 out of 9 pools (including Helensburgh) have no admission fees. If new infrastructure/services are





Course	Very Thomas valeyant to this study
Source	Key Themes relevant to this study
Future	In relation to Helensburgh pool: • One of three fresh water chlorinated facilities offered to the community free of charge and open during the designated swimming season. • Visitation far exceeds industry benchmark comparisons. • Cost recovery levels are way below industry standards at 4%. • The median subsidy per visit is \$4.05 Key points relating to Helensburgh Pool were:
Options and Strategic Plan for Council's Public Swimming Pools, 2014 (Strategic Leisure Group)	 Helensburgh Pool predominantly services the far northern suburbs and has a small catchment population with minimal growth. The pool is an 'old generation' pool with outdated changerooms. Entry is free. Solar heating is provided. The pool is anecdotally situated in a cold area. No additional facilities (e.g. health/fitness, leisure water, kiosk) A small privately owned, heated program pool is nearby. Patronage is much higher than industry benchmarks. Anecdotally, residents also patronise 'new generation' pools in neighbouring Cronulla Shire.
J. 54p)	 Cost recovery 3.8% vs median industry benchmark for pool category 44%. Subsidy per visit \$4.05 (median benchmark \$6.68)
	 Key demands arising from consultation included: Major overhaul/additional water space including upgraded heating, new 50m pool, diving blocks/boards. Extend operating hours, extend swim season and open year-round.
	Other key consultation findings: • Demand for upgrading amenities/changerooms. • Demand for better heating (existing solar considered inadequate). • Insufficient water space for all users in good weather. • Insufficient shade for school users.
	Recommended in relation to Helensburgh Pool: • #19 - Address plant/maintenance issues as part of a rolling program across all pools. • #20 - Upgrade change rooms to more contemporary standard. • #21 - Upgrade heating of main pool and toddlers pool, explore options for low cost enclosure of main pool, install low key leisure water, and introduce entry fees.
	In addition, the report noted that: • upgrading of Helensburgh pool is a lower priority than other pools given the comparatively low catchment population and projected growth.
	 Timing of the heating should be brought forward if funds held in the Stanwell Park Rock Pool Trust Fund are available, sufficient (together with S94 funds) to cover the heating, and their use supported by the community for heating.
Pool Facility Repot, Nov	Entry fees would need to be introduced to cover increased operational costs associated with heating. Considered five heating options: 1. Solar Assistance (existing solar panels) - not considered efficient due to maximum heat being
2014 (TERRE Design Pty Ltd)	available in summer months. 2. Natural Gas Heaters - not available in Helensburgh. 3. LPG Gas Heaters - can be provided with some minor works. 4. Air to Water Electric Heat Pumps
	5. Cogeneration - would require use of LPG to provide fuel for a cogen plant as natural gas is not available.
	Recommended a heat pump heating system including: Two heat pumps - one for each pool. Pool blankets to minimise heat loss and evaporation.
	Pool heating design criteria included: • 32degrees for the toddlers' pool and 28 degrees for the 25m pool. • Plant capable of operating at 27 degrees with consideration to operate pools at different temperatures in the future.





Source	Key Themes relevant to this study						
	Costs were provided for electric and LPG gas plants and are summarised below:						
	Cost Item Total Installation (includes capital cost, installation and builders works)	Electric \$157,995	LPG Gas \$84,256				
	Running Costs Per Annum	\$29,265 Comprising: 25m Pool \$25,269 Toddler Pool \$3,996	\$107,698 Comprising: 25m Pool \$92,345 Toddler Pool \$15,353				
	Life Cycle Costs (Running Costs over 25 years) Life Cycle Costs (Maintenance over 25 years) This report presents the results of the Wollongong City Council Community Survey, 2014. Relevant findings in relation to swimming pools included: Parks, sporting grounds and pools were the 5 th highest priority identified by residents (8%). Public swimming pools (free entry) were rated as the 4 th most important corporate and community service (83.5%) demonstrating an increase in mean score (out of 5) since 2012 from 3.96 to 4.34.						
Wollongong City Council Community Survey 2014 (Iris Research)							

wollongong



Aquatic Facility Trends

5.1 Aquatic and Leisure Facility Trends

This information draws from a review of a large sample of industry market research projects that have been carried out over the past five years to assist in defining aquatic and indoor facility and related leisure trends.

SGL's extensive experience in the development of aquatic and leisure facilities indicates that these types of facilities usually become a highly emotive and public interest debate. Organised formal groups (specialist users of pools) may dominate consultation processes whilst the general resident/casual and recreation user (highest user of pools) can remain unheard.

In many cases when a Council is faced with developing or redeveloping an aquatic facility the debate about the right components for the community it is to serve may at times be dominated by:

- The priority for long course competition, lap swimming and training facilities (50m or 25m lap pools) sometimes at the expense of not including or building multi-use high use viable water areas as well.
- The need for deep water to meet specialist sport needs which increases operating costs and also
 restrictions as to who can use the water. Selection of these areas must be made with financial and
 user impacts clearly highlighted.
- Lack of a co-coordinated strategy for other existing pools in the project area and user catchment zones so there is not duplication of the same thing in the same catchment zone.
- Lack of knowledge on local competitor facilities and user markets of why and how people use pools
 and what they pay for the different user categories. Participation trends usually show only a small
 market for lap swimming, whilst a large proportion of people use the facilities for recreation, fun,
 enjoyment, socialisation, education and therapy.
- The development of limited water areas that have a range of differing water depths and temperatures.
- Not ensuring all user markets are a priority so that a mix of water areas become an essential part of a successful aquatic leisure centre design brief.

5.1.1 Leisure and Aquatic Trends that Impact on Leisure Facilities

The following summary of general leisure trends impacting on people and their demand for recreation, sport and leisure activities and in particular aquatic facilities has been developed using a range of aquatic facility feasibility documents.

General Leisure trends impacting on aquatic leisure facilities design, facility components and user attraction include:

- A gradual ageing of the population. As life expectancy increases, birth rates stay low and the "baby boomers" of the 1950's and 1960's grow older. This is placing a new demand on providing programmed hotter water areas as well as pools suitable for therapy and older adult exercises. It also means it is essential to have a range of pools with different water depths and temperatures.
- Flexibility in the times when people recreate. As demands on people's time increases and work practices change people are seeking to take their recreation at different times, over a broad spread of hours and at facilities that offer a lot of activities under the one roof. Indoor pools and health and fitness facilities are particularly attractive and getting easier to use as many are open 12 to 16 hours, 7 days a week
- Increased variety in recreation and leisure options. People's leisure and recreation options are
 changing towards newer more varied activities offered over a greater range of timeframes compared
 to previous decades where limited variety in activities and scheduling occurred. This has supported
 the trend to more multi-use facilities to attract a broader range of users as well as multiple water
 areas to meet different needs at the one centre.





- Constraints to recreation and leisure participation. Lack of time, lack of facilities close by, family
 and work constraints, health problems and cost of service or use of facilities are the main constraints
 to many people's recreation and leisure participation. The development of targeted markets of users,
 programs and services at aquatic and health and fitness centres has assisted in reducing some of
 these participation constraints
- Changing employment structures, trading and work hours. These trends often make participation in traditional sports difficult and therefore people are looking for facilities that are open longer hours and have a lot of activity options at the one site. This makes opportunities such as indoor pools attractive as their long opening hour's means usage can be made in a wide range of social, training, competition, educational settings.
- Different people want different activities. Differing population characteristics i.e. age, gender, cultural issues sees the need for facilities to offer potential users a much more varied range of programs and services than previously offered. All year round indoor aquatic facilities also provide the greatest diversity of activities throughout the different seasons impacted by an areas local weather
- Provision of high standards and quality of facilities and services. People are looking for high
 standard, high quality facilities and services to meet their recreation and leisure needs. This has also
 seen the trend for indoor facilities becoming very popular as they allow activity in safe and secure
 spaces in all weather and environmental conditions. This leads to indicating that building low
 standard, low cost facilities will not attract the maximum user market
- Desire for activities to be affordable. The development of multi-purpose aquatic leisure centres has enabled the high operating cost activity of aquatics (in many cases) to be cross subsidised by more profitable activity areas such as health and fitness, food and beverage and entertainment areas. This has enabled many facilities to keep general entry fees low to encourage use whilst seeking users who want special services to contribute at a greater level to the cost of such activities.
- Recognition of strong links between physical activity and health. Preventative health care and active lifestyles are very important to many people's aquatic and health and fitness activities are becoming a large part of people's activity choices.
- Expectations of equity and access. Today's society expects people with special needs to be catered
 for in public aquatic and leisure facilities. This has seen improved design features to increase
 accessibility to and within such facilities. Added to this is the growing array of programs and
 activities offered to people of all different abilities, physical condition and skill levels.





5.1.2 General Aquatic Facility Trends

The main general aquatic facility trends that can impact on selection of high use activity components are detailed in the following graphic.



5.1.3 Specific Aquatic Facility Trends

Specific Aquatic Facility Trends that are impacting on people in the 21st Century include:

Aquatic Facility Trends and Main User Markets

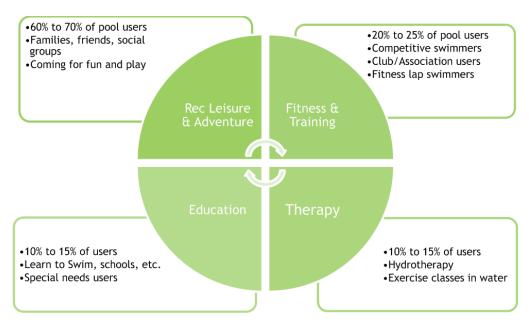
Traditionally many local authority aquatic leisure facilities were built for specialist or limited market users (i.e. competitive swimmers or high level sport participants). Detailed planning and comprehensive feasibility studies now are able to show more targeted user profiles.

Such studies usually identify the demographic profile of residents in the project area, their current aquatic and leisure participation patterns and use of surrounding aquatic facilities that provide a sound base for more user-friendly facilities.

Much of aquatic facility market research indicates future complexes must equally cater for four distinct aquatic user markets.







- Recreation and Leisure Market usually made up of families, people coming with friends and groups for fun, relaxation, social activity and low level competition/participation.
- Competitive/Training/Fitness Market usually made up of people predominantly attending facilities alone for structured fitness or competition activities.
- Education Market usually made up of children and adults wishing to increase water safety and survival skills. Includes Learn to swim classes, school and club use and individuals improving their skills and techniques. They require hot water pools and water depths with some straight edges and easy water access etc.
- Health and Therapy Market usually made up of children, adults and older adults wanting to relax
 or exercise in hot water. This market also includes specialist health condition groups such as arthritis,
 asthma suffers, etc. They require hot water pools and associated health relaxation areas, i.e.
 Spa/saunas, etc.

Benchmarking indicates that the recreation and leisure market will be the largest as it contains people of all ages, ability, types, interest and gender. The competitive/training/fitness market is a more specialist market as it usually contains younger, fitter and more active people who have made time to train and compete.

Previous benchmarking conducted by SGL Leisure Planning Team indicates that in many cases 60% to 70% of facility users come from the recreation/leisure sector with 20% to 30% coming from the competitive/training/fitness markets. The health and therapy and education markets can range from 10% to 20% of the market subject to the age and health profile of the community in which the facility is located.

The most successful centres attract all user markets and should be set up to allow people to participate in a range of activities at the one site. The further addition of health and fitness facilities, spas and saunas and social areas have been very successful at many aquatic facilities, as they add to the user experience and contribute to people being attracted to attend these facilities more often.

Aquatic Facilities Activity Areas

Industry trends indicate that in the majority of current indoor stand-alone aquatic facilities revenue does not meet annual operating costs. Average losses range from \$200,000 to \$500,000 plus per annum. The Centres that have the capacity to return an operational surplus show minimal return on capital investment.





A review of the successful Centres' business indicates that these Centres record:

- High visits per square metre
- High expense recovery ability including capital repayment
- · High operating profits per visit
- Excellent program range returns and attendances
- High secondary spend returns
- Excellent range of attendance types (adult/child ratio)
- · Draws users from a large catchment area
- · High revenue returns from health and fitness

To ensure financial viability and attract potential interest from capital investors, any future facility development must be designed with the above business aims in mind. This support usually recommends activity area components that can:

- Provide a mix of shallow leisure/recreation water with programmable water areas.
- Provide high revenue generating complementary service areas such as spas, saunas, and food and beverage services.
- · Are located in a high traffic/visitation area.
- · Are located as part of other leisure facility development.

Traditionally, commercial investment in aquatic facilities has been in specialist pools such as learn-to-swim or as additions to health and fitness clubs. The high capital cost and limited financial returns have contributed to this situation. Recent projects do see an increase in the number of management groups prepared to invest capital funds in return for longer-term agreements.

Health and Fitness Activity Areas

Industry trends indicate that users of aquatic facilities are also significant users of health and fitness facilities. Location of each of these activity components at the one site improves financial viability.

Health and fitness has the capacity to record high expense recovery returns, with many centres returning 125% to 180% of expenditure. Traditionally these returns can also attract commercial investors and operators to health and fitness facilities. Locating these facilities at aquatic centres increases the potential of cross-selling and spin-off use. It also improves the membership/program user and casual user ratio.

Ancillary Services and Activity Areas

In recent years, there has been a trend to develop a range of complementary businesses in conjunction with aquatic leisure facilities. These include:

- Wellness Centres/Day Spas: There is an emerging trend of adding in an area for specialist wellness
 activities, services and merchandising. The key services found at successful wellness centres include
 massage, beauty therapy treatments, gentle exercise classes and relaxation and time out activities.
- Inclusion of such facilities offers a broader range of activities to a larger age profile of people. The
 massage and beauty therapy are high yield sales activities and can have high linked merchandising
 product sales.
- It is essential in developing such areas that they are located with good views, away from general
 public noise and viewing areas and have very good finishes and fittings. There needs to be a close by
 lounge for relaxation after treatment or classes.
- Sports Medicine: Development of consulting rooms, with patient access to health and fitness and pools, have been excellent revenue generators.
- Health and Therapeutic Services: Health consultancies, weight loss and therapeutic services linking
 in worker and accident rehabilitation patients to use the range of facilities with centre memberships
 paid by relevant authorities.
- Health and Beauty Services: Leased areas to services such as beauticians, hair salons and body toning.





5.1.4 Potential Future Aquatic Facility Trends

Aquatic Facility reviews completed in Australia, North America, Canada, the Middle East and China during the past two years by SGL provide a guide to likely new aquatic facility innovations and trends.

Key features that should be considered when redeveloping or retrofitting high use aquatic facilities are:

Leisure Play Equipment

Changing static shallow water areas into water play and fun zones is one of the most popular renovations. This can be done by adding simple play equipment, water sprays and interactive equipment to existing pools. Added to this is the option to introduce inflatable play equipment to allow the area to be changeable.

Many such outdoor pools that have been retrofitted have been linked to high use indoor pools.

Major Attraction Leisure Features

Water slides and similar challenge and adventure type activities have remained popular as long as the venue has a range of slides/rides to keep peoples interest. Single ride facilities struggle to keep interest due to the lack of variety. Multi ride areas allow users to try different length and configuration rides. There are also a range of new water rides that have a slide component leading to another ride experience such as dropping into a bowl and then water, or onto a ramp and then into a splash pool.

A key design trend is to link all slides to a common entry platform to ensure one staff person can supervise the area. A common splash down zone also allows one lifeguard to control a range of ride water entry points.

Special Effects

A range of North American Indoor leisure parks have added computerised light shows and sound systems to allow night time areas to be changed. The use of lights and sound provided users with new indoor facility experiences at night-time.

Some centres have gone further by adding projection walls to incorporate movies and short video clips with their new light and sound effects.

Leisure Furniture

Many centres aimed to keep parents and children at centres longer (to encourage greater secondary spending on food/beverage/merchandising) by providing quality furniture. The use of pool side lounges, tables, chairs, umbrellas, has allowed families to stay close to the water areas in relative comfort.

Food/Beverage/Merchandising

This area has seen some major changes through development of pool side and dry area multi serving zones. Linked to these are high quality wet and dry lounge zones where people are encouraged to sit down and relax.

A number of innovative centres provide extensive lounge areas as well as pool side furniture. These centres use mobile food and beverage carts to sell items directly to centre users (i.e. they take the product to the customer). A number of other centres visited have used merchandising innovations, such as all existing customers having to go through the sales area. Other innovations included:

- Multi-media video screens through the centre reminding customers about programs, special promotions, and food/beverage and merchandising specials.
- Providing customers with discount vouchers (at entry to centre) to spend in food/beverage and merchandising outlets or on their next visit.
- Offering combination sales specials to attract a higher spend per person.





Review of Heating and Expansion Options

6.1 Option Descriptions

From the objectives set out in the Brief (with specific reference to February 2016 Council Resolution 'A'), a set of options for heating and expansion were developed with Council officers. Four basic options were identified with one of these having a sub-option, i.e. **five (5) options** in total. The basic components of these options are set out in the table below.

Table 14 Options Summary

Option	Outdoor or Indoor	Exist 25m pool (see Note 1)	Existing Toddlers (see Note 2)	Wading water / splash zone	New 50m Pool (see Note 3)	Low cost Roof Enclosure	Season (months)
1	Outdoor	Retain, + new heating	Retain, + new heating + separate WTP	N/A	N/A	N/A	7
2	Outdoor	Retain, + new heating	Demolish	New, including new WTP + heating	N/A	N/A	7
3A	Outdoor	Demolish	Retain, + new heating + separate WTP	n/a	New pool, including new WTP + heating	N/A	7
3B	Outdoor	Demolish	Demolish	New, including new WTP + heating	New pool, including new WTP + heating	N/A	7
4	Indoor	Retain, + new WTP + heating	Demolish	New, including new WTP + heating	N/A	Roof enclosure over both 25m pool and 'wading / splash zone'	12
5	Outdoor	Retain, unchanged	Retain, unchanged	New, including new WTP, but no heating	N/A	N/A	7

WTP = Water Treatment Plant

6.2 Basis of Design

This section sets out the basis of design that has been adopted for the purposes of this study. Some of these parameters have been set by Council, others have necessarily been set by the engineering design team as required.

Council may elect, if they wish, to modify some of these parameters as the design progresses. If so there will need to commensurate adjustments to budgets.

Pool water temperature

Table 15 Pool Water Temperatures

Pool	Target Design Temperature	Remarks
i. 25 m Pool Outdoor/50m Pool Outdoor	27°C	As nominated by Council
ii. Toddlers Pool (indoor/outdoor)	28°C to 30°C	
 Leisure Water/Splash Zone (Supply water temperature) 	28°C to 30°C	
iv. 25 m Pool Indoor	28 °C	





Pool Shell sizes and Pool Building Enclosure

Table 16 Pool Shell Sizes and Building Enclosure

Po	ol	Size	Remarks
i.	25 m Pool Outdoor	25m x 13m; Depth 0.93m to 1.4m	Existing
ii.	50m Pool Outdoor	50m x 20m; Depth 1.2m to 1.8m	Option - New pool
iii.	Toddlers Pool (outdoor)	9m x 6m; Depth 0.28m to 0.48m	Existing
iv.	25 m Pool Indoor	25m x 13m; Depth 0.93m to 1.4m	Existing
٧.	25m Pool/leisure water/Splash	~1400sqm; 5.5m clear internal	Option - Existing 25m pool + new
	zone Building Enclosure	height	Leisure water/Splash zone

Leisure Water/Splash Zone

For the purposes of this study, an example of new 'leisure water/splash zone' was required to represent a base line reference facility and for this purpose the AP250 design from White Water West (WWW) in Canada was selected. The AP250 is various water features located within a splash zone. OPG/JWC Engineers do not necessarily endorse this option, rather it simply provides a budget cost linked to a defined range of water features that can then be used for a base line reference once overall project budgets are further defined. WWW advise that it has been installed at a number of municipal pools in Australia and this supports it selection as a typical reference facility. However there are numerous lower cost option possible, whether they be proprietary or customized, and this is for future discussion within the context of overall project budgets.

Building Enclosure

To maximise usage during winter, Option 4 includes the enclosure of the new leisure water/splash zone. The consequence however in the case of the 'reference option AP250' is a large building footprint since the footprint for the AP250 is commensurate with that for the 25m pool itself. The selection of suitable 'leisure water/splash water' can be further assessed as part of the next design phase.

Shade over pool:

The existing Toddlers pool has a sunshade over about 75% of the surface. This assessment assumes that this shading will be retained for the Toddlers Pool or for the new Leisure Water/Splash Zone (outdoor Options only).

Heating Plant Type:

Heating plant shall utilise electric heat pumps as required by the Council (refer Council Brief, Scope of Study, Item 1) and based on earlier assessment undertaken by them (refer 2014 TERRE Design report). Reticulated natural gas is typically the most cost effective energy source for pool heating but this is not available in Helensburgh township.

Electricity tariffs:

Review of bills for 2015-2016 as provided by Council indicates that the power supply is not time-of-use based, but has a two-tiered tariff based on consumption. The average is about \$0.26 per kWHr including GST for the more recent bills. This rate is used for estimating probable electricity costs and it is noted that this figure is significantly higher than that adopted in the 2014 TERRE Design report). (Note that two bill extracts, but without printed meter number, did have lower rates, but these have not been used due to lack of detail to confirm suitability).

Ambient Conditions:

The assessment is based on averaged design ambient condition data available for Nowra as that is the closest weather station with likely similar conditions.

Operating Periods:

The outdoor pools are to be operating from 1st Saturday of September school holidays (to ANZAC day following year. The opening hours are 6AM to 6PM in the first & last month and 6AM to 7PM for the remaining months.





The option of operating the existing outdoor 25m pool for 12 months in lieu of 7 months has been recently requested and added. For the purposes of this preliminary exercise it is assumed that the above opening hours 6AM to 7PM will apply. It is likely that opening hours will actually be shorter but this will not significantly impact heating costs

Indoor pools will be operated for 12 months a year with opening hours of 6AM to 8PM.

Pool covers:

Pool covers are reported to be currently used during the shoulder season. With pool heating, the covers will need to be used during the whole season to minimise power costs and this assessment is based on use of pool covers for minimum 8 hours every night during the whole operating season, including for indoor pools. The existing pool covers are assumed to be in good condition and will continue to be used.

Existing Plant, Buildings & Tanks:

The necessary condition assessments of existing Plant, Buildings & Tanks are outside the scope of this report and these aspects which we understand to include cost estimates for repairs/upgrades to get the facility to a compliant and leak-tight condition are separately covered by the TERRE Design report.

New Water Treatment systems

All Options allow for new filtration & treatment system for the existing Toddlers Pool, or the new Leisure water/Splash zone (as the case may be). Conversion of the existing Toddlers pool to a dedicated system is In line with NSW Dept. of Health - 2013 Swimming Pool & Spa Advisory Document - cl7.2.5, and best practice.

Options 3A and 3B require new filtration systems for the main pools due to the increased pool volume.

Option 4 requires a new filtration system for the main indoor pool due to the changed operating conditions and periods.

Flowrates for the new filtration systems have been based on the NSW Dept. of Health - 2013 Swimming Pool & Spa Advisory Document.

Filtration options

This study is based on the Neptune-Benson 'Defender' series of filters. The selection of this filter type (as opposed to traditional sand filters) was a direction received early in the study from discussion with Councils Asset Manager and we understand it is in line with similar refurbishments of other pools in the municipality. However, the nomination in this report of this filter brand/type should not necessarily be construed as an endorsement of same by OPG/JWC Engineers. We would suggest that cost-benefit studies of this important project item be undertaken prior to any final decision.

The Defender filters use a concept that originally began with diatomaceous earth (DE) filters (but Neptune Benson use perlite). Both DE and perlite are natural materials but perlite has less health issues (associated with the fine airborne particles) than DE. These types of filters are characterized by good particulate removal, small filter footprints and low water loss (during backwashing). For these reasons they are often used in indoor pools with high bather loads. However they can be more expensive and have higher maintenance demands than sand filters.

In regard to pool upgrades of a typical outdoor facility in small communities such as Helensburgh, the NSW Department of Health 2013 Swimming Pool & Spa Advisory Document cl 7.2.8 provides the following relevant guidance:

Section 7.2.8 Upgrading existing outdoor pools

Upgrading and refurbishing of existing outdoor pools often presents a dilemma for pool owners, particularly local councils with limited funding. Where it is not possible to upgrade to this Advisory Document, but funds are available to effect some improvements, attempts should be made to upgrade to the most economically feasible optimum design configuration. The following issues should be considered: a Turnover should not be longer than 4 hours for depths less than 3 metres for a swimming pool and longer than 30 minutes for a spa





n Strategies should be developed to compensate for the lack of turnover. Such strategies could include:

- a) A risk management plan to ensure that possible public health risks are minimised
- b) Full automation of disinfection and pH processes
- c) Limiting bather numbers
- d) Elevation of minimum disinfectant concentrations
- e) Improving filtration.

In summary, the selection of the new filtration system (item e), or any upgrade, should be considered in conjunction with items a) to d) above.

6.3 Pool Water Heating Plant

6.3.1 Plant Sizing

The heating plant sizing requires an optimised balance between start up time, peak heating load and cost while ensuring adequate 'rest' time, defrost allowance, commercial grade and level of redundancy.

Separate heat pump plant is proposed for each pool. For the larger pool system, at least two heat pump units per pool are proposed. The smaller pool bodies can be heated with a single heat pump with no redundancy i.e. no partial capacity in case of failure of the unit.

The plant units proposed as the basis for the cost estimates are tabulated below. The selections shall be subject to finalisation during detailed design phase.

Table 17 Pool Water Plant Size

Pool Water	Total Nominal Heating Capacity	No of Units	Preliminary Selections basis for the Estimate
i. Outdoor 25 m Pool	190 kW (7 month) or 300 kW (12 month) See Note 1	Three	3 Nos. Rheem RTHP065-3
ii. Outdoor Toddlers Pool or Splash Zone	60 kW	One	1 No. Rheem RTHP065-3
iii. Outdoor 50m Pool	500 kW	Two	2 Nos. Rheem HWP-250
iv. Indoor 25 m Pool	120 kW	Two	2 Nos. Rheem RTHP065-3
v. Indoor Splash Zone	40 kW	One	1 No. Rheem RTHP051-3

Note 1: Larger heat pumps will be required for 12 month operation of the outdoor pool.

6.3.2 System Descriptions

Heating System General Arrangement

The heat pump units are proposed to be located on a new outdoor concrete plinth area located along the northern boundary on the west side of the existing plant room.

An acoustic barrier enclosure will be required around the plant to reduce noise impact for the patrons. The heating loop pump/s are proposed to be located in the existing plantroom. A new MCC (motor control centre) will be located in or adjacent the existing plant room.

Option 1: Heating for Existing Outdoor Pools - 25m and Toddlers Pool

This plant will comprise two systems - one for the 25m pool with three air-to-water electric heat pump units, and one for the Toddlers pool with a single heat pump unit.

The 25m pool system will include a heating loop pump located in the existing plant room. For the Toddlers pool, the new pump as part of the new treatment plant shall be sized to allow direct circulation through the heat pump on a bypass loop.





The system will require associated electricals and controls including cabling from the new MCC. The controls will allow automatic and efficient control of the heat pump units and pumps. Existing pool covers will continue to be used.

Option 2: Heating for Existing Outdoor 25m Pool and New Leisure Water/Splash Zone (to replace existing Toddlers)

The pool water heating plant will be similar to that for Option 1.

Option 3A: Option: Heating for New 50m 8 lane outdoor pool and existing outdoor Toddlers Pool

The pool water heating plant will comprise two systems - one for the 50m pool with two multi-circuit air-to-water electric heat pump units and one for the Toddlers pool with a single heat pump unit.

The 50m pool system will include a heating loop pump located in the new plant area. For the Toddlers pool, the new pump as part of the new treatment plant shall be sized to allow direct circulation through the heat pump on a bypass loop.

The system will require associated electricals and controls including cabling from the new MCC. The controls will allow automatic efficient control of the heat pump units and pumps.

New pool covers will be required for the new 50m pool.

Option 3B: New 50m 8 lane outdoor pool (to replace existing 25m) and new Leisure Water/Splash Zone (replacing existing Toddlers)

The pool water heating plant will be similar to that for Option 3A.

Option 4: Heating for Existing 25m pool in new building enclosure including New Leisure Water/Splash Zone

The pool water heating plant will comprise two systems - one for the 25m pool with two air-to-water electric heat pump units and one for the Splash Zone with a single heat pump unit.

The 25m pool system will include a heating loop pump located in the reconfigured plant room. For the Toddlers pool, the new pump as part of the new treatment plant shall be sized to allow direct circulation through the heat pump on a bypass loop.

The system will require associated electricals and controls including cabling from the new MCC. The controls will allow automatic efficient control of the heat pump units and pumps.

Existing pool covers will continue to be used for the 25m pool.

6.4 Pool Structures

6.4.1 New 50m Pool

Extension of the $25m \times 13.2m$ pool was originally a consideration for construction of the new $50m \times 20m$ pool. However, our site inspection on 11 May 2017 identified that it was not practical to re-use the existing floors and walls due to the following:

- The new 50m pool has a flatter and deeper floor than the 25m pool, as well as the fact that two of the existing walls need to be demolished, and this new geometry precludes re-use of much of the pool.
- The new depths of the 50m pool will also mean that the much of the walls cannot be re-used.
- The existing pool shell is some 46 years old and linking a structure of this age to new concrete structure will significantly detract from the life expectancy of the structure as a whole.
- New pipework in the pool floor will be required along the centreline of the 50m pool, which is a different location from the centreline of the narrower 25m pool.

On this basis, the new 50m pool is required to be an entirely new structure.





6.4.2 Asbestos Pipes

The original 1969 design drawings show that asbestos pipes have been used for the pool pipework from the pool to the plantroom. In new construction works it will be highly unlikely to avoid interfacing with this pipework. Upon selection of the preferred option further assessments can be made on means to minimise the costs of asbestos removal.

6.5 Geotechnical Investigation

A preliminary geotechnical investigation was undertaken as part of this study by Terra Insight P/L (Unanderra). The full report is attached in **Appendix Two**.

The prime purpose of this study was to ascertain the levels and extent of rock that is known to underlie the site, the foundation conditions, and the potential for contamination in any fill materials encountered.

The scope of the investigation related to the extension/construction of a new 50m pool, southwards from the existing 25m footprint.

The key points and findings were:

- Five (5) boreholes were drilled.
- Rock (sandstone) was found on the south side of the 25m pool and at depths varying from 0.5m to
 1.5m. (BH 2, 3, and 4). This indicates the variability of rock depths over relatively short distances.
- Rock depth near the north-west corner of the 25m pool was about 2m (i.e. similar to maximum depth of new 50m pool).
- The rock should be able to be ripped but will get harder with depth.
- The material above rock level is essentially non-cohesive, and non-reactive (i.e. predominantly sand) which is relatively benign from an engineering viewpoint.
- There was no sign of groundwater.
- Some heavy metals were detected but these were below regulatory limits.

6.6 Future Studies

This options study represents the first phase of the potential redevelopment of the Helensburgh Pool. Dependent on the selected option adopted by Council, further studies and/or design tasks expected to be required include:

- Additional geotechnical investigation (to further define the extent of rock and ease of excavation).
- Details of upgrade of power supply to site (to cater for heat pumps).
- · Cost-benefit study on filtration options.

6.7 Cost Estimates for Mechanical Plant

6.7.1 General

The order of cost allowances for the new pool heating plant, new water treatment plant and pool hydraulics, and HVAC (heating ventilation and aircon) are provided herein.

All order of cost estimates and allowances exclude:

- GST.
- · Associated works by other trades as noted,
- Design development and detailed engineering,





- Project contingency,
- Any allowance for special site agreements, head contractor mark-up, inflation etc.

The methodology adopted in preparing the estimate was as follows:

- Conceptual level design to assess indicative major plant items sizing such as heat pumps and filters;
- Indicative budget supply price input from respective manufacturers for heat pump units, Neptune-Benson filters and White Water West Leisure Water/Splash Zone equipment;
- Allowances for associated piping and electrical is based on experience from past projects.

The actual costs will be subject to mark et conditions and delivery methodology adopted.

The total estimates are considered to have $\pm 35\%$ accuracy, commensurate with the conceptual level of design.

Power upgrades to site, which will most likely be necessary for the heat pumps, are excluded. This will firstly require selection of the preferred option and then consultation with the power company.

6.7.2 Pool Water Heating

Table 18 Pool Water Heating Cost

Pool Water Heating							
Capital Cost: Order of Cost Estimate to +/-35% (excl GST)	Option 1: Existing 25m & Toddlers - All Outdoor (7 month)	Option 2: Existing 25m & New Leisure Water /Splash Zone - All Outdoor (7 month)	Option 3A: New 50m & Existing Toddlers - All Outdoor	Option 3B: New 50m & New Leisure Water / Splash Zone - All Outdoor	Option 4: Existing 25m Indoor & New Leisure Water / Splash Zone Indoor **		
Heat pumps and hot water pump	\$120,000	\$120,000	\$230,000	\$230,000	\$87,000		
Heating loop pipework	\$15,000	\$15,000	\$25,000	\$25,000	\$15,000		
Electricals	\$30,000	\$30,000	\$50,000	\$50,000	\$30,000		
Pool Covers	Existing	\$15,000	\$110,000	\$100,000	\$15,000		
Total	\$165,000	\$180,000	\$405,000	\$420,000	\$147,000		

12 months operation for Outdoor Pools: The capital cost for the larger heat pumps needed for 12 month outdoor operation of the 25m and Toddlers pool increases Option 1 and 2 by approximately \$50,000, i.e. Option 1 increases to \$215,000 and Option 2 increases to \$230,000.





Table 19 Pool Water Treatments and Pool Hydraulics Costs

Capital Cost: Order of Cost Estimate to +/-35% (Excl GST)	Option 1: New Plant for Outdoor Toddlers Pool	Option 2: New Plant for New Outdoor Leisure Water /Splash Zone	Option 3A: For New 50m & Existing Toddlers - All Outdoor	Option 3B: New 50m & New Leisure Water/Splash Zone - All Outdoor	Option 4: New for Existing 25m Indoor & New Leisure Water/Splash Zone Indoor
Plantroom pipework	\$15,000	\$15,000	\$105,000	\$105,000	\$60,000
Pumps, Filtration and dosing	\$85,000	\$85,000	\$585,000	\$585,000	\$380,000
Pipework to pool/splash	Existing	\$30,000	\$90,000	\$120,000	\$75,000
Electricals	\$30,000	\$30,000	\$90,000	\$90,000	\$75,000
Total	\$ 130,000	\$160,000	\$ 870,000	\$900,000	\$590,000

Pool Water Treatment and Pool Hydraulics Notes;

- In case of new plant for existing Toddlers pool, pipework around the pool is assumed to in good order and can be reused.
- Existing backwash retention/discharge system is assumed to be in good suitable condition and is assumed to be reused.
- 3) Existing structures including tanks, buildings etc. is assumed to be in good condition and is assumed to be reused. No allowance is included for repair of the existing plant, tanks, underground piping etc. as this is being reviewed as part of a separate study for Council (TERRE Design).
- 4) Existing plant and pipework for the 25m pool is assumed to be in good working condition and is assumed to be reused (for Outdoor case).
- 6) Above filtration estimates are based on Pre-coat Media Pressure Filters using Perlite media (Neptune Benson Defender Regenerative media filters or approved equivalent using Perlite) as preferred by the Council.

6.7.3 Indoor Option Pool Enclosure HVAC

The HVAC (heating ventilation & air conditioning) system for the pool enclosure hall will be electric heat pump based, compliant with the NCC (BCA) requirements. Capital cost allowance is suggested to be based on \$400 per sqm. The cost allowance assumes that the pool enclosure will comply with NCC 2016 (BCA) requirements including Section J.

6.7.4 Associated Works by Other Trades

- Concrete slab for the heat pumps with partial enclosure (acoustic barrier walls, no roof) including associated works (~40sqm for 25m option and ~70sqm for 50m option).
- Reconfiguration of existing gravity sand filters (for Option 3A/3B/4 to house regenerative media
 filters) and construction of new plantroom in the adjacent roofed area at plantroom entry for housing
 the regenerative media filtration for the Toddlers or Leisure Water/Splash Zone (for all options)
- The positioning and fixing of sparge pipes, ELWS (Extra Low Water Supply soiled water) pipes, pipe sleeves and embedments in new concrete pool/balance tanks, etc.
- New pool tanks complete with wet deck and soiled water channels, balance tank (allow -20m x 6m x 2.5m deep for estimate purposes), sumps, concourse etc. for the new 50m Pool and new Leisure Water/Splash Zone.
- New wet slab complete with two drain sumps with grates, balance tank (allow ~2.5mx2mx2.5m deep for estimate), concourse etc. for the new Leisure Water/Splash Zone.
- Leisure Water/Splash Zone feature and associated pumping/piping (White Water West AP250) \$400K allowance.





- Trenching, back-filling and concourse reinstatement work for the under-concourse pool water pipework for new 50m Pool and new Leisure Water/Splash Zone.
- New 25m pool enclosure to BCA requirements complete with all services and pool hall air HVAC plant
 enclosure (allow -6m x 10m x 3m high for estimate).
- · Supply of water and electricity during installation, testing and commissioning of the plant.
- Building hydraulics (plantroom drainage, concourse drainage, tundishes, overflow drainage etc.
- Upgrade/addition of submains to the plantroom to the various MCCs including upgrade of the facility power supply to site.
- Data connection at the plantroom to facilitate remote monitoring etc. if required.

6.8 Operational Cost Estimates for the Pool Water Heating Plant

6.8.1 Estimated Annual Electricity Costs

The estimates for the electrical energy costs for the proposed heat pump based heating plant are tabulated below for the respective options.

Table 20 Pool Water Heating Electricity Cost Estimates

Pool Water Heating electricity cost estimates	Option 1: Existing 25m & Toddlers - All Outdoor	Option 2: Existing 25m & New Splash Zone - All Outdoor	Option 3A: New 50m & Existing Toddlers - All Outdoor	Option 3B: New 50m & New Splash Zone - All Outdoor	Option 4: Existing 25m Indoor & New Splash Zone Indoor - Including Enclosure HVAC**
Cost \$ per annum	\$31,000 (7 month) / \$50,000 (12 month)	\$31,000 (7 month) / \$50,000 (12 month)	\$76,000	\$76,000	\$84,000

^{**} The estimate for Option 4 is based on Pool Building Enclosure construction to be as per DTS requirements of Section J of the BCA Volume 2 of the National Construction Code 2016 for thermal performance of the enclosure façade and roof.

The above are for heating only and exclude other electricity costs associated with the pool/splash water circulation pumps and treatment, etc.

The above do not allow for any contribution from the existing solar heating plant since this contribution can be very indeterminate and heat losses could far outweigh the gains unless the solar plant control can ensure satisfactory isolation during cold (e.g. overnight) periods.

The contribution from the solar plant could apply for the outdoor pools option and savings could be of the order of \$2,000 per annum if operated and controlled appropriately.

The actual power costs will be dependent upon various variables including:

- · Operating period,
- · Operating pool/pool hall temperature,
- Usage of pool covers,
- · Efficacy of Control implementation,
- · Ambient conditions,
- Bather/visitor numbers and level of activity,

wollongong





- Extent of water loss/make up into the pool,
- Existing Solar Heating Contribution/Loss,
- Level and quality of ongoing preventive maintenance.

6.8.2 Ongoing Preventive Maintenance

Annual allowance for ongoing maintenance for the heating plant is suggested to be 4% of the system capital cost. The cost will be much lower in the early life, rising as the plant ages.

For the electric heat pumps, the economic life expectancy is about 15 years.

6.9 Facility Option Assessment Summary

Based on the information provided above the following provides a summary of each of the options being assessed. Quantity Surveyors Tuner and Townsend have developed a detailed capital cost estimate for each option based on the information provided above. A copy of the detailed report is provided in **Appendix Three.**

6.9.1 Option One

Option one includes the retention and heating of the existing 25m pool and toddler pool. This option would also include the provision of a new water treatment plant.

6.9.1.1 Usage

Heating of both pools may increase the annual usage of the pools by increasing the visitations during the cooler months at the beginning and end of the season.

The heating of the pool will support increased programming opportunities including learn to swim, rehabilitation programs and aquaerobics.

It is anticipated that the increase may be in the order of 15% to 20%. Based on 2016 attendance figures this would be in the order of 10,700 to 14,300 additional visits per year.

6.9.1.2 Catchment

The heating of the existing pools will not have a significant impact on the catchment for facility users. The heating of the pools will trigger an entry fee to be charged which may have an impact on those people that travel to the facility to gain free access.

It is anticipated that the majority of pool users (70% - 80%) will come from within a 5km catchment of the facility.

6.9.1.3 Capital Cost

The capital cost estimate based on Quantity Surveyors Turner and Townsend report indicate a cost of \$819,500 to undertake the necessary works.

6.9.1.1 Operating Income

This option would trigger a fee to be charged for entry to the pool. Based on the anticipated increased usage and the current fees and charges this option would provide an operating income of between \$180,000 and \$230,000 per season.

6.9.2 Option Two

Option two includes the retention and heating of the existing 25m pool and the demolition of the toddler's pool and replacement with a free form splash pad/aquatic play structure. The option would also include the provision of a new water treatment plant. A plan indicating the Option Two is provided on page 36.





6.9.2.1 Usage

Heating of the 25m pool may increase the annual usage of the pool by improving the visitations during the cooler months at the beginning and end of the season. The heating of the pool will support increased programming opportunities including learn to swim and aquaerobics.

The provisions of a new interactive aquatic play structure that supports a range of age groups and encourages the family/social market will have a significant impact on usage during the summer warmer months.

It is anticipated that the increase may be in the order of 25% to 35%. Based on 2016 attendance figures this would be in the order of 17,900 to 21,500 additional visits per year.

6.9.2.2 Catchment

The heating of the existing 25m pool will not have a significant impact on the facility catchment however the provision of a new aquatic play structure will have an impact on the catchment of users. Aquatic facility trends indicate that between 60% and 70% of users access these types of facilities for fun and social interaction.

The heating of the pools will trigger an entry fee to be charged which may have an impact on those people that travel to the facility to gain free access.

It is anticipated that the majority of pool users (70% - 80%) will come from within a 5km catchment of the facility. However the interactive play structure may attract users from a wider catchment 5km - 15KM

6.9.2.3 Capital Cost

The capital cost estimate based on Quantity Surveyors Turner and Townsend report indicate a cost of \$2,139,000 to undertake the necessary works.

6.9.2.4 Operating Income

This option would trigger a fee to be charged for entry to the pool. Based on the anticipated increased usage and the current fees and charges this option would provide an operating income of between \$180,000 and \$260,000 per season.

198







Option Two



PEDDLE THORP

PROJECT NO: 37-0128

HELENSBURGH POOL WOLLONGONG

REASON FOR ISSUE: PRELIMINARY

DATE: 07-07-2017 SCALE: 1:500 @ A3

F001





6.9.3 Option Three A and B

Option three includes the demolition of the existing 25m pool and the development of a new outdoor heated 50m pool. This option considers either retaining and heating the existing toddlers' pool (3A) or demolishing it and replacing it with an interactive splash pad/aquatic play structure (3B). The option would also include the provision of a new water treatment plant. A plan indicating the option 3A and 3B facilities is provided on page 38 and 39 of this report.

6.9.3.1 Usage

The development of a 50 metre heated pool would support a slight increase by some groups/individuals who prefer to swim/train in a 50m pool configuration.

Access to a 50m pool in the local area may also encourage the disbanded swimming club to reform, as the pool will be of sufficient length for competitive swimming training and events.

The additional water space will increase the capacity of the facility to support concurrent learn to swim and recreational swimming particularly during the hotter months.

The provisions of a new interactive aquatic play structure that supports a range of age groups and encourages the family/social market will also have an impact on usage.

Given the large number of pools provided within Wollongong and surrounding areas there is little evidence to indicate a gap in the market for a 50 metre heated pool. It is anticipated that the increase may be similar to option two and could be in the order of 25% to 35%. Based on 2016 attendance figures this would be in the order of 17,900 to 21,500 additional visits per year.

6.9.3.2 Catchment

The replacement of the existing 25m pool with a heated 50m will not have a significant impact on the facility catchment however there may be some increase by people who wish to swim/train in a 50m lap or competitive swimming clubs.

The provision of a new aquatic play structure will have an impact on the catchment of users. Aquatic facility trends indicate that between 60% and 70% of users access these types of facilities for fun and social interaction.

The heating of the pools will trigger an entry fee to be charged which may have an impact on those people that travel to the facility to gain free access.

It is anticipated that the majority of pool users (70% - 80%) will come from within a 5km catchment of the facility.

6.9.3.3 Capital Cost

The capital cost estimate based on Quantity Surveyors Turner and Townsend report indicate the following capital costs for 3A and 3B:

- 3A \$6,974,500
- 3B- \$8,181,000

6.9.3.4 Operating Income

This option would trigger a fee to be charged for entry to the pool. Based on the anticipated increased usage and the current fees and charges this option would provide an operating income of between \$200,000 and \$260,000 per season.

Group) Final Report

200







Option 3A



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning

PEDDLE THORP

REASON FOR ISSUE: PRELIMINARY

SCALE: 1:500 @ A3





Group) Final Report

201





Option 3A



Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning

PEDDLE THORP

HELENSBURGH POOL WOLLONGONG







6.9.4 Option Four

Option for includes the retention and heating of the existing 25m pool, the demolition of the toddler's pool and replacement with a free form splash pad/aquatic play structure and enclosure of both pools with a permanent structure to enable 12 month of the year access. The option would also include the provision of a new water treatment plant. A plan indicating the option 4 facilities is provided on page 41

6.9.4.1 Usage

The enclosure and heating of the 25m pool and splash pad would support all year round access to an aquatic facility in the Helensburgh area

While the 25m pool will not increase the water space capacity, the enclosed facility would increase programming opportunities such as learn to swim, rehabilitation and aquaerobics during and after school hours across 12 months of the year.

Access to a facility for 12 months of the year will also support a locally based swimming club if there is sufficient interest and increased access by local school over a longer period.

Access to a new interactive aquatic play structure that supports a range of age groups and encourages the family/social market would also have an impact on usage. Parents with young children will be encouraged to make greater use of the pool during the cooler months if the facility is enclosed.

It is anticipated that enclosing the facility will increase usage in the order 50% to 60%.

6.9.4.2 Catchment

Access to an enclosed facility that is open for 12 months of the year has the potential to increase usage as a result of the extended opening period. However given the large number of both indoor and outdoor pools provided within Wollongong and surrounding areas and the close proximity to indoor pools at Beaton Park and the Sutherland Leisure Centres there is not strong evidence to indicate that there will be a large increase in the catchment numbers.

The heating of the pools will trigger an entry fee to be charged which may have an impact on those people that travel to the facility to gain free access.

It is anticipated that the majority of pool users (70% - 80%) will come from within a 5km catchment of the facility. There will be some people who come from a wider catchment to make use of the enclosed aqua play equipment during both the warmer and cooler months.

6.9.4.3 Capital Cost

The capital cost estimate based on Quantity Surveyors Turner and Townsend report indicate a cost of \$8,159,700 to undertake the necessary works.

6.9.4.4 Operating Income

This option would trigger a fee to be charged for entry to the pool. Based on the anticipated increased usage and the current fees and charges, the capacity to operate the facility all year round and provide a range of programming opportunities this option would provide an operating income of between \$600,000 and \$1M per year.

6.10 Recommended Strategic Direction

The Study's market research, consultation and aquatic trend reviews indicate that there are a number of localised trends in relation to the Helensburgh Pool facility usage and aquatic activity participation.

These include the following broad trends that will impact on the future strategy for the centre:

 Helensburgh Swimming Pool was originally opened as a War Memorial pool in the 6 December 1969 and is therefore 48 years old.



- The pool is one of 18 pool facilities provided for Wollongong residents and one of the nine supervised pools. There are also a number of privately operated learn to swim facilities within the catchment area.
- The facility is highly valued by residents and is well used with visitations of the Centre over the past four years increasing. Total usage has increased from 55,907 visits in 2012/2013 to 71,480 in 2015/2016, an increase of 15,573 (27.8%).
- The operational performance review indicates that the facility is generating an increasing
 operational deficit due to the high cost associated with operating the facility (staffing, utilities,
 chemicals)
- Future demand will be affected by the ongoing pressure by residents to access quality and affordable sporting and leisure activities.
- The younger age profile of Helensburgh residents with the median age being 35 years should see current usage levels of the pools continue, particularly if improved facilities to attract the family market are provide, even though there will be a gradual ageing of the population over time.
- · The resident population catchment for the pool is approximately 8,922 which is relatively small

The review findings indicate that the Helensburgh Pool is highly valued by residents. The cost to operate the facility however is increasing due to the high cost of staffing and operating outdoor aquatic facilities and the relatively small catchment population surrounding the facility.

A review of the usage data indicates that the pool is heavily used during the warmer summer months between November and February each year. This usage is predominantly the family/social market with some program occurring through the learn to swim operators.

Previous research conducted by the Otium Planning Team indicates that in many cases 60% to 70% of facility users come from the recreation/leisure sector with 20% to 30% coming from the competitive/training/fitness markets.

The 2014 Aquatic Strategy recommended the following for the Helensburgh Pool:

Given its comparatively low catchment population and low projected growth, upgrading of Helensburgh Pool is a lower priority than other pools. If funds held in the Stanwell Park Rock Pool Trust Fund are available, sufficient (together with S94 funds) to cover the cost of upgraded heating, and their use supported by the community for that purpose, then the timing of upgraded heating should be brought forward. The introduction of entry fees would be required to cover increased operational costs associated with heating.

The findings of this review indicate that the high cost associated with all of the options (1 to 4) investigated, coupled with the low catchment population and the large number of existing facilities within the catchment area cannot justify the required expenditure to heat the Helensburgh Pool, expand it to a 50 metre pool or enclose the pool to create an all year round facility.

The above findings and facility trends along with the current usage trends indicate the need to ensure future improvements that in the longer term:

- Encourages greater family/child entries by adding more leisure water, play and fun water features
 and some interactive water. This would include the development of an outdoor splash pad with a
 range of features suitable for varying age groups. This type of facility could be developed in the
 northwest corner of the site adjacent to the 25m pool. The ground level at this location is lower
 than around the 25m pool and the level difference may provide some advantage in the design of a
 splash pad.
- Continues to monitor and review the plant and equipment to ensure the water turnover rates and technical requirements are achieved.
- Provides the facility with a general upgrade to improve the amenities and customer comfort including refurbishing the change rooms and resurfacing the concourse.
- Installs a PV solar panel system to the change rooms roof to help offset utility costs.
- Separates the water filtration system to assist with better meeting the health standards



• Initiates additional direct programming opportunities to continue to attract usage of the facility including learn to swim and holiday program activities i.e. inflatables.

6.10.1 Capital Cost

As a stand-alone new water play area, this facility will include with the AP250:

- Dedicated water treatment plant
- Pumps and controls for leisure features
- Balance tank
- · Building enclosure for plant
- · Electrics and site power upgrade

No water heating is included but it is recommended that provision be made in pipework for future connections to either solar panels or a heat pump system.

Capital Cost: Order of Cost Estimate to +/-35% (Excl GST) capital cost of the splash pad

 Aquatic play structure AP250 White Water West or similar 	\$400,000*
Plant room pipework	\$15,000
Plant room building	\$60,000
Electricals	\$30,000
Total	\$505,000

^{**} WWW capex estimate

An allowance of between \$150,000 - \$390,000 could also be considered to improve the amenity of the facility

Change room refurbishment \$50,000 - \$100,000

Concourse \$50,000 - \$200,000 (depending on extent of surface replacement)

Plant and equipment \$50,000 - \$60,000
 Solar panel system \$20,000 - \$30,000
 Separate filtration system \$85,000 \$90,000

Group) Final Report





Item 7 - Attachment 1 - Helensburgh War Memorial Pool Investigation and Feasibility Assessment (Otium Planning



Option 4



PEDDLE THORP

Northbank Place East Level 1, 525 Flinders St Melbourne VIC 3000 Australia P +61 3 9923 2222 F +61 3 9923 2223 E info@pta.com.au W www.pta.com.au Acn 006 975 668 HELENSBURGH POOL WOLLONGONG PROJECT NO: 37-0128

REASON FOR ISSUE: PRELIMINARY OPTION 4

DATE: SCALE: 07-07-2017 1:500 @









7. Review of Fees and Charges

All four options reviewed included heating of either or both of the formal pool (25m or 50m) and the toddler's pools or splash pad. The current Council policy indicates that the heating of a pool is the trigger for Council charging and entry fee to the facility. Given the high cost associated with the operation of the pools Council could consider charging an entry fee to aid the cost of expenditure recovery.

Given the large number of Council own and operated swimming pools it is recommended that the fees and charges for the Helensburgh Pool be in line with and consistent with the policy for the existing heated Council facilities.

Adopted fees and charges applicable to the Helensburgh Pool are:

Table 21 Proposed Fees and Chargers Helensburgh Pool

ltem	Helensburgh Fees & Charges 2016/2017 (GST Inclusive, if applicable)
Use of any pool by schools outside Council's area for organised activities/events involving 50 or more persons - excluding carnivals (per hour or part thereof)	\$144.00
Normal Hours Exclusive Main Pool Use Only (per hour or part thereof)	\$191.00
After Hours Exclusive Main Pool Use Only	
Mon-Fri (per hour or part thereof)	\$224.00
Sat, Sun, Public Holidays (per hour or part thereof)	\$248.00
Pool grounds and surrounds for social event (excluding pool) (per hour or part thereof)	\$156.00
Carnivals generally including Swimming Club, South Coast of Tablelands ASC and pool complex hire (during normal operation hours)	
Sat (per hour or part thereof)	\$191.00
Sun or Public Holiday (per hour or part thereof)	\$224.00
Promotion at Swimming Pool Commercial	\$1,275
Promotion at Swimming Pool Non-Commercial	\$287.00
School Swimming Carnivals (within Wollongong LGA)	
Pool Hire for School Swimming Carnivals ½ day (up to 4 hours)	\$136.00
Pool Hire for School Swimming Carnivals Full Day (up to 8 hours)	\$272.00
Lane Hire (per lane or part thereof)	
Half Olympic Pool Complex	\$21.50
School Sport/Activities (within Wollongong LGA excludes Dept. Ed. SSS Learn to Swim Program)	\$11.00
Licenced LTS teaching (per lane per hour)	\$21.50

Table 22 Additional fees that are applicable to 50m pools:

Item	Fees & Charges 2016/2017 (GST Inclusive, if applicable)
Exclusive 50m Pool Hire for Swimming Club Point Score (per hour or part thereof)	\$92.50
Lane Hire (per lane or part thereof) (Olympic Complex)	\$42.00

Table 23 Additional feels that are applicable to heated pools

Item	Heated Pools Fees & Charges 2016/2017 (GST Inclusive, if applicable)
Children under 5 years with adult supervision	\$0.00
Carers/Companion Card Holders with paying adult/child	\$0.00
Adult actively supervision child under 5 years	\$2.40
Adult per visit	\$5.00





Item	Heated Pools Fees & Charges 2016/2017 (GST
	Inclusive, if applicable)
Child/concession per visit	\$3.20
Unemployed per visit	\$3.20
Family pass per visit	\$16.00
Organised school/social activities (per person pre-booked -	\$2.50
child/concession) (min 5 participants)	
Adult Voucher Book (25 tickets)	\$107.00
Child/Concession Voucher Book (25 tickets)	\$60.00
Adult 3-month pass (unlimited entry - non-transferable)	\$195.00
Child/concession 3-month pass (unlimited entry - non-transferable)	\$144.00
Spectators per visit	\$0.60
Use of Water Slide including entry	\$4.70
Exclusive 50m Pool Hire for Swimming Club Point Score (per	\$114.00 (no entry fee)
hour or part thereof)	
Unlimited pass out entry - adult	\$7.70
Unlimited pass out entry - child	\$4.60
Unlimited pass out entry - concessions	\$4.60
Unlimited pass out entry - family	\$23.00
50m Pool Hire for Private Bookings per hour or part thereof	
(after hours pool use)	
Mon-Fri	\$228.00
Sat, Sun & Public Holidays	\$252.00
Exclusive 50m Pool Hire for Swimming Club Point Score (per hour or part thereof)	\$114.00 (no entry fee)
Pool Hire (max 4 hour booking) - Ed. Dept., Carnivals, LTS, School Sport/Activities, Dept. Sport & Rec. LTS	Entry fee only
Swimming Clubs/South Coast and Tablelands Amateur Swimming Association Carnivals (50m pool max 5 hours) - Saturday, Sunday & Public Holidays	\$57.00 plus entry fee
Lane Hire (per lane per hour or part thereof)	
50m Pool	\$43.50 plus entry fee
25m Pool	\$21.50 plus entry fee
Licenced LTS teaching	\$35.00 plus entry fee
Aquarobics	
Adult	\$14.00
Child	\$9.70





Warranties and Disclaimers

The information contained in this report is provided in good faith. While Otium Planning Group has applied their own experience to the task, they have relied upon information supplied to them by other persons and organisations.

We have not conducted an audit of the information provided by others but have accepted it in good faith. Some of the information may have been provided 'commercial in confidence' and as such these venues or sources of information are not specifically identified. Readers should be aware that the preparation of this report may have necessitated projections of the future that are inherently uncertain and that our opinion is based on the underlying representations, assumptions and projections detailed in this report.

There will be differences between projected and actual results, because events and circumstances frequently do not occur as expected and those differences may be material. We do not express an opinion as to whether actual results will approximate projected results, nor can we confirm, underwrite or guarantee the achievability of the projections as it is not possible to substantiate assumptions which are based on future events.

Accordingly, neither Otium Planning Group, nor any member or employee of Otium Planning Group, undertakes responsibility arising in any way whatsoever to any persons other than client in respect of this report, for any errors or omissions herein, arising through negligence or otherwise however caused.





Appendix One - Demographic Review

Demographic Profile and Population Trends

The following section of the report reviews the demographic profile for the Helensburgh Pool catchment area made up of the Helensburgh-Otford area and the Stanwell Park, Stanwell Top and Coalcliff area. The information has been obtained from .id, an online based company that complete demographic analysis from ABS Census data.

The population trends indicate that between 2006 and 2011 the population of the Helensburgh Pool catchment increased from 8,015 people to 8,458 people. This equates to an approximate growth of 5.5% of the population (443Residents).

Age Group Population Profile

The age profile of residents in 2011 compared to the Wollongong Council population and the 2006 ABS Census data was estimated as follows:

Table 24 Population Age Profile of Helensburgh Pool Catchment Area

		20	11		200		Change
	Number	%	Wollongong City %	Number	%	Wollongong City %	2006 to 2011
0 to 4	657	7.8	6.3	637	7.9	6.1	20
5 to 9	612	7.2	6.1	706	8.8	6.8	-94
10 to 14	672	7.9	6.2	739	9.2	7.3	-67
15 to 19	677	8.0	6.7	622	7.8	6.9	55
20 to 24	490	5.8	7.5	396	4.9	5.5	94
25 to 29	394	4.7	6.5	358	4.5	5.0	36
30 to 34	548	6.5	6.1	582	7.3	5.8	-34
35 to 39	670	7.9	6.7	666	8.3	6.5	4
40 to 44	650	7.7	6.6	777	9.7	7.1	-127
45 to 49	747	8.8	6.9	676	8.4	7.4	71
50 to 54	675	8.0	6.7	511	6.4	6.9	164
55 to 59	502	5.9	5.9	392	4.9	6.7	110
60 to 64	396	4.7	5.5	304	3.8	5.6	92
65 to 69	281	3.3	4.5	210	2.6	4.7	71
70 to 74	167	2.0	3.8	120	1.5	3.9	47
75 to 79	110	1.3	3.2	121	1.5	3.5	-11
80 to 84	99	1.2	2.6	100	1.2	2.5	-1
85 and over	96	1.1	2.2	84	1.0	1.9	12
Total population	8458	100.0	100.0	8015	100.0	100.0	443

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented by .id, the population experts.

Analysis of the five year age groups of the Helensburgh Pool catchment area in 2011 compared to the Wollongong population shows that there was a larger proportion of people in the younger age groups (under 15 years) and a significantly smaller percentage of the population in the older age groups (65+ years). Overall, 22.9% of the population were aged between 0 and 15, and 8.9% were aged 65 years and over, compared to 18.6% and 16.3% respectively for Wollongong.

The major differences between the age structure of the pool catchment area and the Wollongong area were:

- A larger percentage of people aged between 45 to 49 (8.8% compared to 6.9%)
- A larger percentage of people aged between 10 to 14 (7.9% compared to 6.2%)
- A smaller percentage of people aged between 75 to 79 1.3% compared to 3.2%)
- A smaller percentage of people aged between 70 to 74 (2.0% compared to 3.8%)





A smaller percentage of people aged between 25 to 29 (4.7% compared to 6.5%)

The largest changes in age structure in the pool catchment area between 2011 and 2006 were in the following age groups:

- 50 to 54 (+164 people)
- 55 to 59 (+110 people)
- 40 to 44 (-94 people)
- 5 to 9 (-127 people)

Gender Population Profile

The following table details the gender comparison of Helensburgh Pool catchment area residents in 2011 compared to 2006 and the Wollongong area.

Table 25 Helensburgh Pool Catchment Gender Population

		201	1 _		Change		
	Number % Wollongong City %		Number	%	Wollongong City %	2011 to 2016	
Population	8458	100.0	100.0	8015	100.0	100.0	443
Males	4249	50.2	49.5	4005	50.0	49.5	244
Females	4210	49.8	50.5	4011	50.0	50.5	199

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented by id, the population experts.

There are slightly more males than females within the pool catchment area (50.2% compared to 49.8%) which is the opposite to the Wollongong population ratio. There was a slight increase in the percentage of males when compared to females between 2006 and 2011.

Country of Birth

The percentage of the population born overseas and the diversity in their country of origin can give an indication of how diverse the population is within the community.

Analysis of the Helensburgh Pool catchment area cultural diversity data shows that there is a low level of diversify with 3.9% born in a non-English speaking country and 3.6% speaking a language other than English while at home.

The table below details the country of birth of residents in 2011 and 2006 as well as being compared against Wollongong data.

Table 26 Most Common Countries of Birth

		2011		Change			
	Number	%	Wollongong City %	Number	%	Wollongong City %	2006 to 2011
United Kingdom	488	5.8	5.5	468	5.8	6.0	20
New Zealand	102	1.2	1.0	61	0.8	0.9	41
United States of America	33	0.4	0.3	24	0.3	0.2	9
South Africa	21	0.2	0.3	25	0.3	0.2	-4
Canada	21	0.2	0.2	6	0.1	0.1	15

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented by .id, the population experts.

The table below summarises the diversity within the Helensburgh Pool catchment area and identifies whether residents are from English or non-English speaking backgrounds.





Table 27 Summary of Diversity

		20	11		Change		
	Number	%	Wollongong City %	Number	%	Wollongong City %	2006 to 2011
Total overseas born	1045	12.3	21.8	942	11.7	21.5	103
Non-English speaking backgrounds	327	3.9	14.3	307	3.8	13.8	20
Main English speaking countries	718	8.5	7.5	634	7.9	7.7	84
Australia	7085	83.7	73.3	6773	84.5	72.1	312
Not stated	328	3.9	4.9	302	3.8	6.4	26
Total Population	8461	100.0	100.0	8019	100.0	100.0	442

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented by .id, the population experts.

The percentage of the population born overseas is lower than that found in the Wollongong population (12.3% compared to 21.8%). The percentage from non-English speaking backgrounds is also significantly lower than that in the Wollongong area at 3.9% compared to 14.3%.

Languages Spoken at Home

The Helensburgh Pool catchment area has very few residents that speak a language other than English at home with 3.6% of residents compared to 16.7% in Wollongong.

The top languages spoken in the catchment other than English in 2011 were:

- Spanish
- German

Resident Income Levels

The table below presents the personal weekly income levels of residents within the catchment area.

Table 28 Weekly Individual Income Levels for the Helensburgh Pool Catchment Area

	2011						
	Number	%	Wollongong City %				
Negative Income/ Nil income	553	8.6	8.2				
\$1-\$199	497	7.7	8.0				
\$200-\$299	446	6.9	13.0				
\$300-\$399	475	7.4	12.0				
\$400-\$599	684	10.6	12.0				
\$600-\$799	581	9.0	9.1				
\$800-\$999	512	7.9	7.0				
\$1000-\$1249	545	8.4	6.8				
\$1250-\$1499	474	7.3	5.0				
\$1500-\$1999	643	10.0	6.8				
\$2000 or more	627	9.7	5.2				
Not stated	410	6.3	6.8				
Total persons aged 15+	6458	100.0	100.0				

Source: Australian Bureau of Statistics, Census of Population and Housing_2006 and 2011. Compiled and presented by .id, the population experts

Analysis of the individual income levels in the Helensburgh Pool Catchment area compared to Wollongong City shows that there was a higher proportion of people earning a high income (those earning \$1,500 per week or more) and a lower proportion of low income people (those earning less than \$400 per week). Overall 19.7% of the population earned a high income and 22.0% earned a low income, compared to 12.0% and 33.0% respectively for Wollongong.





The main differences between the pool catchment area and the Wollongong area's individual incomes were:

- A larger percentage of people who earned \$2,000 or more (9.7% compared to 5.2%)
- A larger percentage of people who earned \$1,500-\$1,999 (10.0% compared to 6.8%)
- A smaller percentage of people who earned \$200-\$299 (6.9% compared to 13.0%)
- A smaller percentage of people who earned \$330-\$399 (7.4% compared to 12.0%)

Vehicle Ownership

The number of vehicles per household is detailed in the table below.

Table 29 Vehicle Ownership

	2011								
	Number	%	Wollongong City %						
No motor vehicles	91	3.3	11.2						
1 motor vehicle	804	28.8	36.3						
2 motor vehicles	1205	43.2	32.8						
3 or more motor vehicles	545	19.5	13.6						
Not stated	142	5.1	6.1						
Total households	2792	100.0	100.0						

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented by .id, the population experts

A household's ownership of vehicles can be used as an indicator of an individual's ability to independently access leisure facilities without the reliance on public transport or utilizing other modes of transport.

A review of the catchment areas vehicle ownership indicates that just over nine out of every 10 households (91.5%) own one or more vehicles indicating a high ability to independently access leisure activities. This is higher than the Wollongong population where 82.7% own one or more vehicles. Only 3.3% of households in the catchment area identified as having access to no motor vehicles therefore there may be less of a reliance on public transport or non-motorised forms of transport such as walking, bike riding or using skateboards.





Appendix 2 - Geotechnical Report





Appendix Three - Capital Cost Estimate

City of Wollongong Helensburgh Pool

Preliminary Cost Plan QS REF: me Date: 17/07/2017



1400 60 Allow 40 70 1,570 Allow Allow Allow		2,600 2,000 1,200 1,200	\$	48,000	\$	48,000	s	cost \$	\$	cost \$	***	3,640,000 120,000 250,000
1400 60 Allow 40 70 1,570 Allow Allow	\$ \$	2,600 2,000 1,200 1,200			\$		s			*		3,640,000 120,000 250,000
Allow Allow Allow Allow Allow	\$ \$	1,200 1,200		48,000	\$	48,000	s	84 000				120,000 250,000
Allow Allow Allow Allow Allow	\$ \$	1,200 1,200		48,000	\$	48,000	s	84 000				120,000 250,000
Allow Allow Allow Allow Allow	\$ \$	1,200 1,200		48,000	\$	48,000	s	84 000				120,000 250,000
1,570 Allow	\$	1,200		48,000	\$	48,000	s	84 000			\$	250,000
1,570 Allow	\$	1,200		48,000	\$	48,000	s	84.000			\$	
1,570 Allow	\$	1,200		48,000	*	48,000	s	84 000				
1,570 Allow Allow										84,000		48,000
Allow	\$	31						0.7,000	1	04,000		
Allow	\$	31	_									
Allow	\$	31		48,000	s		s		_			
Allow			7	48,000	,	48,000	*	84,000	\$	84,000	s	4,058,000
Allow												
			s	165,000	\$	180,000	\$	405,000	\$	420,000	\$	147,000
B. 11 a			s	130,000	\$	160,000	\$	870,000	\$	900,000	\$	590,000
							s	50,000	\$	100,000	\$	100,000
Allow							4	100,000	s	100,000	T .	100,000
Allow					\$	50,000	1	,	ŝ	50,000	ŝ	50,000
					ļ .							
Allow					\$	300,0			\$	300,000	\$	300,000
Allow					\$	40 0			\$	400,000	\$	400,000
Allow							s	2,800,000	\$	2,800,000		
				100.000	.4	100	\$					150,000
												158,700
									_			
			\$	424	s	1,299,000	\$	962,500	\$	5,892,000	s	1,895,700
						^		•				
Allow					1	10,000	s	20,000	\$	30,000	\$	30,000
Allow											\$	50,000
Allow				_	4	15,000	s	60,000	\$	60,000	\$	25,000
				_				,	1	,		
				100,000			s		1			
					*							uded in Building 350,000
Allow			۲.		Ė	•	1	130,000	,	130,000	*	330,000
			\sim	150,000	*	325,000	\$	460,000	\$	490,000	\$	455,000
			\mathbf{v}	622,500	\$	1,672,000	\$	5,506,500	\$	6,466,000	\$	6,408,700
-					١.		١.	554.000			١.	
	Z		; 1									641,000 352,000
			-		7		7				*	
			\$	97,000	\$	260,000	\$	853,000	\$	1,002,000	\$	993,000
87			\$	58,000	\$	155,000	4	509,000	\$	598,000	\$	593,000
Allow			\$	7,000	\$	17,000	s	56,000	\$	65,000	\$	65,000
Allow			\$	35,000	\$	35,000	s	50,000	\$	50,000	\$	100,000
T	•		s	100,000	\$	207,000	\$	615,000	\$	713,000	\$	758,000
			\$	819,500	\$	2,139,000	\$	6.974.500	l s	8,181,000	-	8,159,700
	Allow	Allow	Allow	Allow Allow Allow Allow S Allow S Allow Allow Allow Allow Allow Allow Allow Allow S S S S S S S S S S S S S S S S S S S	Allow Allow Allow S 100,000 S 29,500 S 100,000 Allow S 3,000 S 97,000 S 5,000 S 100,000 Allow S 15,000 S 100,000 S 1	Allow Allow Allow 5 100,000 1 4 100 100 100 100 100 100 100 100	Allow Allow Allow 5 100,000 1 100,000	Allow Allow 5 100,000 1 100,000 5 10	Allow Allow Allow 5 100,000 5 100,000 5 15,000 100,000 100,000 5 100,000 5 100,000 100	Allow Allow 5 100,000 1 100,000 5 10	Allow Allow S 100,000 \$ 15	Allow Allow S 100,000 \$ 2,800,000 \$ 2,280,000 \$ 1,000







Prepared for:

Otium Planning Group





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Prepared for:

Otium Planning Group C/ JWC Enginners john@jwceng.com.au

30 June 2017

Our Ref: TERRA170084Rep 1 Rev 0

Attention: Mr J Wemyss

RE: Helensburgh Pool Upgrade

Report on Geotechnical and Contamination Investigations

Dear John

Please find enclosed our combined geotechnical and preliminary target contamination report for the proposed upgrade of the Helensburgh pool located off Walker Street in Helensburgh, NSW.

This report should be read in conjunction with the attached document 'About Your Report' provided in Appendix A. Should you have any questions please contact the undersigned.

For and on behalf of Terra Insight

Karen Gates

Principal Engineer/ Director

CPEng NPER MIEaust BEng MEngSc(Geot) MEnvMgt MBA





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Contents

1	Introduction						
2	Scope of work						
3	Site	5					
	3.1	NSW EPA records	5				
	3.2	Site Geology	5				
	3.3	Historical Aerial Imagery	5				
	3.4	Summary of desktop site history review	6				
4	Site	walkover and surface conditions	6				
5	Subs	surface conditions	6				
6	Labo	pratory test results	7				
	6.1	Geotechnical testing	7				
	6.2	Environmental testing	7				
7	Geo	technical assessment	8				
	7.1	Geotechnical site model	8				
	7.2	Footings	8				
	7.3	Earthworks	10				
8	Con	clusions and Recommendations	11				
9	List	of Acronyms	12				
10	List	of Definitions	13				
Ta	bles						
		: Summary of historical aerial photographs	5 7				
	Table 5-1: Summary of subsurface conditions encountered in boreholes						
	Table 7-1: Footing design parameters Table 7-2: Kirsten's eight-point excavation classification system						
		: Fill placement density requirements	10				
Fi	gure	S					

Figure 1: Site location and Geology

Figure 2: Historical Aerial Images

Figure 3: Potential Areas of Envrionmental Concern AEC

Figure 4: Site plan and Test locations







Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendices

Appendix A: Your Report
Appendix B: Site Images
Appendix C: Engineering Logs

Appendix D: Laboratory Results – Geotechnical Appendix E: Laboratory Results - Environmental

Email: admin@terransw.com Tel: 0458 008 030 PO BOX 414 Unanderra NSW 2526





Helensburgh Pool Upgrade Report on Geotechnical Investigation

1 Introduction

At the request of JWC engineers on behalf Otium Consulting, Terra Insight Pty Ltd (Terra) has carried out a combined geotechnical and limited targeted contamination assessment of the subsurface conditions at Helensburgh Pool, located off Walker Street in Helensburgh, NSW. The assessment was undertaken in relation to the proposed extension of the existing pool southwards to facilitate heating of the pool.

The objective of the assessment was to investigate the ground conditions underlying the site and provide advice on:

- Foundation conditions;
- The depth to rock and ease with which it can be excavated; and
- The potential for contamination to be present on fill (if encountered).

The findings contained in this report are the result of discrete/specific methodologies used in accordance with normal practices and standards. Under no circumstances can it be considered that these findings represent the actual state at all points. The subsurface conditions may vary significantly on the other parts of the site, particularly where no nearby sampling and testing work has been carried out. This report does not provide a complete assessment of the contamination status of the site or surrounding area. The report is limited to the scope or work and objectives as outlined herein.

2 Scope of work

The proposed scope of work for the geotechnical and environmental assessment included the following:

- Site preparation including:
 - Review of existing information;
 - Dial before you dig submission (service clearance was provided by council);
 - Safety plan and management of subcontractor; and
 - Liaison with council
- · A Desk top study including review of aerial images and geological mapping;
- A site walkover by a principal geo-environmental engineer;
- Site investigation including
 - Service clearance of the proposed test locations (to be done by council);
 - Augering of four (4) boreholes to 3.0m depth or refusal in rock, whichever is shallowest, using an excavator attached with an auger
 - In situ testing (including DCPs) and sampling will be undertaken at regular intervals at each test site; and
 - Backfilling of the test sites will tailings;
- Geotechnical Laboratory investigation including two (2) Atterberg Limits testing.
- A limited scope of environmental testing was allowed to identify if there is the potential for contamination of
 any imported fill materials encountered on the site. Testing comprised heavy metal testing on 2 samples per
 site (8 samples in total) based on the assumption that coal washery rejects (CWR) may be present on the site
 (there is a history of coal washery reject CWR being used as fill on the nearby oval);
- Preparation of a report summarising the results of fieldwork, presenting the subsurface conditions
 encountered, interpreting findings and providing engineering advice relevant to the objectives outlined above.

The scope of work was carried out in general accordance with the above, except for the following exceptions:

- As the depth to rock was shallow on the southern side of the site, time permitted the implementation of an
 additional borehole to determine the depth to rock to the west of the existing pool (It is understood that initial
 plans for the pool considered a 50m pool orientated west-east);
- As limited imported fill was encountered on the site, the level of environmental testing was reduced. Two
 samples of fill material (most likely won from local cut to fill earthworks) were submitted for heavy metal
 testing only.

TERRA170084.Rep1 Rev 0 30 June 2017







Helensburgh Pool Upgrade Report on Geotechnical Investigation

3 Site Location and Setting

Helensburg Pool is located of Walker Street as shown on Figure 1. The site is part of Lot 7065 in DP 1031042 which includes the pool, a sports-field to the north of the pool and associate parking and facilities. The proposed extension to the pool is to the south of the existing pool.

3.1 NSW EPA records

Based on an online search conducted on 5 May 2017, there are currently no notices for the site (or neighbouring sites) on the NSW EPA contaminated land record or Protection of the Environment Operations Act 1997 public register.

3.2 Site Geology

The 1:100,000 geology sheet for Wollongong indicates the site is underlain by rock formations from the Hawkesbury Sandstone which includes fine to coarse sandstone, with very minor shale and laminate lenses. An extract from the geology sheet is provided on Figure 1.

3.3 Historical Aerial Imagery

Aerial imagery from 2002 onwards was reviewed on Google Earth software. Aerial Images of the site for late 1940's and late 1970's were viewed using Wollongong Spyglass. Historical images of the site are shown on Figure 2. Table 3.1 presents a summary of observations made during the review.

Table 3.1: Summary of historical aerial photographs

Image Date	Onsite Observations	Offsite Observations			
1940's	The site is shown as a mainly grassed with a number of mature trees.	This image shows a sports field to the north of the site. Walker Street is visible the east, and Parkes Street to the south. Residential development is visible to the south of Parkes Street, west of Walker Street and east the Laurina Avenue to the west. Forest is visible to the immediate west and surrounding the oval.			
1976	The pool and paddling pool and associated facilities are now visible.	Two sports fields are now visible to the north of the site. The streets around the site are also visible. Land immediately to the west is now partly developed.			
2003 (Google Earth)	There is little change on the site.	Additional residential and commercial development is visible to the immediate north and south-east of the site.			
2004 (Google Earth)	Shaded canopies are now visible on the site.	No notable differences			
2012 (Google Earth)	There is little notable change on the site. Small changes in vegetation are visible	There are some minor changes around the site, including additional car parking, changes to the existing carpark, formalisation of roads.			





Helensburgh Pool Upgrade Report on Geotechnical Investigation

3.4 Summary of desktop site history review

The following is a summary of the history of the site:

- The site is and has been used for recreational purposes since at least the 1970's. Prior to this the site was mainly a natural landscaped area since at least the late 1940's.
- The site comprises a 25 m long pool and associated facilities.

4 Site walkover and surface conditions

A site walkover by a principal geo-environmental engineer was undertaken to visually identify and observe:

- · potential sources of contamination,
- surrounding land uses and topography including noting visual evidence of filling; and
- evidence of structural distress related to ground conditions;

Images taken during the site inspection are provided in Appendix B for reference. The following observations were made during the site visit:

- The site is located on relatively level ground with a surface elevation of about RL 256 to 254 AHD with ground levels typically falling to the north-west.
- The pool is located in the middle of the site, within a fenced enclosure. A smaller paddling pool is located to the
 east of the main pool. The existing on-site facilities are located to east of the pools. Car parking is located to the
 east of the facilities.
- The main pool is surrounded by benches, shade canopies and light poles.
- Photograph 1 shows the north-western edge of the pool, looking north towards the sports-fields. This area
 appears to have been filled to provide a level platform for the pool. A moderate to steep slope of about 2m
 height is visible to the south of the site.
- Photograph 2 shows the site is mainly grassed with a few mature trees around the site boundaries. Photograph 3 and 4 show the sloping ground to the south of the pool. The slope is gently, failing typically to the north-west.
- No visual signs of groundwater seepages, outcropping rock or erosion were evident on the site.

5 Subsurface conditions

The locations of the test holes are shown on Figure 3. The engineering logs of the test holes with soil and rock description explanation sheets are presented in **Appendix C** and should be referred to for a detailed description of the materials encountered. The subsurface conditions underlying the site were found to comprise the following:

- TOPSOIL: comprising sandy CLAY, low to medium plasticity, Brown, soft to firm, moist; underlain by
- FILL: predominantly Clayey SAND and SAND, fine or fine to medium grained, brown to grey-brown, medium
 dense, moist to dry, 'trace' to 'with' fine to medium grained sub-angular gravel; underlain by
- RESDIUAL: comprising SAND, fine to medium, grey, moist, medium dense to dense, 'trace' to 'with' subangular fine to medium gravel, underlain by:
- EXTREMELY WEATHERED ROCK: SANDSTONE recovered as above.

Table 5-1 below provides a summary of the subsurface conditions encountered in each test hole.





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Table 5-1: Summary of subsurface conditions encountered in boreholes

Test site	Depth range over which material was encountered within the Boreholes (m) BGSL Material Description						
number							
	TOPSOIL	FILL	RESIDUAL	XW ROCK			
BH01	0.0-0.2	0.2-1.0	1.0-2.0	2.0-2.2 ^R			
BH02	0.0-0.1	0.1-0.8	0.8-1.5	1.5-1.6 ^R			
BH03	0.0-0.1	NE	0.1-0.5	0.5-0.6 ^R			
BH04	0.0-0.1	NE	0.1-0.5	0.5-0.6 ^R			
BH05	0.0-0.1	0.1-1.0	1.0-2.0	2.0-2.3 ^R			

Note - * - End of Borehole target depth.R = end of borehole refusal, NE - not encountered

Groundwater seepage was not observed in any of the test holes. Soils were typically found in a dry to moist condition.

6 Laboratory test results

6.1 Geotechnical testing

As the soils were typically non cohesive in nature, no Atterberg limits testing was deemed required. A sample of soil (B1 S1 0.2-0.5m) was testing for particle size distribution. This testing indicates the fill soils are a clayey SAND with gravel which is consistent with the field descriptions. These soils are non-plastic. The laboratory certificate is provided in Appendix D.

6.2 Environmental testing

Site history information and site observations indicate a limited number of potentially contaminating activities that may have occurred at the site. These activities and potential sources of contamination include:

- 1. Use of site potentially for wastage of spoil;
- 2. The site's historic and current use as a pool. Chemicals associated with the operation and maintenance of the pool are likely to be present.
- 3. Buildings on the site are of an age to potentially contain asbestos and lead paint.

As the site usage will not change, the assessment focused on potential contamination from imported fill. No CWR fill was encountered in the boreholes. Subsurface investigations found the fill materials on the site to be of similar composition to the underlying natural materials. Assessment of the fill soils was therefore based on assessing if the soils meet the criteria for excavated natural material (ENM).

Two samples of the fill material encountered on the site were submitted to a NATA registered laboratory for testing to detect the presence of heavy metals. A summary of the results with the laboratory certificates is provided in Appendix E. This testing indicates some heavy metals above the level of detection, but below NSW EPA health and environmental guidelines as follows:

- Chromium: was detected at 18 ppm in sample BH01-S1 (0.2-0.5) and 6ppm in sample BH01-S2 (0.5-1.0) were detected in both samples;
- Lead: was detected in sample BH01-S1 (0.2-0.5) at 6ppm;
- Copper: was detected in sample BH01-S1 (0.2-0.5) at 7ppm; and
- Zinc: was detected in sample BH01-S1 (0.2-0.5) at 7ppm.





Helensburgh Pool Upgrade Report on Geotechnical Investigation

7 Geotechnical assessment

7.1 Geotechnical site model

The site has been subject to earthworks. These earthworks likely involved excavation of material from within the pool footprint and south-western part of the site, and placement of this excavated material on the north-western part of the site to provide a level area around the pool.

Fill material encountered on the site was of similar composition to the underlying natural soil and is therefore likely to meet the classification of ENM subject to waste classification. Limited testing of this material for contaminants found levels of heavy metal above the limits of detection but below guidelines environmental and health guidelines values for the current site's recreational use.

The fill material is underlain by residual soil which grades into weathered sandstone at depths between 0.5 and 2.0m. The depth to rock is shallowest on the south-eastern corner and deeper in the north-western corner where fill has been placed.

7.2 Footings

Footings for new building should be designed by a structural engineer to suit the ground conditions. Characteristic seasonal surface movements for the site are expected to be minimal(<10mm), due to the granular and non-cohesive nature of the near surface soils.

All footings for the same structure should be founded on strata of similar stiffness and reactivity to minimise the risk of differential movements, with articulation provided where appropriate. Footings are expected to comprise a ground slab with internal and edge beams or a stiffened raft slab.

Slabs /rafts founded on the natural residual soils underlying the site may be proportioned on an allowable bearing pressure of 100kPa. Footings located on the weathered sandstone rock at a depth between 0.5 and 2.0m, can be proportioned based on an allowable bearing capacity of 300kPa. Table 7.1 provides relevant design parameters for footings for the site.

The above recommendations are for the site conditions advised at the time of fieldwork and consequently these may need to be reviewed if the proposed earthworks are changed (e.g. further fill is placed on the site or the depth of cut is greater than 2m).

To ensure adequate performance of footings, the following is recommended:

- The planting of fast growing trees or trees with aggressive root systems close to the proposed pool should be avoided.
- Irrigation of landscaped areas should be carefully managed to provide relatively uniform soil moisture content in landscaped areas around the pool.
- Surface water should be drained from the site to minimise ponding around the pool. Surface drains should be maintained free of blockages.
- Appropriate drainage is provided around the pool to prevent scouring. The ground around the pool should slope away at 1 in 20 for 2m and then collected via surface drains and disposed of safely away from the slopes.

224





Item 7 - Attachment 2 - Helensburgh Pool Upgrade - Report on Geotechnical Investigation

Helensburgh Pool Upgrade Report on Geotechnical Investigation

Table 7-1: Footing design parameters

Material	Undrained Shear Strength (kPa)	Allowable bearing capacity (kPa)	Youngs Modulus (MPa)	Bulk Unit Weight (kN/m³)	Geotechnical strength reduction factor	Ultimate End bearing (MPa)	Ultimate Shaft Adhesion (kPa)
Topsoil	25	Ignore	8	16	0.45	Ignore	Ignore
Fill: Sand and Clayey Sand	40	Ignore	15	18	0.45	Ignore	Ignore
Residual Soil – Sand, medium dense or better, ø'=28 degree	75	100	20	18	0.45	lgnore	Ignore
XW sandstone rock	NA	300	50	20	0.45	1 MPa	50

Notes: NE - not encountered





Helensburgh Pool Upgrade Report on Geotechnical Investigation

7.3 Earthworks

7.3.1 Site preparation

Ground preparation should allow for the stripping of topsoil and uncontrolled fill (if deemed required) from structural footprints. The stripped granular soil should be suitable for structural fill once processed to exclude cobbles and foreign material (where present). Alternatively, it can be for landscape applications if determined to be suitable for this purpose. Surplus excavated materials may need to be exported or disposed of off the site.

7.3.2 Ease of excavation

This ease with which materials can be excavated onsite has been assessed using the Kirsten eight-point classification system provided in Table 7.2 below.

Table 7-2: Kirsten's eight-point excavation classification system

Class	Material Type	Description of Excavatability
1	Soil / Detritus	Hand spade (Dozer D3)
2		Hand pick and spade
3		Power tools
4	Rock	Easy ripping (Dozer D7)
5		Hard ripping (Dozer D8)
6		Very hard ripping (Dozer D9)
7		Extremely hard ripping / blasting (Dozer D10)
8		Blasting

The topsoil, fill and residual materials encountered are expected to meet a Kirsten Classification of Class 2 to 3 and should be readily excavated using conventional earthmoving equipment such as hydraulic excavators, backhoes, and dozers.

The weathered rock at depths between 0.5 and 2.0m on the northern and western side of the site is likely to require easy ripping initially. The degree of ripping will increase with depth. On the southern side of the site, hard to very hard ripping is likely to be required at depths between 1.0 and 2.0m. At depths below 2.0m very hard to extremely hard ripping and possibly some minor sawing, is likely to be required.

7.3.3 **Fil**

Fill materials to be placed on the site are likely to comprise general and/or structural fill. Fill materials should be placed and compacted to the required density ratios as outlined in Table 11.2.

Table 7-3: Fill placement density requirements

Description	Density Ratio Requirements		
Structural fill	Minimum 100% Standard		
General Fill Zone (deeper than 300mm below top of subgrade)	Minimum 98% Standard		





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Testing of controlled fill should be in accordance with the following:

- Density and compaction testing should be undertaken on all fill placed.
- Density and compaction testing of the fill should be carried out on each 150mm thick layer of compacted fill. Proof rolling of each layer should also be carried out using a smooth drum roller of at least 12 tonne mass, without vibration;
- Density testing of fill should be carried out at the rate of three tests per visit or one
 test every 2000m², whichever is the greater. If full time geotechnical supervision of the
 fill occurs, then a minimum three tests per day should be sufficient.

8 Conclusions and Recommendations

The following conclusions and recommendations have been made based on the findings of the desk top, field and laboratory investigations:

- The site is underlain by:
 - TOPSOIL and FILL: predominantly sandy in nature; underlain by
 - RESIDUAL SOIL: comprising SAND which grades into extremely weathered sandstone.
- The depth to rock is shallowest on the southern part of the site, with refusal in rock encountered at a depth of 0.5m.
- No groundwater was encountered during the investigation.
- Heavy metals above the level of detection were encountered on the site. The levels of heavy metals detected were below the Class C HILs and Urban/parkland EILs derived for the site and within background levels.





Helensburgh Pool Upgrade Report on Geotechnical Investigation

9 List of Acronyms

ACM	Asbestos containing materials
AECs	Areas of environmental concern

AF Asbestos fines

ANZECC Australian and New Zealand Environmental Conservation Council

ARCP Asbestos removal control plan

BTEX Benzene, toluene, ethylbenzene and xylene
CLMP Contaminated land management plan
CMP Construction management plan
COCs Contaminants of concern

CSM Conceptual site model

DESA Detailed environmental site assessment

DQO Data quality objective
EIL Ecological Investigation level
EPA Environmental protection Agency

FA Fibrous Asbestos

GME Groundwater Monitoring event

GSW General solid waste

GWMP Groundwater management plan HIL Health Investigation limits JSA Job Safety analysis

LOR Limit of report

LLD Lower limit of detection ML Management limits

NATA Nata Association of Testing Authorities
NEPC National Environmental Protection Council

OCP Organochlorine Pesticides
OHS Occupation Health safety
OPP Organophosphorus Pesticides
PAH Polyaromatic Hydrocarbons

PBILs Phyto-toxicity based investigation levels

PCBs Polychlorinated bisphenols

PESA Preliminary environmental site assessment

PID Photoionization detector

QC Quality Control RAP remedial action plan

REF Review of Environmental factors

RSW restricted solid waste

SVOC Semi-volatile organic compounds
TPH Total petroleum hydrocarbons
VOC Volatile organic compounds
WHS Work health and safety







Helensburgh Pool Upgrade Report on Geotechnical Investigation

10 List of Definitions

Airborne asbestos: means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.

Asbestos: means the varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.

Asbestos containing material (ACM): means any material or thing that, as part of its design, contains asbestos.

Asbestos removalist: means a person conducting a business or undertaking who carries out asbestos removal work.

Asbestos removal work means: Work involving the removal of asbestos or ACM

- Class A asbestos removal work or Class B asbestos removal work as outlined in Part 8.10 of the WHS Regulations.
- Class A Licence: Can remove any amount or quantity of asbestos or ACM, including any amount of friable asbestos or non-friable asbestos or ACM.
- Class B Licence: Can remove any amount of non-friable asbestos or ACM.

Friable asbestos: means material that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos.

NATA-accredited laboratory: means a testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.

Non-friable asbestos: means material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.

Project Works Boundary: Fence to be erected for duration of construction works and operational maintenance areas.

Project Works Zone: Construction area and potential ancillary sites within project works boundary.

Proposed Property Boundary: Future land title covering road to be owned by LMCC Road Corridor: Cadastral boundaries associated with the proposal.





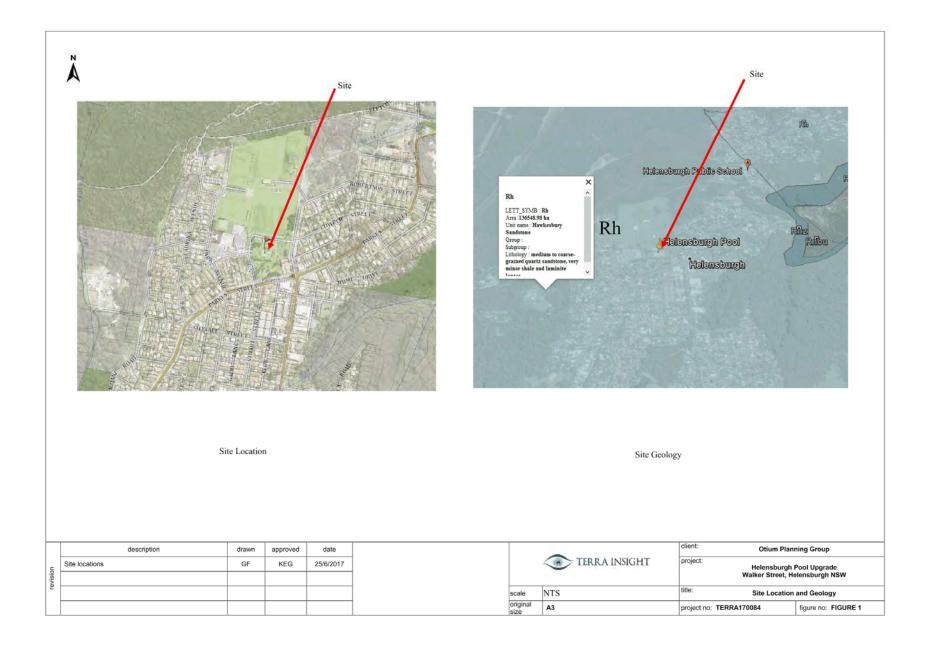


Helensburgh Pool Upgrade Report on Geotechnical Investigation

Figures

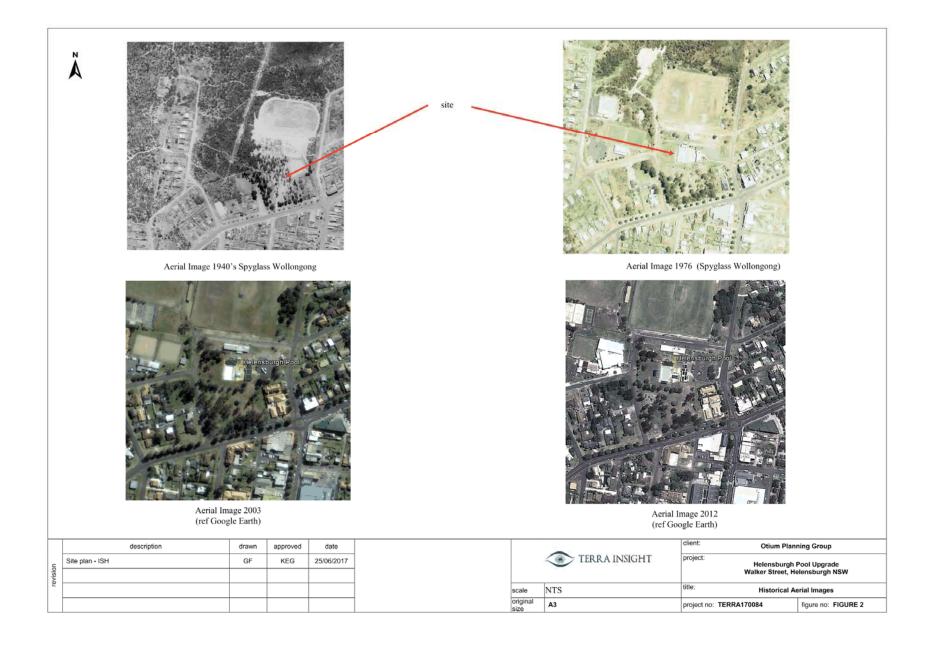
230





231

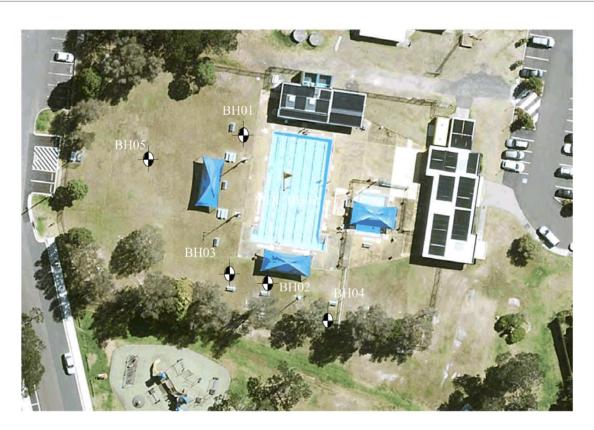




232







LEGEND



Test site

revision	description	drawn	approved	date				client: Otium Planning Group		
	Site plan - WHS	GF	KEG	25/06/2017	Helensburgh P					
								Walker Street, Helensburgh NSW		
					scale	scale NTS		e: Test site l	ocations	
					original size	nal A3	pro	oject no: TERRA170084	figure no: FIGURE 3	





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendix A: Your Report



Your Report

These notes have been prepared to help you understand the advice provided in Your Report and its limitations.

Your Report is based on what you tell us

Your Report has been developed based on the information you have provided such as the scope and size of your project. It applies only to the site investigated. If there are changes to the proposed works, then the advice provided within Your Report may need to be reviewed.

Your Report is written with your needs in mind

The advice provided within Your Report is also not relevant to another purpose other than that originally specified at the time the report was issued. Please seek advice from Terra Insight before you share Your Report with another third party – except for the purpose for which the report was written.

Terra Insight assumes no responsibility and will not be liable to any other person or organisation for, or in relation to, any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in Your Report.

Your Report is based on what we observed

The advice provided within Your Report assumes that the site conditions, revealed through selective point sampling at a particular point in time, are indicative of the actual conditions on your site. However, the nature of the materials underlying your site is affected by natural processes and the activity of man. As a result conditions on your site can change with time; they can also vary spatially. As a result, the actual conditions encountered may differ from those detailed within Your Report. Although nothing can be done to change the actual site conditions which exist, steps can be taken to gain a better understanding of the subsurface conditions underlying your site and reduce the potential for unexpected conditions to be encountered

The advice within Your Report also relies on interpretation of factual information based on judgement and opinion and has a level of uncertainty attached to it. Only Terra Insight is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered as the project develops. If the details of your project have changed, the site conditions have changed or a significant amount of time as elapsed since our report was written, the advice provided within Your Report may need to be reviewed.

Your Report has been written by a Professional

The report has been prepared using accepted procedures and practices of the consulting profession at the time it was prepared, and the opinions, recommendations and conclusions set out in the report are made in accordance with generally accepted principles and practices of that profession.

Your Report is better when it is kept together

Your Report presents all the findings of the site assessment and should not be copied in part or altered in any way. Keeping Your Report intact reduces the potential for yourself or other design professionals to misinterpret the report.

Your Geo-Environmental Report

If Your Report is for geotechnical purposes only, it will not relate any findings, conclusions, or recommendations about the potential for hazardous materials to exist at the site unless you have specifically asked us to do so. If your report is written for Geo-Environmental purposes the following should be noted in addition to the above:

- Advancements in professional practice regarding contaminated land and changes in applicable statues and/or guidelines may affect the validity of this
 report. Consequently, the currency of conclusions and recommendations in Your Report should be verified if you propose to use this report more than
 6 months after its date of issue;
- Your Report is based on information gained from environmental conditions (including assessment of some or all of soil, groundwater, vapour and surface water) and supplemented by reported data of the local area and professional experience. The assessment has been scoped with consideration to industry standards, regulations, guidelines and your specific requirements, which includes budget and timing;
- The characterisation of site conditions is an interpretation of information collected during assessment, in accordance with industry practice. Any
 interpretation in Your Report is not a complete description of all material on or in the vicinity of the site, due to the inherent variation in spatial and
 temporal patterns of contaminant presence and impact in the natural environment.
- We may have relied on data and other information provided by you and other qualified individuals in preparing Your Report. We have not verified the
 accuracy or completeness of such data or information except as otherwise stated in Your Report. For these reasons Your Report must be regarded as
 interpretative, in accordance with industry standards and practice, rather than being a definitive record.
- For each purpose, a tailored approach to the assessment of potential soil and groundwater contamination is required. In most cases, a key objective is
 to identify, and if possible quantify, risks that both recognised and potential contamination posed in the context of the agreed purpose. If the proposed
 use of the site changes, the assessment may no longer be valid and will need to be reviewed.

^{*} For further information on this aspect reference should be made to "Guidelines for the Provision of Geotechnical information in Construction Contracts" published by the Institution of Engineers Australia, National headquarters, Canberra, 1987.





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendix B: Site Images

236



Item 7 - Attachment 2 - Helensburgh Pool Upgrade - Report on Geotechnical Investigation

Photograph1: View of western edge of pool, looking north towards borehole BH01



Photograph 3: View of the southern end of the pool and area of proposed pool extension to the south, looking towards borehole BH04





Photograph 2: View of north-western part of site looking north-west from borehole BH01.



Photograph 3: Close up of southern part of site, looking south-east from near borehole BH03 towards borehole BH04 and BH02. Shows gentle slope.

		client: Otium Planning Group		
		project:	Helensburgh I Walker Street, He	
scale	NST	title:	Site Phot	ographs
original size	A3	project no:	TERRA170084	Plate no: 1







Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendix C: Engineering Logs



Page 1 of 4



How to interpret the engineering logs in Your Report

FIELD DECRIPTIONS OF SOILS

		(Excluding particle		DENTIFICATION PRO han 60 mm and basing	CEDURES gractions on estimated mass)	USC	PRIMARY NAME			
ore than 50% of materials Jer than 0.075 mm GRAVELS Wore than half of coarse fraction is	ction is	Wide range in grain size and substantial amounts of all intermediate particle sizes Wide range in grain size and substantial amounts of all intermediate particle sizes Predominantly one size or a range of sizes with more intermediate sizes missing		GW	GRAVEL					
	GRAVELS alf of coarse fra r than 2.36 mm	CLE GRAY (Little fin	Predomir	nantly one size or a rar	nge of sizes with more intermediate sizes missing.	GP	GRAVEL			
an 50% o n 0.075 r	GRAVELS nan half of coarse fra larger than 2.36 mm	/ELS FINES ciable int of ss)	Non-plas	Non-plastic fines (for identification procedures see ML below)		GM	SILTY GRAVEL			
More that arger tha	More th	More than half larger the larger the graveLS WITH FINES Appreciable amount of fines)		nes (for identification p	rocedures see CL below)	GC	CLAYEY GRAVEL			
ED SOLLS 3 mm is 1	raction	CLEAN SANDS (Little or no fines)	Wide range in grain sizes and substantial amounts of all intermediate sizes		SW	SAND				
COARSE GRAINED SOILS More than 50% of materials less than 63 mm is larger than 0.075 mm SANDS (GRAVELS More than half of coarse fraction More than half of coarse fraction	SANDS e than half of coarse frac is smaller than 2.36 mm	CLEAN SANDS (Littl or no fines)	Predomir	Predominantly one size or a range of sizes with some intermediate sizes missing.		SP	SAND			
	SA than half smaller th	SANDS WITH FINES (Appreciable amount of fines)	Non-plas	tic fines (for identificati	ion procedures see ML below).	SM	SILTY SAND			
0	More is SAN WILL WILL WILL WILL WILL WILL WILL WIL		Plastic fir	Plastic fines (for identification procedures see CL below).			CLAYEY SAND			
IDENTIFICATION PROCEDURES ON FRACTIONS <0.2 mm (Note a 75Um particle is about the smallest particle that is visible to the naked eye.) DRY STRENGTH DILATANCY TOUGHNESS USC PRIMARY NAME										
50% n 0.0	(O -=	DRY STREN	GTH	DILATANCY	TOUGHNESS	USC	PRIMARY NAME			
than r tha	SILTS & CLAYS Liquid limit less than 50	None to Lo	W	Quick to slow	None	ML	SILT			
Nore malle	rS & CLA lid limit le than 50	Medium to H	igh	None	Medium	CL	CLAY			
E GRAINED SOILS More than 50% of mate ess than 63 mm is smaller than 0.075 mm	SIL7 Liqu	Low to medi	um	Slow to very slow	Low	CL	ORGANIC SILT			
98	S 00	Low to medi	um	Slow to very slow	Low to medium	MH	SILT			
RAIN s than	CLA d limit than §	CLA d limit than (CLA Ilimit than (d limit	High		None	High	CH	CLAY
FINE	SILTS & CLAYS Liquid limit greater than 50	Medium to H	ligh	None	Low to medium	ОН	ORGANIC CLAY			
IIGHLY	ORGANIC	Readily identifie	ed by colou	r, odour, spongy feel a	and frequently by fibrous texture by fibrous texture.	PT	PEAT			
Lov	v plasticity				y - w _L between 35% and 50%. ● High plasticity - w _L	greater than 50%.				

Particle size descriptive terms

NAME	SUBDIVISION	SIZE
Boulders Cobbles		>200 mm 63 mm to 200 mm
Gravel	coarse medium fine	20 mm to 63 mm 6 mm to 20 mm 2.36 mm to 6 mm
Sand	coarse medium fine	600 μm to 2.36 mm 200 μm to 600 μm 75 μm to 200 μm

Minor components

TERM	ASSESSMENT GUIDE	PROPORTION OF MINOR COMPONENT IN:
Trace of	Presence just detectable by feel or eye, but soil properties little or no different to general properties of primary component.	Coarse grained soils: <5% Fine grained soils: <15%
With some	Presence easily detected by feel or eye, soil properties little different to general properties of primary component.	Coarse grained soils: 5 - 12% Fine grained soils: 15 - 30%

Terra Insight Email

Email: admin@terransw.com Tel: 0 4 5 8 0 0 8 0 3 0 PO BOX 414 Unanderra NSW 2526



Page 2 of 4



How to interpret the engineering logs in Your Report

Moisture condition

TERM	DEFINITION
Dry	Looks and feels dry. Cohesive and cemented soils are hard, friable or powdery. Uncemented granular soils run freely through hands.
Moist	Soil feels cool and darkened in colour. Cohesive soils can be moulded. Granular soils tend to cohere.
Wet	As for moist but with free water forming on hands when handled. $\label{eq:continuous}$

Soil structure

	ZONING	CE	MENTING
Layers	Continuous across exposure or sample.	Weakly cemented	Easily broken up by hand in air or water.
Lenses	Discontinuous shape.	Moderately cemented	Effort is required to break up the soil by hand in air or water.
Pockets	Irregular inclusions of different material.		

Consistency of cohesive soils

TERM	UNDRAINED STRENGTH s _u (kPa)	VISUAL OBSERVATION IN FIELD
Very Soft	<12	A finger can be pushed well into the soil with little effort.
Soft	12 – 25	A finger can be pushed into the soil to about 25mm depth.
Firm	25 – 50	The soil can be indented about 5mm with the thumb, but not penetrated.
Stiff	50 – 100	The surface of the soil can be indented with the thumb, but not penetrated.
Very Stiff	100 – 200	The surface of the soil can be marked, but not indented with thumb pressure.
Hard	>200	The surface of the soil can be marked only with the thumbnail.
Friable	-	Crumbles or powders when scraped by thumbnail.

Density of granular soils

TERM	DENSITY INDEX (%)
Very loose	Less than 15
Loose	15 – 35
Medium Dense	35 – 65
Dense	65 – 85
Very Dense	Greater than 85

Geological origin

TRANSPORTED	SOIL	.8

Fill	Man made deposit. Fill may be significantly more variable between tested locations than naturally occurring soils.
Aeolian soil	Deposited by wind.
Alluvial soil	Deposited by streams and rivers.
Colluvial soil	Deposited on slopes (transported downslope by gravity).
Lacustrine soil	Deposited by lakes.
Marine soil	Deposited in ocean basins, bays, beaches and estuaries.

WEATHERED IN PLACE SOILS

Extremely weathered material Structure and fabric of parent rock visible.

Residual soil Structure and fabric of parent rock not visible.

Terra Insight

Email: admin@terransw.com Tel: 0 4 5 8 0 0 8 0 3 0 PO BOX 414 Unanderra NSW 2526



Page 3 of 4



How to interpret the engineering logs in Your Report

FIELD DESCRIPTIONS OF ROCK

The descriptive terms used by Terra Insight are given below. They are broadly consistent with Australian Standard AS1726-1993.

Rock Substance

In engineering terms rock substance is any naturally occurring aggregate of minerals and organic material which cannot be disintegrated or remoulded by hand in air or water. Other material is described using soil descriptive terms. Effectively homogenous material, may be

sotropic or anisotropic.

Defect

Discontinuity or break in the continuity of a substance or substances.

Any body of material which is not effectively homogeneous. It can consist of two or more substances without defects, or one or more

substances with one or more defects.

Classification of weathering products

Abbreviation Definition Residual Soil RS Soil derived from the weathering of rock; the mass structure and substance fabric are no longer evident; there is a large change in volume but the soil has not been significantly transported. Extremely XW Material is weathered to such an extent that it has soil properties, ie, it either disintegrates or can be Weathered Material remoulded in water. Original rock fabric still visible. Rock strength is changed by weathering. The whole of the rock substance is discoloured, usually by Highly HW Weathered Rock iron staining or bleaching to the extent that the colour of the original rock is not recognisable. Some minerals are decomposed to clay minerals. Porosity may be increased by leaching or may be decreased due to the deposition of minerals in pores. Moderately MW The whole of the rock substance is Weathered Rock discoloured, usually by iron staining or bleaching, to the extent that the colour of the fresh rock is no longer recognisable. Rock substance affected by Slightly SW Weathered Rock weathering to the extent that partial staining or partial discolouration of the rock substance (usually by limonite) has taken place. The colour and texture of the fresh rock is recognisable; strength properties are essentially those of the fresh rock substance Fresh Rock Rock substance unaffected by weathering.

Notes on Weathering:

AS1726 suggests the term "Distinctly Weathered" (DW) to cover the range of substance weathering conditions between XW and SW. For projects where it is not practical to delineate between HW and MW or it is judged that there is no advantage in making such a distinction. DW may be used with the definition given in AS1726.

Where physical and chemical changes were caused by hot gasses and liquids associated with igneous rocks, the term "altered" may be substituted for "weathering" to give the abbreviations XA, HA, MA, SA and DA.

Rock substance strength terms

Term	Abbreviation	Point Load Index	, Field Guide
Very Low	VL	Less than 0.1	Material crumbles under firm blows with sharp end of pick; can be peeled with a knife; pieces up to 30mm thick can be broken by finger pressure.
Low	L	0.1 to 0.3	Easily scored with a knife; indentations 1mm to 3mm show with firm bows of a pick point; has a dull sound under hammer. Pieces of core 150mm long by 50mm diameter may be broken by hand. Sharp edges of core may be friable and break during handling.
Medium	М	0.3 to 1.0	Readily scored with a knife; a piece of core 150mm long by 50mm diameter can be broken by hand with difficulty.
High	Н	1 to 3	A piece of core 150mm long by 50mm can not be broken by hand but can be broken by a pick with a single firm blow; rock rings under hammer.
Very High	VH	3 to 10	Hand specimen breaks after more than one blow of a pick; rock rings under hammer.
Extremely High	EH	More than 10	Specimen requires many blows with geological pick to break; rock rings under hammer.

Notes on Rock Substance Strength:

In anisotropic rocks the field guide to strength applies to the strength perpendicular to the anisotropy. High strength anisotropic rocks may break readily parallel to the planar anisotropy. The term "extremely low" is not used as a rock substance strength term. While the term is used in AS1726-1993, the field guide therein makes it clear that materials in that strength range are soils in engineering terms. The unconfined compressive strength for isotropic rocks (and anisotropic rocks which fall across the planar anisotropy) is typically 10 to 25 times the point load index Is(50). The ratio may vary for different rock types. Lower strength rocks often have lower ratios than higher strength rocks.

SUBSTANCE DESCRIPTIVE TERMS:

ROCK NAME	Simple rock names are used rather than precise geological classification.
PARTICLE SIZE	Grain size terms for sandstone are:
Coarse grained	Mainly 0.6mm to 2mm
Medium grained	Mainly 0.2mm to 0.6mm
Fine grained	Mainly 0.06mm (just visible) to 0.2mm
FABRIC	Terms for layering of penetrative fabric (eg. bedding, cleavage etc.) are:
Massive	No layering or penetrative fabric.
Indistinct	Layering or fabric just visible. Little effect on properties.
Distinct	Layering or fabric is easily visible. Rock breaks more easily parallel to layering of fabric.

Terra Insight Email: admin@terransw.com
Tel: 0 4 5 8 0 0 8 0 3 0

PO BOX 414 Unanderra NSW 2526



Page 4 of 4



How to interpret the engineering logs in Your Report

Common defects observed in rock

			Map Symbol	Graphic Log	55.	Let Silvi L	TERMS
Parting	A surface or crack across which the rock has little or no tensile strength, but		20	(Note 1)	Plai	nar	The defect does not vary in orientation
	which is not parallel or sub parallel to layering or planar anisotropy in the rock substance. May be open or closed.		Bedding 20 Cleavage	(Note 2)	Cur	rved	The defect has a gradual change in orientation
Joint	A surface or crack across which the rock has little or no tensile strength. but which is not parallel or sub parallel to	\	60	13.	Unc	dulating	The defect has a wavy surface
	layering or planar anisotropy in the rock substance. May be open or closed.		*	(Note 2)	Ste	pped	The defect has one or more well defined steps
Sheared Zone (Not 3)	Zone of rock substance with roughly reparallel near planar, curved or undulating boundaries cut by closely spaced joints, sheared surfaces or other	A	35		Irre	egular	The defect has many sharp changes of orientation
	defects. Some of the defects are usually curved and intersect to divide the mass into lenticular or wedge shaped blocks.	1/25.7		4	influ		ssment of defect shape is partly he scale of the observation. ERMS
Sheared Surface (Note 3)	A near planar, curved or undulating surface which is usually smooth, polished or slickensided.		40	S.C.	Slic	kensided	Grooved or striated surface, usually polished
				[8]	Poli	ished	Shiny smooth surface
Crushed Seam (Note 3)	Seam with roughly parallel almost planar boundaries, composed of disoriented, usually angular fragments of the host rock substance which may be more weathered than the host rock. The seam has soil properties	(a)	50	7	Smo	ooth	Smooth to touch. Few or no surface irregularities Many small surface
Infilled Seam	Seam of soil substance usually with distinct roughly parallel boundaries formed by the migration of soil into an open cavity or joint, infilled seams less than 1mm thick may be described as veneer or coating on joint surface.		65			y Rough	irregularities (amplitude generally less than 1mm). Feels like fine to coarse sand paper. Many large surface
	Seam of soil substance, often with d gradational boundaries. Formad by weathering of the rock substance in place.	Seam	32 TIME	W.			irregularities (amplitude generally more than 1mm). Feels like, or coarser than very coarse sand paper.
Notes on	Defects:	Count			cox	ATING TERM	1S
 Usually dip. 	borehole logs show the true dip of defects	and face sket	ches and section	s the apparent	Clea	an Nov	visible coating
2. Parting	s and joints are not usually shown on the g	raphic log unle	ess considered s	ignificant.	Stai	ined No v	visible coating but surfaces are
Sheared ze	ones, sheared surfaces and crushed seams	s are faults in	geological terms				oloured
					Ven		sible coating of soil or mineral, thin to measure; may be patchy
					Ven	Thic desc tern rock	sible coating up to 1mm thick. ker soil material is usually cribed using appropriate defect ns (eg, infilled seam). Thicker c strength material is usually cribed as a vein.



																									×	•	> 1	TER	RAI	NSIG	нт	
Test ho	ole No	o. 1 (BH0 ⁻ 1	1																		Fi	eld	4 I	_ 0	a	_ 7	Γes	st I	lol	e
Client:					m Pla	nnin	g Gr	oup	_				_							Jo	ob No							17 0				<u> </u>
Project	:				nburg																ate st	arted:								19/06/2	017	_
Boreho	le Lo	cation	1:	E:30	03907	N:62	2149	63												D	ate co	mplet	ed:							19/06/2		
Drill mo	odel:	Koi	nats	u 1.	8T			Drill	l mou	untinç	g: N	A																ı	ŒG			
Inclination		-90				_						Mater	d-1 F				mete	er: 20	00m	m			_		Α	HD		F	L:		433m	\Box
Penetra Hdep	123	sar	mples t	ests	depth (m)	USC	Soi	l name, compor	plasti nent. M	city/gra finor co	insizo	chara nents, i	cteris	itics, c	alaur,	descri	ption o	f seco	ondary nce		moisture	condition		consist. density		struc	ture:	and a	dditio	nal obs	servatio	ns
A						CI		Sand orow								stici	ty,			Ī	М		1	ИD				TC	PSO	IL		
			S1			SC/ SP		Claye				AND	: fir	ne ti	o me	ediu	m				D						F	ILL	(ENN	л?)		
			52				_	AS Al	o m	ediu	m s	ub-r	our	ided	to s										+							
		L			1			ed g																								
			62			SP		AND f fine										e		1			i-	ИD								_
			S3																	1				D	1			RES	IDU	AL		
	ŀ																			+					-							=
H	ł																			ł					+							-1
H	+			_	2		9	AND	STO	NE:	Rec	over	ed	as a	bove					÷					+		VI	A/ T	O UN	V RO	CV	=
H	ш					H														+					+		^	VV 1	O HV	v ko	CN	_
								ND C	OF HO	OLE /	AT 2	.2m	dep	th. F	Refus	al o	n Roo	:k		1					1							=
H																				1					1							-1
H																				ļ					4							
					3																				4							=
																																=
Drawing				Ŧ		T	Ī														Ī	Ī	Ī	F	Ē					T		
	E		\pm	\pm		\pm	t														1	$^{\pm}$		Ė	Ė	Ė				\pm		
	H	Н	+	+	+	+	+														+	+		\vdash					+	+	-	
				#		#	t														#	#								#	1	
	H	Н		+	+	+	+			\sqcup												+		\vdash					+	+	-	
	F	П		#		#	t														#	#		İ	L	L				#	1	
	L	Ш	<u> </u>	<u> </u>		<u> </u>	_															<u>_</u>		L	<u>_</u>					<u> </u>		
Daily wa	iter les		ot obs	erved] gr	ound	water	inflo	wat:	m				nding	wate	r leve	el					ti	ime:	_	d	ate:			\exists
method DT AS AD RR CB B V, T NMLC NQ,HQ,P HA	diat aug aug rolli clar blar V b NM Q Wir Har	tube ger scre ger drill er/trico w / blac nk bit it, TC to ILC cor reline o nd aug	le bit elt ore		penetra			D N N* E V P Bs		ample undist. disturb SPT - 1 SPT - 1 Enviro vane s pressu bulk sa refusal	sampl n. san hear (ire me ample	ie reco mple (kPa) tre	v.	piasti LP MP HP LL F M	medi	plastic Himit um	asticity	- 1	R B G BI O Y W	red brown grey black orang yellow white	P	gree blue pale dark	. M	r w	e y oist et lastic imit		VS S F St VS H Fb	fin sti x ve ha	ry soft ft m ff ry stiff rd able	VL L MD D VD	very lor loose med. d dense very de	ense



Test hole No.	BH0	2																		<	•	TE	RRA	INS	IGH	Γ
	of 1	_															١	Fi€	elo	d L	.0	g -	Te	est	H	ole
Client:	Otiu	m Pla	nning	g Gro	ир										Jo	b No.					TEF	RRA17	7 0084	1		
Project:		nburg														ite sta		_						19/	06/201	7
Borehole Locati Drill model: K e		13909 8T	N:62		orill mo	unting	NΔ								Da	ate cor	nplet	ed:					W.E.		06/201	7
Inclination: -9		01			Jilli IIIO	unung.				Hole	Dian	neter	200	mm						Al	ID.		KE	,	-	134m
Penetration									Desci	iption					Т	_				Т						
123 s	samples tests	depth (m)	USC	Soil	name, plas ent. Minor	sticity/gra compone	iinsize ents, i.e	charact	eristics, a/trace.	colour, other	descrip soil su	ption of ubstanc	secor e obsi	idary ervation	16	moisture		folionoo	density	s	truct	ure an	d addi	tional	obser	vations
A			CI SP		dy CLA				lium	plast	icity,	bro	wn,		7	M- D		N	1D	ŀ			TOP	SOIL		
					ND : fin								ttle	d,	Ī								RES	IDU	AL	
1,		1		SIL	Y SAN	DSTO	NE:	Reco	vered	as a	bove	9			÷					+		XW ⁻	то н	W R	OCK	
					END OF	HOLE	AT I	0.6m	depth	. Refi	ısal d	on Ro	ck													
		1																								
															1					1						
															ļ					1						
															1					1						
		2													1					1						
															1					1						
															ļ					+						
															ļ					+						
															ŧ					ļ						
		3													ŧ					+						
Drawing			H		_			_	_				_	_	_	_				_	_	_	_		_	
	+++	\mathbb{H}	+	+	+								_	+	+	+	H				_	+	+		Н	
			#		#																1	1				
+	+++	+	+	+	+								+	+	+	+					+	+	+		Н	
		\parallel	#		#					İ			1	#	#	#	İ				1	#	#		Ħ	
\mathbb{H}		+	+	+	+	H	+	+	+	\vdash			\dashv	+	+	+	\vdash	Н		Н	+	+	+	\vdash	Н	
		\parallel	#		#			1		İ			1	#	#	t	Ė				1	#	İ	İ	Ħ	
		Ш		Ш		Ш									_							_			Ш	
groundwate Daily water levels	r not observed				ground			at:	m		Star		water	level						tin	ne:		date:			
DT diatube AS auger's AD auger's AD auger's CB claw / b B blank b V, T V bit, T NMLC NMLC o NQ, HQ, PQ Wirelind HA Hand a	crewing frilling icone slade bit it C bit	penetrat	ion		N E V P Bs	undist. s disturbe SPT SPT - ss Environ. vane sh pressure bulk san refusal	ample d samp ample i samp ear (kF e metre	recov.	PIASTI LP MP HP LL F M C	low pl medit high p liquid fine medit coars	asticity im plas lasticit limit	r sticity ty	R B G BIO Y W	or ye	d rown rey ack range ellow hite	Gr Bu P D	greer blue pale dark	M W W	dr m w p pl	e y oist et astic mit		VS S F St VS; H Fb	very so soft firm stiff very st hard friable		MD r	ery loose cose ned, dense lense ery dense



TERRA INSIGHT Test hole No. BH03 Field Log - Test Hole Otium Planning Group Job No. TERRA17 0084 Helenburgh Pool Date started: Borehole Location: E:313905 N:6214933 Date completed: Drill model: Komatsu 1.8T Drill mounting: NA -90 Hole Diameter: 200mm Material Description Sandy CLAY: low to medium plasticity, brown with organics (rootlets) M-MD D Clayey SAND : fine grained, brown to orange-brown, trace fine to coarse sandstone gravel FILL (ENM?) Clayey SAND to SAND: fine to medium grained, RESIDUAL grey with orange-brown mottling, trace of fine to medium sandstone gravel fragments, -D SILTY SANDSTONE: Recovered as above XW TO HW ROCK END OF HOLE AT 1.6m depth. Refusal on Rock R red Gr green
B brown Bu blue
G grey P pale
Bl black D dark
O orange
Y yellow
W white medium plasticity high plasticity liquid limit fine medium coarse



Otium Planning Group Date started: Helenburgh Pool Date started: Helenburgh Pool Date started: Helenburgh Pool Date started: 1900/2017 REG Note Contained: Subject of the Contained: Helenburgh Pool Date started: Date complexed: 1900/2017 REG Note Contained: REG Note Contained: AD RE JASIN: Market Distanced: Market Distanced: Market Distanced: By Jasin Started: AD RES Subject Started: AD RES AN	Test hole I	No.		вно																			_	:-	ا۔ ا						SIGH	
Project: Helenburgh Pool Date started: 1900/2017 Storechola Location: E.313927 Nic214925 Diff mounting: NA KEG Material Description: APO RL: 43-ben Material Description: APO RL: 4			1 of																					ıe	ıa	<u> </u>	ΟĆ	<u> </u>	10	25	ι Η	lole
Department Constition Con									ир																		TER	RA17	008	4		
Dell models: Komatsu 1.87 Dell mounting NA Hote Diameter: 200mm Material Description Section of the Comment						_																								19	/06/20	17
Material Description Section of the Committee of the Com						N:6	3214	492	5											- 1	Date o	comp	leted	:						19	/06/20	17
Production Section S				su 1.	.8T			[Orill mo	ountir	ng: N	Α																		G		
So drames, incomplete the control of			90				_					Mata	rial D				netei	: 20	Omm	_			_			AHI)		RL:			434m
1 2 3 samples leels (m) USC		1				ı		Soil	name, pla	asticity/	grainsi:	ze char	racteris	stics, o	olour,	descri	iption o	f seco	ndary	١	2	. 5		نہ	>							
A South Calculation (modelets) SSP SAND to Calculation Fine grained, orange-brown, trace fine gravel below 0.2m SILTY SANDSTONE: Recovered as above END OF HOLE AT 0.6m depth. Refusal on Nock I I I I I I I I I I I I I I I I I I I		3	sample	tests		US		ompone	ent. Mino	or comp	onents,	i.e., sı	ome/tra	ace	. other	soil si	ubstan	ce obs	servati	ons	noieti	ondit		sonsis	Jensit	st	ructu	ire an	d add	tiona	lobse	rvations
SAND to clays ADD: fine grained, orange-brown, trace fine grained, orange-brown, trace fine gravel below 0.2m SILTY SANDSTONE: Recovered as above END OF HOLE AT 0.5m depth. Refusal on Rock END OF HOLE AT 0.5m depth. Refusal on Rock 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3					1	=	1	San	dy Cl	Δ٧٠	low t	to m	edir	ım r	lacti	city	bre	nwn		╡			Ť			1						
SILTY SANDSTONE: Recovered as above XWTO HW ROCK END OF HOLE AT .0. 6m depth. Refusal on Rock 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	^	1			1 3	SC	7								1000		,			1		-	1	M)	г					٩L	
SILTY SANDSTONE: Recovered as above XWTO HW ROCK END OF HOLE AT 0.6m depth. Refusal on Rock 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3						SP											rang	e-					-									
END OF HOLE AT 0.6m depth. Refusal on Rock 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2							1																1									
Topic groundwater not observed groundwater inflow at: m Standing water level time: date:	#	ļ					÷													-			÷			÷)	(W)	ГО Н	W R	OCK	
Country of Colorando	-	1					ļ		END O	F HO	LE AT	0.6	m de	pth.	Refu	ısal d	on Re	ock					+			-						
groundwater not observed groundwater inflow at: m standing water level time: date: groundwater loveds:					1	L																										
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:						ſ	T													1												
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		1				F	1																+			+						
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		i				H	÷													-			÷			÷						
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:	- 111	i				ı	۱													1			÷									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		ı					T																T			Г						
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		1				H	t													1			+									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:	-111	i			2		1																1									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		İ					ŀ																1									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		İ				E	t																1			t						
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		İ				F	÷													=			÷			H						
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		Ì				L																	1									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		i					l																İ									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date:		İ					t																1									
groundwater not observed groundwater inflow at: m Standing water level time: date: groundwater not observed groundwater inflow at: m Standing water level time: date: page	-#	÷			3 -		÷													-			÷		_	÷						
groundwater not observed groundwater inflow at: m Standing water level time: date:		İ					ı																ı									
taily water levels: emod guppon notes samples, tests plasticity/grainsize colour moisture consistency-oensey index	rawing	Ť	T	T				Ī	T	T	T											T	T	Ť	Ť	T	Ť	T	T	T		
iaily water levels: emod support index samples, texts plasticity/grainsize colour moisture consistency/density index	-	†					\dashv	\dashv	+	+											\forall	$^{+}$	$^{+}$	†	†	$^{+}$	†	+	$^{+}$	t	Н	
iaily water levels: emod support index samples, texts plasticity/grainsize colour moisture consistency/density index	ı	+		\forall	\top			\forall	$^{+}$	†	t	Г									H	†	+	+	†	+	+	†	Ť	t	H	
iaily water levels: emod support index samples, texts plasticity/grainsize colour moisture consistency/density index		+	+		\top			\dashv	+												H	+	$^{+}$	+	+	$^{+}$	+	+	+		Н	
aily water lovels: emoa Eupport roces samples, tests plasticity/granisize colour moisture consistency/oensey moex	H	+		\forall				\dashv	+												Н	+	+	+	+	+	+	+	۰	۰	Н	
aily water levels: enter pussicity/grainsize colour moisture consistency/oensisy make consistency make colour moisture consistency/oensisy make	H	+		\forall	+	\forall		\dashv	+	+	+						Н				\forall	+	+	$^{+}$	+	+	+	+	$^{+}$	۲	Н	
aily water lovels: emoa Eupport roces samples, tests plasticity/granisize colour moisture consistency/oensey moex	H	+	+	+	+			\dashv	+								Н				\forall	+	+	+	$^{+}$	+	+	+	+		H	
iaily water levels: emod support index samples, texts plasticity/grainsize colour moisture consistency/density index	H	+	+	\forall	+			\dashv	+	+	+										\forall	+	$^{+}$	$^{+}$	+	$^{+}$	+	+	$^{+}$		Н	
iaily water levels: emod support index samples, texts plasticity/grainsize colour moisture consistency/density index		+		\forall	+			\dashv	$^{+}$	$^{+}$	t					Н					H	$^{+}$	+	+	†	+	+	$^{+}$	Ť	t	H	
aily water lovels: emoa support roces samples, tests plasticity/granisize colour moisture consistency/oensey moex		T							\top													Ť	Ť	Ť	Ť	Ť	Ť	Ť	Ť	T	П	
aily water lovels: emoa support roces samples, tests plasticity/granisize colour moisture consistency/oensey moex		ob	tor n=t						arc	idur-1	r inti-	u at-				Ct-	ndi	surt.	r le :						_	£			d-t-	_		
eurod support inotes sampies, tests plasticity:grainsize colour moisture consistency/density index				served					groun	uwate	rintio	w at:	m		Ш	star	naing	wate	rieve	'						time	s:		gate			
T V bit, TC bit ALC NMLC Core All Constructions of the profession	etnoa	diatul auger suger cler claw blank	be r screwing r drilling fricone / blade bit bit TC bit		penetra	tion		stance 1 to	D N E V	SPT -	- sampl	e reco	v. L	IP L	mediu high p liquid	ım plas lastici: limit ım	eticity	6	8 8 8 9	brown grey black	B P	r gr u bi po da	ue ele	D M W Wp	dry mois wet plas lim	st tic it		S F	soft firm stiff		MD D	ned, dens dense



TERRA INSIGHT Test hole No. BH05 Field Log - Test Hole Otium Planning Group TERRA17 0084 Helenburgh Pool Date started: Borehole Location: E:313880, N:6214958 Date completed: Drill model: Komatsu 1.8T Drill mounting: NA KEG -90 Hole Diameter: 200mm Material Description TOPSOIL ML Sandy SILT: low plasticity, brown, with rootlets

SAND: Fine to medium grained, Brown, with roots M-MD Grey brown and no organics below 0.2m depth FILL (ENM?) S1 SAND: fine to medium grained, grey with orange -brown MD mottling, trace of fine to medium gravel, trace of fines. RESIDUAL -D SANDSTONE: Recovered as above XW TO HW ROCK END OF HOLE AT 2.3m depth. Refusal on Rock consistency/defisity index
VS very soft VL very loose
S soft L loose
F timm MD med dense
St stiff D dense
VSI very soff VD very dense
H hard
Fb triable red brown grey black orange yellow white





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendix D: Laboratory Results – Geotechnical





ACN 069 211 561 Unit 1/140 Industrial Road Oak Flats, NSW, 2529, AUSTRALIA (02) 4257 4458 (02) 4257 4463 southcoast@netgeo.com.au

TEST REPORT

Terra Insight W07/4683 Client: Job Number:

Helensburgh Pool Excavations Project: Report Number:

Helensburgh 28/06/2017 Location: Report Date: GTR Number : TERRA 170084 Sam Holliday Tested By:

Sample Number: 2 Lab Number : W61078

Lot Description: S1 Date Sampled: 19/06/2017

Test Pit or Borehole: BH01

> Depth: 0.2-0.5m Sample Description:

> > Gravelly Clayey SAND

Sampling Procedure: Sampled By Client

GRADING ANALYSIS - AS1289.3.6.1 (WASHED)

TEST PROC	CEDURE	TEST RESULTS
Percentage (%) Passing	150 mm sieve	
Percentage (%) Passing	100 mm sieve	
Percentage (%) Passing	75 mm sieve	
Percentage (%) Passing	53 mm sieve	
Percentage (%) Passing	37.5 mm sieve	
Percentage (%) Passing	26.5 mm sieve	100
Percentage (%) Passing	19.0 mm sieve	97
Percentage (%) Passing	13.2 mm sieve	95
Percentage (%) Passing	9.5 mm sieve	83
Percentage (%) Passing	6.7 mm sieve	78
Percentage (%) Passing	4.75 mm sieve	75
Percentage (%) Passing	2.36 mm sieve	71
Percentage (%) Passing	1.18 mm sieve	65
Percentage (%) Passing	600 µm sieve	58
Percentage (%) Passing	425 µm sieve	48
Percentage (%) Passing	300 µm sieve	35
Percentage (%) Passing	150 µm sieve	20
Percentage (%) Passing	75 µm sieve	14

REMARKS:



Accredited for compliance with ISO/IEC 17025-Testing

Wollongong Laboratory 1318

APPROVED SIGNATORY Harry Ubungen

28/06/2017

Document No: RP 21-3-12 version 2 2-4-08





Helensburgh Pool Upgrade Report on Geotechnical Investigation

Appendix E: Laboratory Results - Environmental





Project Ref:	TERRA170	184			TERRAIN	SIGHT
Site Details	Helenburgh				Date sampled	19/06/2017
SUMMARY OF LABORATORY RESUI	LTS FOR SOIL SAMPLES					
(All results in mg/kg)						
Sample ID	BH1-S1	BH1-S2			Investigation Levels	
Date of Sampling	19-Jun-1	7 19-Jun-17]	

Sample ID	BH1-S1	BH1-S2				1	nvestigatio	on Levels		
Date of Sampling	19-Jun-17	19-Jun-17			1					
	BH01	BH01			GSW	EIL		HIL		(ref 2)
Sample Location					GSW	EIL	-	l nir		(rer z)
Unit	S1	S2						Class C	:	
	0.2-0.5	0.5-1.0			(EPA NSW) UNO	open parkl urban res		(recreational		Background
Depth interval (m)					UNU	urban res	dienuai	space)		
HEAVY METALS (TOTAL mg/kg)										
Arsenic	<5	<5			100	100	2 (Aged)	300	2	1-50
Barium					NA	300	2a	15000	9	100-3000
Beryllium					20	300	2a	90	2	
Boron					NA			20000	2	
Cadmium	<1	<1			20	3	2a	90	2	1
Chromium	18	6			100	410	2(aged)	300	2	5-1000
Colbolt					NA	50	8	300	2a	14,611
Copper	7	<5			NA	240	2(aged)	17,000	2	2-100
Lead	6	<5			100	1100	2(aged)	600	28	2-200
Manganese					NA	500	2a	19000	2	850
Mercury	<0.1	<0.1			4	1		80	2	0.03
Nickel	<2	<2			40	310	2(aged)	1200	2	5-500
Selenium					20			700	2	
Vanadium					NA	50	2a			
Zinc	7	<5			NA	950	2(aged)	30000	2	10-300
NOTES:										

29/06/2017 lab result summary TERRA170084.pdf

Concentration acceeds the CCTT waste disposal guidelines

Based on Protection of the Environment Operations (Waste) Regulation 2005 - General Exemption Under Part 9, "The excavated natural material exemption" (2014).

Column 2 - Massima wavegar concentration for characterisation

Column 3 - Associate maximum enverage concentration for characterisation

Based on RTA Tax Net Method 1728

Based on RTA Tax Net Method 1728

Under Section 6 (Definitions) of the Vencausted natural exemption" (2012), Excavated Natural Material does not include material that contains asbestion.

Based on Tatle 17 Schedule B(1), National Environmental Protection (Assessment of Site Contamination) Measure 2011

Based on Tatle 17 Schedule B(1), National Environmental Protection (Assessment of Site Contamination) Measure 1999

Based on Investigations levels for soil and groundwister Table 1st) SEPP 58 Residentials 1- minimal opportunities for soil access

Based on Tatle 17 Schedule B(1), National Environmental Protection (Assessment of Site Contamination) Measure 1999

Based on Investigations levels for soil and groundwister Table 1st) SEPP 58 Residentials 1- minimal opportunities for soil access

Based on Taylor and Lampley 1998 Residential 1- with minimal proprinties for soil minimations.

National Environmental Protection (assessment of State Contamination) Measure INEPC 1999)

ANXECC & (Environmental Protection (assessment of State Contamination) Measure INEPC 1999)

USEPA RESIA (2019)

USEPA RESIA (2019)

USEPA RESIA (2019)

Based on NEW EPA, guidelines for Assessing Service station sites

Contamination of the Contamination "Based on NSW EPA, quidelines for Assessing Service station sites

10 DER - Interin guidelines on the assessment and management of Perflucrosity) and Polyfluorosity's substances (PFAS)

Not Described

Not Analysed

Not Analysed

Not of Reporting

See original biboratory sports for detection limits

See original biboratory sports for detection limits

See original biboratory sports for detection limits

For samples < LOR, the LOR is conservatively assumed to be the concentration for calculating average concentrations

Accreditation No. 825

Accredited for compliance with ISO/IEC 17025 - Testing





Item 7 - Attachment 2 - Helensburgh Pool Upgrade - Report on Geotechnical Investigation

CERTIFICATE OF ANALYSIS Work Order EW1702720 Page : 1 of 2 Client TERRA INSIGHT Laboratory Environmental Division NSW South Coast Contact MS KAREN GATES Contact Aneta Prosaroski Address Address PO BOX 414 : 1/19 Ralph Black Dr, North Wollongong 2500 **UNANDERRA NSW 2526** 4/13 Geary Pl, North Nowra 2541 Australia NSW Telephone Telephone : 02 4225 3125 Project : TERRA170084 Date Samples Received : 20-Jun-2017 13:23 Order number Date Analysis Commenced : 21-Jun-2017 C-O-C number Issue Date : 23-Jun-2017 11:54 Sampler : KAREN GATES Site : Helensburgh Pool Excavations

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

: 2

: 2

: WO/014/16

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with **Quality Review and Sample Receipt Notification.**

Quote number

No. of samples received

No. of samples analysed

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Position Signatories Accreditation Category

Celine Conceicao Senior Spectroscopist Sydney Inorganics, Smithfield, NSW



Page 2 of 2 Work Order EW1702720 Client TERRA INSIGHT



General Comments

Project

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Item 7 - Attachment 2 - Helensburgh Pool Upgrade - Report on Geotechnical Investigation

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society. LOR = Limit of reporting

- ^ = This result is computed from individual analyte detections at or above the level of reporting
- ø = ALS is not NATA accredited for these tests.

TERRA170084

~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Clie	ent sample ID	BH1-S1	BH1-S2	 	
	Cli	ent sampli	ng date / time	19-Jun-2017 00:00	19-Jun-2017 00:00	 	
Compound	CAS Number	LOR	Unit	EW1702720-001	EW1702720-002	 	
				Result	Result	 	
EA055: Moisture Content (Dried @	105-110°C)						
Moisture Content		1	%	8.1	6.4	 	
EG005T: Total Metals by ICP-AES							
Arsenic	7440-38-2	5	mg/kg	<5	<5	 	
Cadmium	7440-43-9	1	mg/kg	<1	<1	 	
Chromium	7440-47-3	2	mg/kg	18	6	 	
Copper	7440-50-8	5	mg/kg	7	<5	 	
Lead	7439-92-1	5	mg/kg	6	<5	 	
Nickel	7440-02-0	2	mg/kg	<2	<2	 	
Zinc	7440-66-6	5	mg/kg	7	<5	 	
EG035T: Total Recoverable Mercur	y by FIMS						
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	 	





Item 7 - Attachment 3 - Helensburgh Pool Preliminary Cost Plan

City of Wollongong

Helensburgh Pool

Preliminary Cost Plan



iliding Works New pool hall New mechanical plant room Works to existing concourse for new pool hall ol Plant enclosure - slab with acoustic barriers, no roof: 25m pool	1400 60 Allow	\$	rate \$/m2		cost \$		cost \$		cost \$		cost \$		cost \$
New pool hall New mechanical plant room Works to existing concourse for new pool hall	1400 60 Allow			T	\$		\$	_	\$		\$		\$
New pool hall New mechanical plant room Works to existing concourse for new pool hall	60 Allow		2.6										
New mechanical plant room Works to existing concourse for new pool hall	60 Allow		2.0										
New mechanical plant room Works to existing concourse for new pool hall	60 Allow			00								\$	3,640,000
			2,0									\$	120,000
												\$	250,000
	40	\$	1,2	00 \$	48,000	\$	48,000					\$	48,000
ol Plant enclosure - slab with acoustic barriers, no roof: 50m pool	70	\$	1,2	00				\$	84,000	\$	84,000		
Total Building Worl	cs 1,57	70 \$	3	1 \$	48,000	\$	48,000	\$	84,000	\$	84,000	\$	4,058,000
_				1		ļ .		l	,			ľ	
quatics	A.II			١.	455.000	L	400.000		405.000		400.000		447.000
ol Heating [per JWC Engineers] ater treatment and pool hydraulics [per JWC Engineers]	Allow Allow			\$	165,000 130,000	\$	180,000 160,000	\$	405,000 870,000	\$	420,000 900,000	\$	147,000 590,000
acer deadlient and poor hydraulics [per 5WC Engineers]	Allow			3	130,000	Ψ	100,000	Þ	870,000	Þ	900,000	Þ	390,000
configuration of existing sand filters	Allow							\$	50,000	\$	100,000	\$	100,000
emolish existing pool - 25m	Allow							\$	100,000	\$	100,000		
emolish existing pool - toddler	Allow					\$	50,000			\$	50,000	\$	50,000
ew leisure water / splash zone	Allow					\$	300,000			\$	300,000	\$	300,000
250 feature [per JWC Engineers]	Allow					\$	400,000			\$	400,000	\$	400,000
sw 50m pool	Allow					ľ	,00,000	\$	2,800,000	\$	2,800,000	Ť	100,000
Warrana for the day for deliver									450.000		450.000		
Allowance for pile / pier foundations Allowance for BWIC incl excavation, trenching, grates etc	Allow Allow			\$	100,000	\$	100,000	\$	150,000 150,000	\$	150,000 150,000	\$	150,000
Preliminaries on Pools	Allow			\$	29,500		109,000	\$	437,500	\$	522,000	\$	158,700
Total Aquatic Worl	(S			\$	424,500	\$	1,299,000	\$	4,962,500	\$	5,892,000	\$	1,895,700
cternal Works & Services	1												
Site Preparation	Allow					\$	10,000	\$	20,000	\$	30,000	\$	30,000
Earthworks to building	Allow											\$	50,000
Soft Landscaping	Allow					\$	15,000	\$	60,000	\$	60,000	\$	25,000
Hard Landscaping - removal and reinstatement of concourse for installation				Ι.		١.		١.					
of pipework New concourse	Allow Allow			\$	100,000	\$	100,000 100,000	\$	30,000 200,000	\$	250,000	Inch	uded in Building
Allowance for external services	Allow			\$	50,000	\$	100,000	\$	150,000	\$	150,000	\$	350,000
Total External Works & Service	25			\$	150,000	\$	325,000	\$	460,000	\$	490,000	\$	455,000
Total External World & Service	1			•	150,000	ļ -	323,000	ľ	150,000	,	130,000	,	155,000
Construction Cos	st			\$	622,500	\$	1,672,000	\$	5,506,500	\$	6,466,000	\$	6,408,700
esign Contingency / Locality Allowance	10%			\$	63,000	\$	168,000	\$	551,000	\$	647,000	\$	641,000
Instruction Contingency	5%			\$	34,000	\$	92,000	\$	302,000	\$	355,000	\$	352,000
Sub Tot	al			\$	97,000	\$	260,000	\$	853,000	\$	1,002,000	\$	993,000
ofessional Fee Allowance	8%			\$	58,000	\$	155,000	\$	509,000	\$	598.000	\$	593,000
oressional Fee Allowance othority Fees & Charges	Allow			\$	7,000	\$	17,000	\$	56,000	\$	65,000	\$	65,000
intribution to new authority substation	Allow			\$	35,000	\$	35,000	\$	50,000	\$	50,000	\$	100,000
Sub Tot	al			\$	100,000	\$	207,000	\$	615,000	\$	713,000	\$	758,000
Total Project Cos	,			\$	819,500	\$	2,139,000	\$	6,974,500	\$	8,181,000	\$	8,159,700

Exclusions:

No allowance for fire sprinklers to Aquatic Areas

Upgrade or provision of authority services infrastructure external to the site Public Art

Land, legal, marketing and finance costs

Relocation / Decanting Costs

Staging Costs

Cost Escalation beyond July 2017

Office Equipment costs

Asbestos & other hazardous materials removal

Council internal costs Stormwater detention / retention on site

Adverse soil conditions incl. excavation in rock, contaminated soil, soft spot
Pool equipment incl blankets, anti-drowning software etc.
Audio Visual requirements beyond allowance
Blinds, Curtains or Drapes
Works to existing main road incl turning lanes
No Allowance for lifting building above flood levels

Active IT and telephone equipment
Loose Furniture, fittings and equipment
Diversion / relocation of existing in ground services
Piles or pier foundations to building
Works to existing carparks and buildings





Item 7 - Attachment 4 - Project Brief Investigation and Feasibility

Assessment for Heating and Potential Expansion Helensburgh Pool

Investigations and Feasibility Assessment

wollongong city of innovation

For

Heating and Potential Expansion

Helensburgh Pool



Item 7 - Attachment 4 - Project Brief Investigation and Feasibility Assessment for Heating and Potential Expansion Helensburgh Pool

SPECIFICATIONS

HELENSBURGH POOL – INVESTIGATIONS AND FEASIBILITY ASSESSMENT

BACKGROUND

Helensburgh Pool located on Walker Street in Helensburgh was opened in 1969 and is an old generation $25m \times 6$ lane pool (1.0m -1.5m depth) stair entry, concrete basin painted pool. The facility also provides a shaded toddler pool (9m x 6m) (0.28m -0.48m depth). The Facility is solar heated with the temperature range between 21-28 degrees over the summer with the average range 23-25 degrees.

The pool shell has experienced some structural movement in the past 3-5 years that has led to issues with water circulation in the shallow end of the pool. The pool provides free public access over the period September school holidays to Anzac Day annually; the facility has no complementing features such health and fitness/leisure water or kiosk onsite.

In 2014 Council endorsed the "Future of Our Pools Strategy 2014 – 2024". This strategy was informed by an independent consultant's report "Future Options and Strategic Plan for Council's Public Swimming Pools" in June 2014 which outlined recommendations for each of Council's swimming pools.

The Report noted a series of recommendations to consider for Helensburgh Pool when funding was identified.

The recommendations for the pool are as follows RECOMMENDATION #19

Address plant maintenance issues as part of a rolling program across all pools

RECOMMENDATION #20

Upgrade change rooms to more contemporary standard

RECOMMENDATION #21

Upgrade heating of main pool and toddlers' pool, explore options for low cost enclosure of pools, install low key leisure water and introduce entry fees

Since the adoption of the Pool Strategy community members at Helensburgh have sought and obtained Council's approval to undertake preliminary investigations into the feasibility of either/both heating and extending the pool.

This request was in turn moved and adopted by Council.

On 22nd February 2016 Council adopted a motion to:

A Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool, and/or extending the pool length to 50 metres and the number of lanes to eight.



Item 7 - Attachment 4 - Project Brief Investigation and Feasibility Assessment for Heating and Potential Expansion Helensburgh Pool

- Investigate what would be the expected catchment area of residents who might make use of the pool when heated.
- C Investigate what catchment area of schools might make use of the pool after it is heated and what purposes it could be utilised for.
- D Include in the report what would be the charge for entry after the heating works have been finished, and would that fee also be charged during the summer period.
- E Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool.

OBJECTIVE

To provide Council with

- A comprehensive investigation and feasibility assessment into the capital costs of heating and extending the pool, projected usage of an upgraded facility, suggested fees and ongoing operational costs in line with the Council Resolution of 22nd February 2016 (including geotechnical studies).
- Further information on the likely capital and operational costs/benefits of "installing
 a low cost enclosure of main pool" and the "provision of low key leisure water" as
 per the recommendation #21 of the Future Options and Strategic Plan for Councils
 Public Swimming Pools.
- 3. Provide clear recommendation of priorities for future capital investment in new infrastructure at Helensburgh Pool.

SCOPE OF STUDY

- Provide updated advice on the projected capital and operational cost implications of heating the existing outdoor facility to 27 degrees with an electric heat pump system as outlined in the Pool Facility Report (November 2014) prepared by TERRE Design Pty Ltd.
- 2. Costs of extending the existing pool from 25 metres and 6 lanes to 50 metres and 8 lanes.
- 3. Projected capital and operational cost implications of heating a 50 metres and 8 laned facility to 27 degrees with an electric heat pump system.
- 4. Investigate what would be the expected catchment area of residents and schools who might make use of the pool when heated.
- 5. Make recommendations on a proposed fee giving reference to Council's adopted fees and charges.
- 6. Further information on the likely capital and operational costs/benefits of "installing a low cost enclosure of pools" and the "provision of low key leisure water" as per the



- recommendation #21 of the Future Options and Strategic Plan for Councils Public Swimming Pools.
- 7. Provide clear recommendation of priorities for future capital investment in new infrastructure at Helensburgh Pool.

TIMING OF THE PROJECT

The study is to be delivered to Council Officers by Friday 7th July 2017 with a final report to be considered by Council at its 28th August 2017 meeting.

DELIVERABLES

A draft report for review and feedback by Council, prior to completion of a final report.

The final report must include an executive summary, recommendations, feasibility assumptions, chapters that address each of the scope elements and a conclusion.

WHAT SHOULD BE ADDRESSED IN YOUR QUOTATION

Organsiations interested in quoting for this project should address all criteria contained in the Scope of Study in their quotation:

- 1. A project plan detailing how the outputs will be delivered, tasks and milestones.
- 2. Advice regarding the personnel from your organisation that will be delivering the project, including their qualifications and experience.
- 3. Advice regarding the proposed schedule of payment for the project.

ADDITIONAL INFORMATION

The following corporate documentation is available to provide strategic direction for the site:

Wollongong 2022

Wollongong 2022 under the key strategic goal of 'We are a healthy community in a live able city' identifies the need to provide sport, recreational and leisure opportunities to meet the needs of our community. This is highlighted under the key objectives:

- 5.1. There is an increase in the physical fitness, mental health and emotional wellbeing of all our residents
- 5.5. Participation in recreational and lifestyle activities is increased

Wollongong 2022 is a strategic document providing direction for Council on its operations in the coming 10 years to meet the changing community needs. It identifies that the population in 10 years will be living even longer than today with growth of 33.3% in the over



Item 7 - Attachment 4 - Project Brief Investigation and Feasibility Assessment for Heating and Potential Expansion Helensburgh Pool

65 year age group and a 50.1% growth of over 85 years.

Strategic Plan for Council Swimming Pools (2014-2024)

Achieving our 10 year vision:

Wollongong City to host to a variety of highly used diverse and appealing aquatic recreation opportunities that meet our community's needs of today and their desires of tomorrow.

This would be achieved through:

- 1. DIVERSITY: A diverse range of aquatic recreation opportunities are available for all to enjoy, assisting in promoting healthy living.
- 2. ENGAGEMENT: Our community is involved in the planning, use and renewal of our aquatic facilities.
- 3. PROMOTION: Our community and visitors have access to current information on our city's aquatic recreation opportunities.
- 4. SUSTAINABILITY: A sustainable based approach is undertaken in the planning and management of our current and future aquatic facilities.
- 5. EFFECTIVE MANAGEMENT: Our pools are effectively managed with a strong focus on the customer's experience and public safety.
- 6. PARTNERSHIPS: We are open to exploring partnerships which value-add to our aquatic recreation opportunities.

APPENDIX - OPPORTUNITIES FOR EXPLORATION

- A The Future of our Pools Strategy 2014 2024
- B Pool Facility Report Helensburgh Project TERRE Design Pty Ltd November 2014
- C City Demographic Information available http://www.wollongong.nsw.gov.au/city/demographics/Pages/Demographic-Info.aspx



Item 7 - Attachment 5 - Councillor Brief - Draft Consultants Preliminary Findings Helensburgh Pool Technical Assesssment Nov 2017

1/19/2018

Wollongong City Council

INVESTIGATIONS AND FEASIBILITY ASSESSMENT FOR HEATING AND POTENTIAL EXPANSION

HELENSBURGH POOL



JWC Engineers

Review Purpose

- · Investigation and feasibility assessment into the capital costs of heating and extending the pool in line with the Council resolution of 22nd February 2016 (including geotechnical studies).
- Likely capital and operational costs/benefits of "installing a low cost enclosure of the main pool" and the "provision of low key leisure water" as per the recommendation #21 of the Future Options and Strategic Plan for Council's Public Swimming Pools.
- · Provide clear recommendation of priorities for future capital investment in new infrastructure at Helensburgh Pool.

OTIUM

Council Resolution 22 February 2016

Councillor Colacino has submitted the following Notice of Motion - "I formally move that -

a Undertake a comprehensive examination which will look at the feasibility of, and costs associated with, the heating of Helensburgh Pool.

b Investigate what would be the expected catchment area of residents who might make use of the Pool when heated.

c Investigate what catchment area of schools might make use of the Pool after

it is heated and what purposes it could be utilised for.

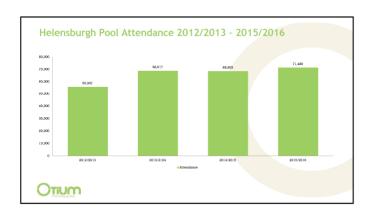
d include in the report what would be the charge for entry after the heating

works have been finished, and would that fee also be charged during the summer period.

e Include what would be the annual ongoing costs associated with the heating of Helensburgh Pool.

2 The above investigations be the subject of a report which is to be finalised and presented to the newlyelected Council not later than four months of that Council being elected."

TiUM

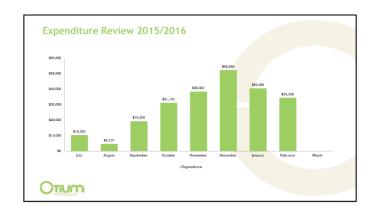


Assessment Nov 2017

260



1/19/2018



Item 7 - Attachment 5 - Councillor Brief - Draft Consultants Preliminary Findings Helensburgh Pool Technical

Competing Facilities

- 4 private facilitates learn to swim focus
- 4 public facilities (Sutherland)
- 6 private facilities learn to swim (Sutherland)
- All facilities within 21min 35min of Helensburgh

OTIUM

Suburb	Estimated 2016 Population	Pop Increase 2016-2026	Estimated 2026 Population	Pop Increase 2026-2036	Estimated 2036 Population
Helensburgh -Otford	6,475	+481	6,956	+270	7,226
Stanwell Park- Stanwell Tops- Coalcliff	2,447	-75	2,372	+68	2,440
Total	8,922	+406	9,328	+338	9,666

The Future Options and Strategic Plan for Council's Public Swimming Pools, 2014 determined that:

- The catchment has a relatively small population with minimal projected growth.
- The catchment area does not have a high index of disadvantage.
- There is a comparatively high proportion of young people (0-14 years) in the catchment compared to Wollongong as a whole.
- Nearly half (45.9%) of all patrons came from Helensburgh with a further 18.6% coming from nearby suburbs of Otford, Stanwell Park, Stanwell Tops, Coalcliff and Darkes Forest.



Assesssment Nov 2017



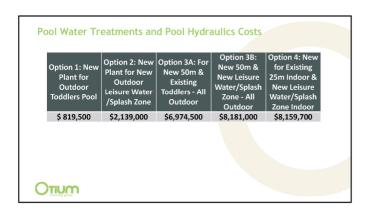
1/19/2018

	Options						
Option	Outdoor or Indoor	Exist 25m pool	Existing Toddlers	Leisure water/splash zone	New 50m Pool	Low cost Roof Enclosure	Season (months)
1	Outdoor	Retain, + new heating	Retain, + new heating + separate WTP	n/a	n/a	n/a	7
2	Outdoor	Retain, + new heating	Demolish	New, including new WTP + heating	n/a	n/a	7
3A	Outdoor	Demolish	Retain, + new heating + separate WTP	n/a	New pool, including new WTP + heating	n/a	7
3B	Outdoor	Demolish	Demolish	New, including new WTP + heating	New pool, including new WTP + heating	n/a	7
4	Indoor	Retain, + new WTP + heating	Demolish	New, including new WTP + heating	n/a	Roof enclosure over both 25m pool and 'leisure water/splash zone'	12

Item 7 - Attachment 5 - Councillor Brief - Draft Consultants Preliminary Findings Helensburgh Pool Technical

Capital Cost: Order of Cost Estimate to +/- 35% (excl GST)	Option 1: Existing 25m & Toddlers - All Outdoor	Option 2: Existing 25m & New Leisure Water /Splash Zone - All Outdoor	Option 3A: New 50m & Existing Toddlers - All Outdoor	Option 3B: New 50m & New Leisure Water/Splash Zone - All Outdoor	Option 4: Existing 25m Indoor & Nev Leisure Wate /Splash Zone Indoor **
Heat pumps and hot water pump	\$120,000	\$120,000	\$230,000	\$230,000	\$87,000
Heating loop pipework	\$15,000	\$15,000	\$25,000	\$25,000	\$15,000
Electricals	\$30,000	\$30,000	\$50,000	\$50,000	\$30,000
Pool Covers	Existing	Existing	\$100,000	\$100,000	Existing
Total	\$165,000	\$180,000	\$405,000	\$420,000	\$147,000

	Option 3B: New Option 4					
Capital Cost: Order of Cost Estimate to +/- 35% (Excl GST)	Option 1: New Plant for Outdoor Toddlers Pool	Option 2: New Plant for New Outdoor Leisure Water /Splash Zone	Option 3A: For New 50m & Existing Toddlers - All Outdoor	50m & New Leisure Water/Splash Zone - All Outdoor	Option 4: New for Existing 25m Indoor & New Leisure Water/Splash Zone Indoor	
Plantroom pipework	\$15,000	\$15,000	\$105,000	\$105,000	\$60,000	
Pumps, Filtration and dosing	\$85,000	\$85,000	\$585,000	\$585,000	\$380,000	
Pipework to pool/splash	Existing	\$30,000	\$90,000	\$120,000	\$75,000	
Electricals	\$30,000	\$30,000	\$90,000	\$90,000	\$75,000	
Total	\$ 130,000	\$160,000	\$ 870,000	\$900,000	\$590,000	





Item 7 - Attachment 5 - Councillor Brief - Draft Consultants Preliminary Findings Helensburgh Pool Technical Assesssment Nov 2017

1/19/2018

Key Issues

- · Helensburgh Pool 48 years old
- · Highly valued by residents
- Ongoing pressure by residents to access quality and affordable sporting and leisure activities
- Facility reporting increasing operational deficit \$280,219 2015/2016
- Young age profile of Helensburgh residents with the median age being 35 years although ageing
- · Population catchment 8,922 relatively small
- · Large number of council and privately owned facility within key catchment area

Otium

Recommendation

High cost, coupled with the low catchment population and large number of existing facilities within catchment cannot justify required expenditure to heat, expand or enclose pool.

- Longer term
- · Encourages greater family/child entries by adding more leisure water
- · Continue to monitor and review the plant and equipment
- General upgrade to improve the overall amenity
- Installs a PV solar panel system to help off set utility costs
- · Initiates additional direct programming opportunities

OTIUM





File: IW-914.07.001 Doc: IC17/703

ITEM 8 POLICY REVIEW: PAVED FOOTPATH CONSTRUCTION

The Paved Footpath Construction Policy has been reviewed. This report recommends endorsement of an updated Policy that reinforces the application of the Public Domain Technical Manual and reflects current supporting Policies.

RECOMMENDATION

The revised draft Paved Footpath Construction Policy be adopted

REPORT AUTHORISATIONS

Report of: Peter Nunn, Manager Infrastructure Strategy and Planning (Acting)

Authorised by: Mike Dowd, Director Infrastructure and Works - Connectivity Assets and Liveable City

(Acting)

ATTACHMENTS

1 Draft Paved Footpath Construction Policy

BACKGROUND

The Paved Footpath Construction Policy was last endorsed by Council in December 2014. The Policy has been reviewed and updated to bring it up to date with respect to:

- 1 Reinforcing the need for Footpaths to be upgraded in accordance with Council's Public Domain Technical Manual
- 2 Ensuring damages that result from development works are rectified by the developer
- 3 The need to align the Policy with the Civil Works Notification Policy

PROPOSAL

That the draft Paved Footpath Construction Policy be adopted.

This policy supports the rolling out of Council's Infrastructure Delivery Program.

CONSULTATION AND COMMUNICATION

The draft Policy has been the subject of internal consultation with affected Divisions as follows:

- City Works and Services
- Governance and Information
- Development Assessment and Certification
- Community, Cultural and Economic Development including City Centre Management
- Project Delivery including Design and Technical Services

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 under the objective 4.4 Our Local Council has the trust of the Community Our under Community Goal "We are a connected and engaged community". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
4.4.4 Policies are simplified to ensure transparency and efficiency	4.4.4.1 Ensure Policies and Procedures are regularly reviewed, updated and promoted.	Conduct rolling review of Council's Policy Register.



RISK ASSESSMENT

The application of conditions of consent involving the construction upgrade or replacement of footpaths by developers gives rise to two community based risks as follows:

- 1 Conditions of consent are currently issued requiring the construction, upgrading or reconstruction of footpaths to levels supplied by Council. The policy reinforces the requirement and responsibility for adjusting related infrastructure such as kerb & guttering, utility pits and road side furniture. This arrangement prevents Council having to urgently undertake a design and construction project to significantly adjust kerbing, roads and utilities before the developer can undertake the required footpath works. Adoption of the revised policy will continue to reduce this risk.
- 2 Community dissatisfaction with damaged and/or isolated sections of footpath that do not increase pedestrian connectivity with consequent requests to Council to construct the resulting "missing link". Adoption of the reviewed policy, maintains the requirement for developers to reasonably construct footpath to the nearest point of the pathway network, public transport point or shopping precinct to decrease this risk.

FINANCIAL IMPLICATIONS

The reviewed Policy does not have direct financial implications; however application of the Policy for the development consent process may impact on capital programs and budgets should developers seek to construct or replace footpaths out of sequence with Council's program.

The Policy seeks to reduce this potential implication by clarifying the responsibility flow on infrastructure adjustments to be undertaken as a part of the required footpath works.

CONCLUSION

The revised Paved Footpath Construction Policy allows Council to articulate a policy establishing the roles and responsibilities for the appropriate and equitable replacement, repair, upgrade and construction of footpath assets to improve pedestrian connectivity across the City.



PAVED FOOTPATH CONSTRUCTION DRAFT COUNCIL POLICY

ADOPTED BY COUNCIL: [TO BE COMPLETED BY CORP SUPPORT]

BACKGROUND

Council is responsible for constructing and maintaining public roads, including associated pedestrian paths, throughout the Wollongong local government area. Within the resources which are available, Council endeavours to maintain a high standard of carriageways and pedestrian pavements as well as improving pedestrian connectivity.

Where damage occurs to the surface of Council's roads, including footpaths, and the responsible party can be identified, Council has an obligation on behalf of the public to recover the cost of rectification of the damage from the responsible party or have that party make good the damage.

Where development creates a need for a new pedestrian path or an upgrade to an existing one, Council will ensure that the development, either directly or through a Section 94 Developer Contribution, funds the required upgrade and minimises direct Council costs.

OBJECTIVE

The main objectives of this policy are to -

- 1 Ensure that an equitable 'user pays' policy applies for the construction of paved footpaths in conjunction with new developments.
- 2 Ensure that an equitable 'user pays' policy applies for recovering the cost of rectification of footpaths that have been damaged in excess of normal wear and tear.
- 3 Make local roads more pedestrian friendly and improve pedestrian connectivity.
- 4 Develop strategies to ensure that Council's expenditures are equitably allocated.
- 5 Manage risks associated with and arising from footpath damage and connectivity.

POLICY STATEMENT

Where new footpaths are required to be constructed as a result of development, full costs of construction of the footpaths are to be borne by the developer.

Where Council undertakes a program of constructing paved footpaths in residential areas, costs will be funded from Council's resources, with works undertaken on a risk management priority basis in accordance with the Asset Management Plan to ensure equitable distribution of improvement works.

Where another party has caused damage to Council footpaths beyond what is considered normal wear and tear, Council will seek to recover the cost of the rectification or require rectification works be undertaken as a priority.

POLICY REVIEW AND VARIATION

- 1 Council is to have the opportunity to review and adopt, at least once during its Term, each Council policy.
- A resolution of Council is required to adopt any variations to this policy, with the exception of minor administrative changes, such as updates to legislative references, which may be endorsed by the Executive Management Committee (EMC). Endorsement of administrative changes made to this policy by EMC does not alter the requirement for it to be reviewed and adopted by each Term of Council.



Item 8 - Attachment 1 - Draft Paved Footpath Construction Policy

PAVED FOOTPATH CONSTRUCTION

COUNCIL POLICY

STATEMENT OF PROCEDURES

1 Where footpaths are reasonably required to be constructed or reconstructed as a result of development in order to deliver active transport connections for residents or workers, full costs of construction of the footpaths for at least the full frontage of the development and connecting to the nearest point of the pathway network, public transport point or shopping precinct are to be borne by the developer in accordance with the following:

New Development in a Commercial Centre where there is no existing footpath.	Developer will be required to undertake footpath construction under Section 80A(1)(f) of the Environmental Planning and Assessment Act relating to the imposition of conditions
New Development in Commercial Centre where the existing footpath is adequate but developer wants to improve standard.	Developer to undertake entire footpath construction and/or reconstruction. The development consent will not however require the work to be undertaken pursuant to the Environmental Planning and Assessment Act.
New Development in Commercial Centre where existing footpath is adequate but will be inadequate to serve the new development.	Developer will be required to undertake footpath reconstruction and/or upgrade in accordance with Council's Public Domain Technical Manual under Section 80A(1)(f) Environmental Planning and Assessment Act.
New Development in an established residential area where there is no existing footpath.	Developer will either: - be required to undertake work pursuant to Section 80A(1)(f) of the <i>Environmental Planning and Assessment Act</i> ; or - provide a monetary contribution in accordance with the applicable Development Contributions Plan in place.

- With respect to the required construction upgrade or reconstruction works to be undertaken by the Developer, the footpath work will include:
 - a Any required adjustments to, or replacement of, service/utility pits or similar, including complying with current standards of management of asbestos containing materials (where applicable); and to achieve footpath levels that are derived from specified kerb levels provided by Council and the relevant Public Domain Technical Manual.
 - b Construction or replacement of existing kerb and guttering, including adjustment or upgrades to kerb ramps, drainage pits and making good of the road pavement to match or transition, to achieve the kerb levels specified by Council. Kerb and guttering damaged due to construction work during development shall also be replaced.
 - c In addition to approvals required under Section 138 of the Roads Act (via Council's Application to Open and/or Occupy Roadway or Footpath) the Developer is required to notify, in writing, residences and businesses within the construction zone or area of traffic management and, in the case of the Traffic Management plan, requiring restrictions to emergency access, emergency services at least one week prior to commencing construction.
- 3 The existing authorised improvements in the street will be recorded prior to construction commencing, to ensure reinstatement to the pre-existing standard following completion of construction. Any identified unauthorised improvements will be referred to the Regulation and Enforcement Division for action as appropriate.
- 4 For footpath works being undertaken by Council, owners of properties and residents/occupiers adjoining proposed footpath construction works are to be notified in writing of Council's intention to carry out the work as follows:
 - a As a part of the design consultation process and within timeframes nominated within the Civil Works Notification Policy:
 - Informing of the proposed scope of the project and estimated time of construction.
 - Inviting them to nominate any additional works required on the basis of prepayment in accordance with the Fees and Charges fixed by Council, prior to the work being carried out.



PAVED FOOTPATH CONSTRUCTION

COUNCIL POLICY

- Provide an opportunity to make comment on the proposed footpath.
- b As part of the construction process, at least one week prior to the start of construction to inform of pending construction and any required access changes or restrictions.
- 5 Where new footpaths are to be constructed as a result of development:
 - a The Manager Infrastructure Strategy and Planning is to be advised of this condition when Development Consent is granted;
 - b The developer is to be advised of the conditions pertaining to undertaking work on Council's footpaths; and
 - c The work is to be completed concurrently with the project.
- In accordance with Section 102 of the Roads Act 1993, footpaths that are damaged (excluding normal wear and tear) as a result of development activities, the actions of property owners or road users, must be repaired or replaced to the contemporary standards for the damaged pavement. Where repairs are not undertaken, Council may undertake the necessary works and seek compensation for any costs incurred for managing site safety and repair works.





PAVED FOOTPATH CONSTRUCTION

COUNCIL POLICY

SUMMARY SHEET		
Responsible Division	Infrastructure Strategy and Planning	
Date adopted by Council	[To be inserted by Corporate Governance]30 January 2018	
Date of previous adoptions	15 December 2014, 6 November 2002, 15 April 1996 Council – 15 December 2014	
Date of next review	January 2021	
Legislative or other requirement for review DELETE THIS WHOLE ROW IF NOT APPLICABLE	[List review timeframe and Act, policy or review requirement]	
Responsible Manager	Infrastructure Strategy Manager	
Authorised by	Director Infrastructure and Works	





File: PR-195.006 Doc: IC18/6

ITEM 9 POLICY REVIEW: SCHOOL USE OF COUNCIL SWIMMING POOLS

The School Use of Council Swimming Pools Policy has now been reviewed as part of Council's rolling review schedule of its policies, with only minor amendments to ensure the policy is consistent with recommendations from the NSW Government and Council's "Risk Management Approach to Water Safety".

RECOMMENDATION

The revised School Use of Council Swimming Pools Policy be adopted.

REPORT AUTHORISATIONS

Report of: Peter Coyte, Manager Property and Recreation

Authorised by: Kerry Hunt, Director Community Services - Creative and Engaged City (Acting)

ATTACHMENTS

1 Draft School Use of Council Swimming Pools Policy

BACKGROUND

The School Use of Council Swimming Pools Council Policy is due for review by March 2018. This policy was first adopted in September 1987 and last reviewed in December 2014. The policy states the provisions for schools utilising Council pools in order to minimise any inconvenience to members of the public arising and in accordance with the expectations of the community.

It is recommended this policy be amended to include Council's 'Risk Management Approach to Water Safety" in accordance with requirements of the NSW Government's Water Safety Practice Note 15 (October 2017).

PROPOSAL

Council adopt the amended School Use of Council Swimming Pools Policy.

CONSULTATION AND COMMUNICATION

Council officers within the Property and Recreation and Community Cultural and Economic Development Division have been consulted.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal "We are a healthy community in a liveable". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
5.5.2 A variety of quality public spaces and opportunities for sport, leisure, recreation, learning and cultural activities in the community.	5.5.2.1 Use data to access the current community infrastructure available, community demand and develop a strategic framework and policies to either rationalise, enhance or expand to meet hanging community needs.	Implement the key recommendations of the Strategic Plan for Council's swimming pools in accordance with Council's capital program.

CONCLUSION

The School Use of Council Swimming Pools Policy reinforces Council's commitment to providing the maximum benefit to schools through use of Council's swimming pools.





SCHOOL USE OF COUNCIL SWIMMING POOLS

COUNCIL POLICY

ADOPTED BY COUNCIL: [TO BE COMPLETED BY CORP SUPPORT]

BACKGROUND

Council maintains various public swimming pools which it makes available to schools for swimming carnivals by excluding public access on those occasions.

In order to minimise any inconvenience to members of the public arising from the use of the pools by schools, it is necessary for schools to undertake their use of Council's pools in accordance with the expectations of the community.

OBJECTIVE

To maximise the benefits to schools through the use of Council's swimming pools.

POLICY STATEMENT

Council will make its swimming pools available for use by schools in accordance with the provisions of this Policy.

POLICY REVIEW AND VARIATION

- 1 Council is to have opportunity to review and adopt, at least once during its Term, each Council policy.
- A resolution of Council is required to adopt any variations to this policy, with the exception of minor administrative changes, such as updates to legislative references, which may be endorsed by the Executive Management Committee (EMC). Endorsement of administrative changes made to this policy by EMC does not alter the requirement for it to be reviewed and adopted by each Term of Council.





SCHOOL USE OF COUNCIL SWIMMING POOLS

COUNCIL POLICY

STATEMENT OF PROCEDURES

BOOKINGS

- 1 Bookings will be accepted for Swimming Carnivals, Learn to Swim or Intensive Lifesaving and weekly swimming between the hours of 8:30am and 3.30pm on weekdays only. Carnivals outside these hours will be charged a fee accordingly.
- 2 Carnivals to have precedence over regular and casual bookings. Carnivals only during first term.
- 3 Only one (1) carnival permitted per school per season.
- 4 Wherever possible, accurate numbers should be given to aid the scheduling of the timetable.
- 5 Individual School Learn to Swim and Intensive Lifesaving to be held only in first and fourth term and in school hours.
- 6 All school bookings shall not have exclusive use of the Pool Complex.
- 7 All pupils must leave the Pool Complex at the end of booked period.

ENTRY TO THE POOL

- 1 Teachers to assemble pupils outside the main entrance to the Swimming Pool.
- 2 Teachers to accompany pupils and ensure they enter the main entrance in an orderly manner.

SUPERVISION

- 1 Each school should provide sufficient staff to supervise its pupils.
- 2 Teachers are required to supervise the entrance.
- 3 Teachers are required to supervise pupils in the change rooms.
- 4 Teachers are also required to familiarise themselves with the pool rules and wherever possible, enforce these rules.
- 5 No balls or ball games are allowed except when booked as a ball game.
- 6 An area must always be made available to the general public.
- 7 No valuables to be left in change rooms.
- 8 The area must be left in a clean and tidy condition at the end of the booked period.

SCHOOL CARNIVALS

- 1 Individual primary school carnivals to be restricted to half day; however schools with a minimum enrolment of 800 pupils be eligible to hold an all-day carnival.
- 2 High schools are eligible to hold an all-day carnival.
- 3 Primary school Zone Carnivals are eligible to hold all-day carnivals.
- 4 A maximum of eighteen (18) school carnivals be permitted at any specific pool in the one season.
- 5 Specific major events shall have priority, eg Zone Championships.
- 6 All-day carnivals to continue through lunch break.
- 7 No non-competitive swimming.



SCHOOL USE OF COUNCIL SWIMMING POOLS

COUNCIL POLICY

Document No: Z17/496801

PUBLIC ADDRESS SYSTEM

- 1 The Pool Public Address System will be made available for school carnivals.
- 2 Please make only necessary announcements.
- 3 No barracking over the Public Address System.

FEES AND CHARGES

1 Schools will be charged fees for the use of swimming pools, determined on an annual basis and included in Council's Schedule of Annual Fees and Charges.

RISK MANAGEMENT

Adopted by Council: [Date]

In accordance with the requirements of the NSW Government's Water Safety Practice Note 15 (October 2017), Council deploys a 'Risk Management Approach to Water Safety'. The Water Safety Practice note provides a detailed framework to guide Council in managing risk at its pools. The approach categorises each of our pool facilities to inform our personnel requirements, safety equipment and signage required to minimise risk to patrons. The risk based categorisation approach considers facility size, configuration, usage, incidents and the profile of users eg age and swimming ability.



Page | 3



SCHOOL USE OF COUNCIL SWIMMING POOLS

COUNCIL POLICY

SUMM	MARY SHEET
Responsible Division	Property and Recreation
Date adopted by Council	[To be inserted by Corporate Governance]
Date of previous adoptions	16 December 2014, 6 November 2002, 21 September 1987
Date of next review	[List date - Not more than 4 years from adoption]
Legislative or other requirement for review DELETE THIS WHOLE ROW IF NOT APPLICABLE	[List review timeframe and Act, policy or review requirement]
Responsible Manager	[Position title only - Line Manager or above]
Authorised by	Manager Property and Recreation





File: FI-230.01.366 Doc: IC18/7

ITEM 10

TENDER T17/34 - AIR CONDITIONING DESIGNS IPAC AND ADMINISTRATION BUILDINGS

This report recommends acceptance of a tender for HVAC Designs for the IPAC and Administration Buildings in accordance with the requirements of the Local Government Act 1993 and the Local Government (General) Regulation 2005.

These works tendered are part of the Capital Works Program to improve our Council assets and infrastructure.

This contract is to review the current air-conditioning (HVAC) condition reports, validate the findings and then propose design options to upgrade the services in-line with the current Australian Standards and provide:

- Reliability Reduce equipment failure and repairs and reduce down times.
- Extend the life cycle of the existing plant and equipment to allow a staged delivery program.
- Determine energy efficiencies by proposing new innovative solutions.
- Provide associated costs for the design and construction of the proposed options.
- Provide a professional recommendation to the options proposed.

Following a review of the options report Council will determine the most advantageous option and, at this point, will consider a further engagement to provide detailed documentation, designs and specifications.

RECOMMENDATION

- 1 In accordance with clause 178(1)(a) of the Local Government (General) Regulation 2005, Council accept the tender of ARUP for the HVAC Designs IPAC and Administration Buildings, in the sum of \$33,000.00, excluding GST.
- 2 Council delegate to the General Manager the authority to finalise and execute the contract and any other documentation required to give effect to this resolution.
- 3 Council grant authority for the use of the Common Seal of Council on the contract and any other documentation, should it be required, to give effect to this resolution.

REPORT AUTHORISATIONS

Report of: Mark Roebuck, Manager City Works and Services

Authorised by: Mike Dowd, Director Infrastructure and Works - Connectivity Assets and Liveable City

(Acting)

ATTACHMENTS

There are no attachments for this report.

BACKGROUND

A Level 3 energy audit was completed in 2015 and the following works were recommended to be investigated to help reduce energy consumption in these sites.

Tenders were required to be invited to submit a proposal to review and investigate design options for air-conditioning (HVAC) for both the whole IPAC building and the Administration Building's supplementary heating opportunities. The specifications within the scope of works are expected to support outcomes in line with condition report recommendations of the existing plant and equipment. The outcome of this tender is to provide an upgrade options recommendation report to the current HVAC plant and equipment with concept designs, documentation and costings. Council will consider the options report and costings and determine the most advantageous concept design to proceed with. Council will either instruct the successful tenderer to continue with the design works or once again tender for the



completion of the preferred option construction package, inclusive of detailed design/drawings, documentation and specifications to allow Council to go to tender. Tenderers were provided with an opportunity to visit the sites prior to submitting proposals and had a copy of the condition reports to review as part of the tender package.

Tenders were invited by the open tender method with a close of tenders of 10.00am on 11 October 2017.

Three tenders were received by the close of tenders and all tenders have been scrutinised and assessed by a Tender Assessment Panel constituted in accordance with Council's Procurement Policies and Procedures and comprising representatives of the City Works + Services, Finance and Legal and Governance Divisions.

The Tender Assessment Panel assessed all tenders in accordance with the following assessment criteria and weightings as set out in the formal tender documents:

- 1 Cost to Council 35%.
- 2 Project Experience 35%.
- 3 Program and Methodology 10%.
- 4 Project Team 15%.
- 5 Local Economy 5%.

The mandatory assessment criteria of referees and accredited quality management systems have been met by the recommended tenderer.

The Tender Assessment Panel utilised a weighted scoring method for the assessment of tenders which allocates a numerical score out of 5 in relation to the level of compliance offered by the tenders to each of the assessment criteria as specified in the tender documentation. The method then takes into account pre-determined weightings for each of the assessment criteria which provides for a total score out of 5 to be calculated for each tender. The tender with the highest total score is considered to be the tender that best meets the requirements of the tender documentation in providing best value to Council. Table 1 below summarises the results of the tender assessment and the ranking of tenders.

Name of TendererRankingARUP1LUCID2Cardno3

TABLE 1 - SUMMARY OF TENDER ASSESSMENT

PROPOSAL

Council should authorise the engagement of ARUP to carry out the HVAC design IPAC and Administration Building in accordance with the scope of works and technical specifications developed for the project.

The recommended tenderer has satisfied the Tender Assessment Panel that it is capable of undertaking the works to Council's standards and in accordance with the technical specification.

Referees nominated by the recommended tenderer have been contacted by the Tender Assessment Panel and expressed satisfaction with the standard of work and methods of operation undertaken on their behalf.

CONSULTATION AND COMMUNICATION

- 1 Members of the Tender Assessment Panel.
- 2 Nominated Referees.



PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal 5 "We are a Healthy Community in a Liveable City". It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-2017	Annual Plan 2016-17
Strategy	5 Year Action	Annual Deliverables
Well maintained assets that meet the needs of current and future communities are provided	5.3.3.1 Manage and maintain community infrastructure portfolio with a focus on asset renewal	Deliver 85% of Council's capital investment into our asset renewal program

RISK ASSESSMENT

The risk in accepting the recommendation of this report is considered low on the basis that the tender process has fully complied with Council's Procurement Policies and Procedures and the Local Government Act 1993.

The risk of the project works or services is considered low based upon Council's risk assessment matrix and appropriate risk management strategies will be implemented.

FINANCIAL IMPLICATIONS

It is proposed that the total project be funded from the following source/s as identified in the Annual Plan –

Buildings Capital Works Program (Cultural Centres + Administration Building) 2017/2018

CONCLUSION

The recommended tenderer has submitted an acceptable tender for this project and Council should endorse the recommendations of this report.



File: CF-05.01353 Doc: IC17/698

ITEM 11

PROPOSED GRANT OF EASEMENT TO DRAIN WATER OVER LOT 23 DP 217420 GERARD AVENUE, FARMBOROUGH HEIGHTS

As a condition of consent of DA-2017/647 at No 1 Gerard Avenue, Farmborough Heights for residential – dual occupancy (detached) and subdivision – Torrens title – two lots, the applicant is required to obtain an easement to drain stormwater through the adjoining Council owned Community land known as Lot 23 DP 217420 Gerard Park at Farmborough Heights.

This report seeks approval to the grant of the easement.

RECOMMENDATION

- 1 Council approve the grant of an Easement to Drain Water 1m wide over Lot 23 DP 217420 Gerard Avenue, Farmborough Heights, in favour of Lot 22 DP 217420 No 1 Gerard Avenue, Farmborough Heights Gerard Park, as shown shaded dark grey on the attachment to this report.
- 2 Council accept payment in the amount of \$4,500 (GST free) from the owner of Lot 22 DP 217420 No 1 Gerard Avenue, Farmborough Heights as compensation for the grant of the easement.
- 3 The applicant will be responsible for all costs associated with this matter.
- 4 Approval be granted to affix the Common Seal of Council to the survey plan, administration sheet, Section 88B Instrument and any other documentation required to give effect to this resolution.

REPORT AUTHORISATIONS

Report of: Peter Coyte, Manager Property and Recreation

Authorised by: Kerry Hunt, Director Community Services - Creative and Engaged City (Acting)

ATTACHMENTS

1 Map of proposed Easement to Drain Water 1m wide over Lot 23 DP 217420 Gerard Avenue, Farmborough Heights - Gerard Park

BACKGROUND

Consent Condition No i of DA-2017/647 at No 1 Gerard Avenue, Farmborough Heights for residential – dual occupancy (detached) and subdivision – Torrens title – two lots, requires the applicant to obtain an easement to drain water through the adjoining Council owned Community land known as Lot 23 DP 217420 Gerard Avenue, Farmborough Heights – Gerard Park, as shown shaded dark grey on the attachment to this report.

Gerard Park is classified as Community land under the Local Government Act 1993. Under Sec 46(1)(a1) of the Act, Council has the ability to grant an easement "... for the purpose of providing pipes, conduits or other connections under the surface of the ground for the connection of premises adjoining the community land to a facility of the council or other public utility provider".

A valuation report was sought from Walsh and Monaghan Valuers for the amount of compensation that would be payable by the applicant to Council for the grant of the easement. The amount of compensation was assessed at \$4,500 (GST free) which has been agreed to by the applicant.

PROPOSAL

It is proposed Council approve the grant of an Easement to Drain Water 1m wide over the drainage pipe to be installed from Lot 22 DP 217420 No 1 Gerard Avenue, Farmborough Heights through Council's land known as Lot 23 DP 217420 Gerard Avenue, Farmborough Heights – Gerard Park, as shown shaded dark grey on attachment.

wollongong city of innovation

CONSULTATION AND COMMUNICATION

City Planning in relation to the condition in DA-2017/647.

Marksman Homes acting on behalf of the applicant.

Walsh and Monaghan Valuers.

As the Council land is classified as Community land, public consultation on the proposal is required under the Local Government Act 1993. 76 letters were sent to landowners in the vicinity of the proposal and no submissions were received.

PLANNING AND POLICY IMPACT

This report is in accordance with Council's policy "Land and Easement Acquisition and Disposal".

This report contributes to the delivery of Wollongong 2022 goal "We are a healthy community in a liveable city".

It specifically delivers on core business activities as detailed in the Property Services Service Plan 2017-18.

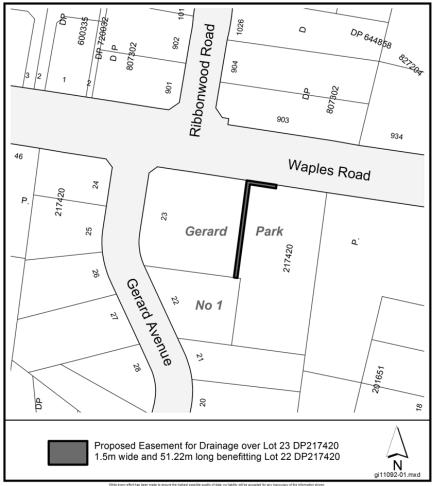
FINANCIAL IMPLICATIONS

Council will receive \$4,500 (GST free) as compensation for the grant of the easement, which is considered to be fair and reasonable. The applicant will be responsible for all costs in the creation of the easement.

CONCLUSION

To allow the condition in DA-2017/647 to be finalised and the stormwater pipe installed and formalised within Council's land, it is recommended the grant of the easement be approved.

Item 11 - Attachment 1 - Map of proposed Easement to Drain Water 1m wide over Lot 23 DP 217420 Gerard Avenue, Farmborough Heights - Gerard Park



White every effort has been made to ensure the highest possible quality of data, no liability will be accepted for any inaccuracy of the information shown.

Copyright © Wollengong City Council, Mapping Services Section. This map may not be reproduced in any form whatever without the express written permission of Wollengong City Council



File: FI-914.05.001 Doc: IC18/14

ITEM 12 DECEMBER 2017 FINANCIALS

Overall, the result for the month of December is favourable compared to phased budget for the key indicators. The Operating Result [pre capital)] is favourable by \$6.9M and the Funds Result shows a favourable variance compared to the phased budget of \$5.8M.

The Cash Flow Statement at the end of the period indicates that there is sufficient cash to support external restrictions.

Council has expended \$43.6M on its capital works program representing 45.9% of the annual budget. The year to date budget for the same period was \$42.9M.

The financial reports presented do not include the adjustments to budgets that form part of the December 2017 Quarterly Review.

RECOMMENDATION

- 1 The financials be received and noted.
- 2 Proposed changes in the Capital Works Program be approved.

REPORT AUTHORISATIONS

Report of: Tana Ramsden, Manager Finance [Acting]

Authorised by: Tom Tyrpenou, Director Corporate Services – Connected and Engaged City [Acting]

ATTACHMENTS

- 1 Income and Funding Statement December 2017
- 2 Capital Project Report December 2017
- 3 Balance Sheet December 2017
- 4 Cash Flow Statement December 2017

BACKGROUND

This report presents the Income and Expense Statement, Balance Sheet and Cash Flow Statement for December 2017. Council's current budget has a Net Funding (cash) deficit of \$12.1M, an Operating Deficit [pre capital] of \$2.8M and a capital expenditure of \$94.9M. At the end of December, Council remains on target to the operational components of this result.

The following table provides a summary view of the organisation's overall financial results for the year to date.

FORECAST POSITION		Original Budget	Revised Budget	YTD Forecast	YTD Actual	Variation
KEY MOVEMENTS		1-Jul	29-Dec	29-Dec	29-Dec	
Operating Revenue	\$M	261.5	266.6	133.6	134.7	1.1
Operating Costs	\$M	(269.9)	(269.3)	(133.0)	(127.3)	5.7
Operating Result [Pre Capital]	\$M	(8.4)	(2.8)	0.6	7.5	6.9
Capital Grants & Contributions	\$M	44.9	26.7	10.5	11.2	0.7
Operating Result	\$M	36.4	23.9	11.1	18.6	7.5
Funds Available from Operations	\$M	54.4	56.3	28.5	31.6	3.0
Capital Works		91.4	94.9	42.9	43.6	(0.7)
Contributed Assets		3.6	3.6	-	-	-
Transfer to Restricted Cash		-	13.6	13.6	13.6	-
Borrowings Repaid	\$M	7.5	7.5	5.0	5.0	-
Funded from:						
- Operational Funds	\$M	54.4	56.3	23.5	26.6	3.0
- Other Funding	\$M	38.4	51.3	27.4	30.9	3.5
Total Funds Surplus/(Deficit)	\$M	(9.7)	(12.1)	(5.5)	0.3	5.8



Financial Performance

The December 2017 Operating Result [pre capital] shows a positive variance compared to budget of \$6.9M.

The Funds Available from Operations shows a positive variance of \$3.0M. This includes the Operating Result variance of \$7.5M but excludes non-cash and transfer to and from restricted cash movements. These include non-cash variations in depreciation (\$1.4M) and profit on disposal of assets (\$0.4M), employee on-costs (\$0.2M), transfer of additional grants and income received to restricted cash (\$1.0M), lower level of application of restricted cash for funded projects (\$1.1M) and a higher level of employee leave payments (\$0.4M).

Funds Result

The Total Funds result as at 29 December 2017 shows a positive variance of \$5.8M compared to phased budget. This includes the positive variation in the funds component of the Operating Result (\$3.0M), expenditure greater than the phased budget in capital works (\$0.7M) and better progress in funded capital works that do not rely on the Funds from Operations (\$3.5M).

Capital Budget

As at 29 December 2017, Council had expended \$43.6M or 45.9% of the approved annual capital budget of \$94.9M. The overall capital budget remains effectively unchanged with proposed changes between programs contained in Attachment 2.

Liquidity

Council's cash and investments increased during December 2017 to holdings of \$170.7M compared to \$155.6M at the end of November 2017. This reflects normal trends for this time of the year.

CASH, INVEST	MENTS & AV	AILABLE FU	NDS	
	Actual 2016/17 \$M	Original Budget 2017/18	September QR 2017/18	Actual Ytd Dec 2017
Total Cash and Investments	167.6	153.5	144.9	170.7
Less Restrictions: External Internal Total Restrictions Available Cash	75.8 57.4 133.2 34.4	96.9 49.8 146.8 6.8	76.3 63.2 139.5 5.4	75.8 66.0 141.8 28.8
Adjusted for : Current payables Receivables Other Net Payables & Receivables Available Funds	(41.6) 23.5 10.7 (7.4) 27.0	(24.3) 23.9 11.0 10.6 17.3	(24.2) 33.8 11.0 9.6 15.0	(32.8) 16.5 14.9 (1.4) 27.4

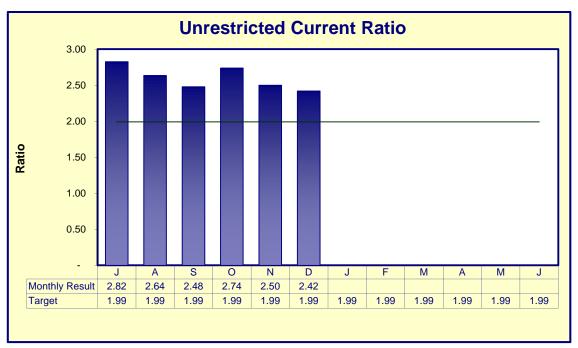
The Available Funds position excludes restricted cash. External restrictions are funds that must be spent for a specific purpose and cannot be used by Council for general operations. Internal restrictions are funds that Council has determined will be used for a specific future purpose.

The Available Funds forecast that formed part of the 2017-18 Annual Plan is within Council's Financial Strategy target of 3.5% to 5.5% of Operational Revenue [pre capital] and is between \$9.2M and \$14.4M for the year ending 30 June 2018. The actual Available Funds at 29 December 2017 has been impacted

wollongong

by the progress of planned expenditure to date and a transfer made to the Strategic Projects reserve of \$4.4M related to last year surplus funds result.

The Unrestricted Current Ratio measures the cash/liquidity position of an organisation. This ratio is intended to disclose the ability of an organisation to satisfy payment obligations in the short term from the unrestricted activities of Council. Council's current ratio is above the Local Government Benchmark of >2:1, however, the strategy is to maximise the use of available funds for asset renewal by targeting a lean Unrestricted Current Ratio.



Receivables

Receivables are the amount of money owed to Council or funds that Council has paid in advance. At December 2017, receivables totalled \$16.5M, compared to receivables of \$22.8M at December 2016. Fluctuations relate to the timing of revenue and rates payments which are accrued before the actual payments are due.

Payables

Payables (the amount of money owed to suppliers) of \$32.8M were owed at December 2017 compared to payables of \$35.9M in December 2016. The difference in payables relate to goods and services and capital projects delivered but not yet paid for, timing of the receipt of rating income and timing of the Financial Assistance Grant payments.

Debt

Council continues to have financial strength in its low level of borrowing. The industry measure of debt commitment is the Debt Service Ratio that measures the proportion of revenues that is required to meet annual loan repayments.

Council's Financial Strategy includes provision for additional borrowing in the future and Council will consider borrowing opportunities from time to time to bring forward the completion of capital projects where immediate funding is not available. Council currently has borrowings through an interest free loan and the subsidised Local Government Infrastructure Renewal Scheme (LIRS). In 2009-10, Council borrowed \$26M interest free to assist in the delivery of the West Dapto Access Plan. Council has also been successful in securing subsidies for loans under the three rounds of the LIRS program and has entered into loans of \$20M in 2012-13 for Round 1, \$4.3M in 2013-14 for Round 2 and \$20.5M for Round 3. The LIRS program provides a loan subsidy of 4% for Round 1 and 3% for the subsequent rounds. Loan funds have been used to accelerate the Citywide Footpaths, Shared Path Renewal, Missing Links Construction Program, building refurbishment works for Berkeley Community Centre,



Corrimal Library and Community Centre, Thirroul Pavilion and Kiosk and to support the West Dapto Access – Fowlers Road project respectively.

Council's Debt Service Ratio forecast for 2017-18 is approximately 3.5%, which is still below Council's target of 4% and remains low in comparison to the Local Government's benchmark ratio of <10%. It is noted that non-cash interest expense relating to the amortisation of the income recognised on the West Dapto Access Plan Loan is not included when calculating the Debt Service Ratio.

Assets

The Balance Sheet shows that \$2.6B of assets are controlled and managed by Council for the community as at 29 December 2017. The 2017-18 capital works program includes projects such as the West Dapto Access Strategy, Grand Pacific Walk, tramway sea wall and path upgrade, civil asset renewals including roads, car parks and buildings and purchase of library books. As at 29 December 2017, Council had expended \$43.6M or 45.9% of the approved annual capital budget of \$94.9M.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal 'We are a connected and engaged community'. It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-17	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
4.4.5 Finances are managed effectively to ensure long	4.4.5.1 Effective and transparent financial management	Provide accurate and timely financial reports monthly, quarterly and via the annual financial statement
term financial sustainability	systems are in place	Continuous Budget Management is in place, controlled and reported
		Manage and further develop compliance program
		Monitor and review achievement of Financial Strategy

CONCLUSION

The results for December 2017 are within projections over a range of financial indicators and it is expected that Council will achieve the forecast annual results.



Item 12 - Attachment 1 - Income and Funding Statement - December 2017

1 July 20	017 to 29 Dece 2017/18	mber 2017 2017/18	2047/49	2017/18
	2017/18 Orginal Budget \$'000	2017/18 Current Budget \$'000	2017/18 YTD Budget \$'000	2017/18 Actual YTD \$'000
Inc	come Staten	nent		
Income From Continuing Operations				
Revenue:	400.044	104 500	05 500	05.40
Rates and Annual Charges User Charges and Fees	190,941 35,691	191,532 35,686	95,508 17,455	95,420 17,73
Interest and Investment Revenues	4,321	5,217	2,608	2,72
Other Revenues	9,705	10,204	5,011	5,13
Grants & Contributions provided for Operating Purposes	20,838	21,051	10,204	10,488
Grants & Contributions provided for Capital Purposes	44,858	26,702	10,510	11,166
Profit/Loss on Disposal of Assets	0	2,869	2,869	3,23
Total Income from Continuing Operations	306,353	293,261	144,167	145,89
Expenses From Continuing Operations				
	405.000	100.000	00.004	00.10
Employee Costs Borrowing Costs	125,906 3,849	126,209 3,859	62,384 1,927	60,102
Materials, Contracts & Other Expenses	93,150	94,111	45,076	42,65
Depreciation, Amortisation + Impairment	64,340	62,362	31,437	30,00
Internal Charges (labour)	(15,702)	(15,582)	(6,987)	(6,860
Internal Charges (not labour)	(1,618)	(1,614)	(804)	(553
Total Expenses From Continuing Operations	269,926	269,345	133,033	127,26
Coperating Results From Continuing Operations	36,427	23,916	11,133	18,629
- Department of the continuing operations	30,421	25,310	11,100	10,02
Net Operating Result for the Year _	36,427	23,916	11,133	18,62
Net Operating Result for the Year before Grants &				
Contributions provided for Capital Purposes	(8,431)	(2,786)	623 7.7%	7,463
Contributions provided for Capital Purposes	(8,431) 11.9%	(2,786) 8.2%	623 7.7%	7,463 12.8°
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] %	11.9%	8.2%	-	
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] %		8.2%	-	12.8
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year	11.9%	ment	7.7%	12.8
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back :	11.9% anding State 36,427	8.2% ment 23,916	7.7%	12.8
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year	11.9%	ment	7.7%	12.8° 18,62:
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions	11.9% anding State 36,427	8.2% ment 23,916 76,548	7.7% 11,133	18,62 35,06 5,76
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations	11.9% 11.9% 11.9% 11.9% 11.9% 11.9%	8.2%	7.7% 11,133 137,061 6,877	18,62 35,06 5,76 (21,383
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash	11.9% Inding State 36,427 80,942 13,286 (63,548)	8.2% ment 23,916 76,548 15,476 (46,502)	7.7% 11,133 137,061 6,877 (20,462)	18,62 35,06 5,76 (21,383 (6,482
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions	11.9% 11.9% 11.9% 11.286 (63,548) (12,718)	8.2% ment 23,916 76,548 15,476 (46,502) (13,171)	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065)	18,62 35,06 5,76 (21,383 (6,482
Funds Available from Operations Funds Available from Operations Funds Available from Operations	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065) 0	18,62 35,06 5,76 (21,383 (6,482
Fu Net Operating Result for the Year Add back: Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065) 0 28,545	18,62 35,06 5,76 (21,383 (6,482 31,59
Funds Available from Operations - Payment of Carbon Contributions - Payment of Carbon Contributions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions - Funds Available from Operations - Advances (made by) / repaid to Council - Borrowings repaid	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065) 0 28,545 0	18,62 35,06 5,76 (21,383 (6,482 31,59
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389 0 (7,486)	8.2% ment 23,916 [76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486)	7.7% 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017)	18,62 35,06 5,76 (21,383 (6,482 31,59
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET	80,942 13,286 (63,548) 0 54,389 0 (7,486)	8.2% ment 23,916 [76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486)	7.7% 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017)	18,62 35,06 5,76 (21,383 (6,482 31,59 (5,017
Fundamental English of Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fundamental Purposes Retailed Cash (Septicity) (Pre capital) % Power of Cash (Septicity) (Pre capital) % Restricted Cash (Septicity) (Present C	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389 0 (7,486)	8.2% ment 23,916 [76,548 15,476 (46,502) (13,171) 0 56,268 (7,486) 48,781	7.7% 11,133 37,061 6.877 (20,462) (6.065) 0 28,545 0 (5,017) 23,528	18,62 35,06 5,76 (21,383 (6,482 31,59 (5,017
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781	7.7% 11,133 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017) 23,528 (42,909)	18,629 35,066 5,766 (21,383 (6,482) (5,017 26,574
Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Contributed Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Coperational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funded From :-	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903 (91,373) (3,600) 0	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625)	7.7% 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017) 23,528 (42,909) 0 (13,625)	18,625 18,625 18,625 18,625 18,625 18,625 18,625 18,625
Fundance (made by) / repaid to Council Borrowings repaid Contributed Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Capital Budget Capital	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903 (91,373) (3,600) 0 46,903	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625)	7.7% 11,133 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528	18,62 18,62 35,06 5,76 (21,383 (6,482 31,59 (5,017 26,57 (43,564
Funded From: - Capital Budget Capital Budget	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389 0 (7,486) 46,903 (91,373) (3,600) 0 46,903 1,750	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000	7.7% 11,133 37,061 6,877 (20,462) (6,065) 0 28,545 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560	18,62 18,62 35,06 5,76 (21,383 (6,482 31,59 (5,017 26,57 (43,564 (13,625 26,57 10,29
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Funded From: - Operational Funds - Sale of Assets - Sale of Assets - Internally Restricted Cash	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 54,389 0 (7,486) 46,903 (91,373) (3,600) 0 46,903 1,750 9,241	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000 12,633	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065) 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560 6,739	12.8 18,62 35,06 5,76 (21,383 (6,482) 31,59 (5,017) 26,57 (43,564) (13,625) 26,57 10,29 7,37
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funded From: - Operational Funds - Sale of Assets - Internally Restricted Cash - Borrowings	11.9% 11	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000 12,633 0	7.7% 11,133 37,061 6,877 (20,462) (6,065) 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560 6,739 0	18.62 35.06 5,76 (21,383 (6,482 31,59 (5,017 26,57 (43,564 (13,625 26,57,10,29
Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funded From : - Operational Funds - Sale of Assets - Internally Restricted Cash - Borrowings - Capital Grants	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903 (91,373) (3,600) 0 46,903 1,750 9,241 0 9,641	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000 12,633 0 11,107	7.7% 11,133 11,133 37,061 6,877 (20,462) (6,065) 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560 6,739 0 5,072	18,62 18,62 35,06 5,76 (21,382 (6,482 31,59 (5,017 26,57 (43,564 (13,625 26,57 10,29 7,37 5,64
Fu Net Operating Result for the Year Add back: Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funded From : - Operational Funds - Sale of Assets - Internally Restricted Cash - Borrowings - Capital Grants - Developer Contributions (Section 94)	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903 (91,373) (3,600) 46,903 1,750 9,241 0 9,641 6,665	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000 12,633 0 11,107 6,967	7.7% 11,133 11,133 137,061 6,877 (20,462) (6,065) 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560 6,739 0 5,072 2,326	12.8° 18,62° 35,06° (21,383° (6,482° (5,017) 26,57° (43,564° (13,625° 26,57° 10,29° 7,37° 5,64° 3,24°
Contributions provided for Capital Purposes NET SURPLUS (DEFICIT) [Pre capital] % Fu Net Operating Result for the Year Add back: - Non-cash Operating Transactions - Restricted cash used for operations - Income transferred to Restricted Cash - Payment of Accrued Leave Entitlements - Payment of Carbon Contributions Funds Available from Operations Advances (made by) / repaid to Council Borrowings repaid Operational Funds Available for Capital Budget CAPITAL BUDGET Assets Acquired Contributed Assets Transfers to Restricted Cash Funded From: - Operational Funds - Sale of Assets - Internally Restricted Cash - Borrowings - Capital Grants	11.9% Inding State 36,427 80,942 13,286 (63,548) (12,718) 0 (7,486) 46,903 (91,373) (3,600) 0 46,903 1,750 9,241 0 9,641	8.2% ment 23,916 76,548 15,476 (46,502) (13,171) 0 56,268 0 (7,486) 48,781 (94,894) (3,600) (13,625) 48,781 11,000 12,633 0 11,107	7.7% 11,133 11,133 37,061 6,877 (20,462) (6,065) 0 (5,017) 23,528 (42,909) 0 (13,625) 23,528 9,560 6,739 0 5,072	



			PROJECT od ended 29 De				
	\$10	00	\$1000			\$1000	0
	CURRENT	BUDGET	WORKING B	UDGET		VARIAT	TION
ASSET CLASS PROGRAMME	EXPENDITURE	OTHER FUNDING	EXPENDITURE	OTHER FUNDING	YTD EXPENDITURE	EXPENDITURE	OTHER FUNDING
Roads And Related Assets							
Traffic Facilities	3,143	(2,646)	3,185	(2,688)	1,118	42	(42)
Public Transport Facilities	290	(120)	340	(170)	198	50	(50)
Roadworks Bridges, Boardwalks and Jetties	13,000 2,300	(2,989)	13,000 2,405	(2,989)	5,360 777	(0) 105	0 45
TOTAL Roads And Related Assets	18,733	(5,805)	18,930	(5,852)	7,453	197	(47)
				(-2)	-,		()
West Dapto West Dapto Infrastructure Expansion	8,128	(8,128)	8,128	(8,128)	5,196	(0)	0
TOTAL West Dapto	8,128	(8,128)	8,128	(8,128)	5,196	(0)	0
TOTAL West Bupto	0,120	(0,120)	0,120	(0,120)	5,130	(0)	•
Footpaths And Cycleways							
Footpaths	4,158	(1,023)	4,012	(1,027)	1,869	(146)	(4)
Cycle/Shared Paths Commercial Centre Upgrades - Footpaths and Cyclewa	12,307 3,715	(3,639)	12,307 3,715	(3,639)	7,591 1,325	(0)	(O) O
TOTAL Footpaths And Cycleways	20,181	(5,308)	20,034	(5,311)	10,785	(146)	(4)
Carparks							
Carpark Construction/Formalising	510	(265)	510	(265)	62	(0)	0
Carpark Reconstruction or Upgrading	1,933	(73)	1,933	(73)	1,205	0	(0)
TOTAL Carparks	2,443	(338)	2,443	(338)	1,267	0	0
Stormwater And Floodplain Manageme	ent						
Floodplain Management	2,477	(717)	2,477	(717)	759	(0)	0
Stormwater Management	3,995	(1,000)	3,930	(935)	1,357	(65)	65
Stormwater Treatment Devices	491	(186)	361	(56)	65	(130)	130
TOTAL Stormwater And Floodplain N	6,963	(1,903)	6,768	(1,708)	2,180	(195)	195
Buildings							
Cultural Centres (IPAC, Gallery, Townhall)	1,360	0	1,360	0	166	0	0
Administration Buildings	2,024	(20)	2,024	(20)	611	0	0
Community Buildings Public Facilities (Shelters, Toilets etc.)	9,822 686	(704)	9,822 686	(704)	4,382 500	(0)	0
Carbon Abatement	1,198	(825)	1,198	(825)	861	0	(0)
TOTAL Buildings	15,089	(1,549)	15,089	(1,549)	6,520	(0)	(0)
Commercial Operations							
Tourist Park - Upgrades and Renewal	750	0	750	0	553	0	0
Crematorium/Cemetery - Upgrades and Renewal	320	0	320	0	27	0	0
Leisure Centres & RVGC TOTAL Commercial Operations	1,220	0	1,220	0	5 585	0	0
· ·	1,220	0	1,220	0	585	0	0
Parks Gardens And Sportfields							
Play Facilities Recreation Facilities	1,421 645	(119) (562)	1,448 665	(146) (582)	526 281	27 20	(27)
Sporting Facilities	1,430	(653)	1,460	(683)	148	30	(30)
TOTAL Parks Gardens And Sportfield	3,497	(1,335)	3,573	(1,411)	955	77	(77)
	5,101	(.,500)	5,010	(.,.11)	555	"	(**)



Item 12 - Attachment 2 - Capital Project Report - December 2017

	C	APITAL	PROJECT	REPOR	T		
	\$10	00	\$1000)		\$100)
	CURRENT	BUDGET	WORKING B	UDGET		VARIAT	ION
ASSET CLASS PROGRAMME	EXPENDITURE	OTHER FUNDING	EXPENDITURE	OTHER FUNDING	YTD EXPENDITURE	EXPENDITURE	OTHER FUNDING
eaches And Pools	_						
Beach Facilities	211	0	211	0	50	(0)	
Rock/Tidal Pools	1,160	(165)	1,160	(165)	832	0	
Treated Water Pools	944	(20)	944	(20)	487	(0)	
TOTAL Beaches And Pools	2,315	(185)	2,315	(185)	1,370	0	
atural Areas							
Natural Area Management and Rehabilitation	210	(10)	210	(10)	141	(0)	
TOTAL Natural Areas	210	(10)	210	(10)	141	(0)	
aste Facilities							
Vhytes Gully New Cells	8,082	(8,082)	8,082	(8,082)	4,916	(0)	
Whytes Gully Renewal Works	300	(300)	300	(300)	101	(0)	
Helensburgh Rehabilitation TOTAL Waste Facilities	100	(100)	100	(100)	15	(0)	
	8,482	(8,482)	8,482	(8,482)	5,033	(0)	
leet							
Notor Vehicles TOTAL Fleet	1,822	(960)	1,822	(960)	626 626	(0)	
	1,022	(900)	1,022	(900)	620	(0)	
lant And Equipment	220	(67)	220	(67)	27	/0)	
Portable Equipment (Mowers etc.) Mobile Plant (trucks, backhoes etc.)	3,102	(67)	3,102	(808)	27	(0)	
Fixed Equipment	340	0	350	(10)	(0)	10	
TOTAL Plant And Equipment	3,662	(874)	3,672	(884)	54	10	
formation Technology							
Information Technology	1,216	(10)	1,216	(10)	305	(0)	
TOTAL Information Technology	1,216	(10)	1,216	(10)	305	(0)	
brary Books							
ibrary Books	1,162	(6)	1,162	(6)	678	(0)	
TOTAL Library Books	1,162	(6)	1,162	(6)	678	(0)	
ublic Art							
Public Art Works Art Gallery Acquisitions	20 115	0	20 164	0 (49)	42 76	(0) 49	
TOTAL Public Art	135	0	184	(49)	118	49	
mergency Services							
Emergency Services Emergency Services Plant and Equipment	250	0	250	0	237	0	
TOTAL Emergency Services	250	0	250	0	237	0	
and Acquisitions							
and Acquisitions	149	0	149	0	58	(0)	
TOTAL Land Acquisitions	149	0	149	0	58	(0)	
on-Project Allocations							
Capital Project Contingency	(773)	0	(773)	0	0	0	
Capital Project Plan	10	0	10	0	2	0	
TOTAL Non-Project Allocations	(763)	0	(763)	0	2	0	
GRAND TOTAL	94,894	(34,894)	94,885	(34,885)	43,564	(9)	

Manager Project Delivery Division Commentary on December 2017 Capital Budget Report

On 26 June 2017 Council approved a capital budget for 2017-18 of \$91.4M. During each of the first five months of 2017-18, a number of adjustments have been resolved by Council. As a result at 29 December 2017 the approved capital budget had increased to \$94.9M and year to date expenditure of the capital budget was \$43.6M. The year to date expenditure was \$0.7M more than the forecast expenditure of \$42.9M for this period.

The following table summarises the proposed changes to the total Capital Budget for January 2018 detailed in December Capital budget report arising from transfer of budget between programs and reduction or introduction of various types of external or loan funding. These changes result in a net decrease of \$9K in the overall capital budget.

Program	Major Points of change to Capital Budget
Traffic Facilities	Introduce additional RMS funding for existing project. Rephase Section 94 funding for several intersection upgrade projects. Reallocate Section 94 funds from Traffic Facilities Program to Public Transport Facilities.
Public Transport Facilities	Reallocate Section 94 funds from Traffic Facilities Program to Public Transport Facilities.
Bridges Boardwalks and Jetties	Rephase Section 94 funding for existing project. Reallocate budget from Footpaths Program to Bridges Boardwalks and Jetties.
Footpaths Program	Reallocate budget from Footpaths Program to Bridges Boardwalks and Jetties Program. Introduce additional Sect 94 funding for existing project.
Stormwater Management	Rephase Stormwater Services Management Levy for existing projects.
Stormwater Treatment Devices	Rephase Stormwater Services Management Levy for existing projects.
Play Facilities	Introduce CBP funding for existing project.
Recreation Facilities	Introduce CBP funding for existing project.
Sporting Facilities	Introduce Sports Priority Reserve funding for existing project. Introduce Port Kembla Community Infrastructure funding for existing project.
Art Gallery Acquisitions	Introduce community bequest funding for fine art purchase.

WOLLONGONG CITY (COUNCI	L
	Actual 2017/18 \$'000	Actual 2016/17 \$'000
Balance Sheet		
Current Assets		
Cash Assets	38,986	23,534
Investment Securities	110,652	119,458
Receivables	16,476	23,532
Inventories	6,072	6,089
Other	14,980	10,680
Assets classified as held for sale	0	6,381
Total Current Assets	187,166	189,672
Non-Current Assets		
Non Current Cash Assets	21,085	24,585
Non-Current Receivables	0	0
	0	0
Property, Plant and Equipment	2,336,458	2,314,277
Investment Properties	4,775	4,775
Westpool Equity Contribution	1,835	1,835
Intangible Assets	454	653
Total Non-Current Assets	2,364,607	2,346,125
TOTAL ASSETS	2,551,773	2,535,797
Current Liabilities		
Current Payables	32,843	41,617
Current Provisions payable < 12 months	11,709	11,185
Current Provisions payable > 12 months	37,669	37,669
Current Interest Bearing Liabilities	7,513	7,513
Total Current Liabilities	89,733	97,984
Non-Current Liabilities		
Non Current Interest Rearing Liabilities	30,314	32,188
Non Current Interest Bearing Liabilities Non Current Provisions	49,115	48,121
Total Non-Current Liabilities	79,430	80,309
TOTAL LIABILITIES	169,162	178,292
NET ASSETS	2,382,611	2,357,505
Equity		
Accumulated Surplus	1,260,781	1,249,603
Asset Revaluation Reserve	980,026	974,736
Restricted Assets	141,805	133,166
TOTAL EQUITY	2,382,611	2,357,505
TOTAL EQUIT	2,302,011	2,337,305

Item 12 - Attachment 4 - Cash Flow Statement - December 2017

289



WOLLONGONG CITY CASH FLOW STATEME as at 29 December 20:	NT	IL.
	YTD Actual	Actual
	2017/18	2016/17
	\$ '000	\$ '000
CASH FLOWS FROM OPERATING ACTIV	ITIES	
Receipts:		
Rates & Annual Charges	103,748	182.005
User Charges & Fees	24,256	39.819
Interest & Interest Received	3,135	5,464
Grants & Contributions	18,704	57.871
Other	6,351	25,559
Payments:	5,501][20,000
Employee Benefits & On-costs	(53,750)	(102,860
Materials & Contracts	(24,250)	(60,479
Borrowing Costs	(640)	(1,447
Other	(28,307)	(44,300
	(20,001)))	(11,000
Net Cash provided (or used in) Operating Activities	49,247	101,632
CASH FLOWS FROM INVESTING ACTIVIT Receipts: Sale of Infrastructure. Property. Plant & Equipment		3,239
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments:	10,299	3,239
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments		3,239
Receipts Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property	10,299	
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment		
Receipts Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property	10,299	
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment	10,299	(90,313
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Interests in Joint Ventures & Associates	10,299 - - - - (54,244) - (43,945)	(90,313
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant	10,299 - - - - (54,244) - (43,945)	(90,313
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Interests in Joint Ventures & Associates Net Cash provided (or used in) Investing Activities CASH FLOWS FROM FINANCING ACTIVIT	10,299 - - - - (54,244) - (43,945)	(90,313 (87,074
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investments Purchase of Infrastructure, Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Interests in Joint Ventures & Associates Net Cash provided (or used in) Investing Activities CASH FLOWS FROM FINANCING ACTIVIT Receipts:	10,299 - - - - (54,244) - (43,945)	(90,313
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Receipts: Proceeds from Borrowings & Advances	10,299 - - - - (54,244) - (43,945)	(90,313 (87,074 5,500
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Receipts: Proceeds from Borrowings & Advances Payments:	10,299 - (54,244) (43,945) (12,043)	(90,313 (87,074 5,500
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Receipts: Receipts: Repayment of Borrowings & Advances Repayment of Finance Lease Liabilities	10,299 10,299 (54,244) (54,244) [10,20]	(90,313 (87,074 5,500 (7,158
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Infrastructure, Property Purchase of Infrastructure, Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Interests in Joint Ventures & Associates Net Cash provided (or used in) Investing Activities CASH FLOWS FROM FINANCING ACTIVIT Receipts Proceeds from Borrowings & Advences Payments: Repayment of Borrowings & Advances	10,299 - (54,244) (43,945) (12,043)	(90,313
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Receipts: Receipts: Repayment of Borrowings & Advances Repayment of Finance Lease Liabilities	10,299 10,299 (54,244) (54,244) [10,20]	(90,313 (87,074 5,500 (7,158
Receipts: Sale of Infrastructure, Property, Plant & Equipment Deferred Debtors Receipts Payments: Purchase of Investments Purchase of Investment Property Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Purchase of Infrastructure, Property, Plant & Equipment Recaipts Proceeds from Borrowings & Advances Payments: Repayment of Borrowings & Advances Repayment of Finance Lease Liabilities Net Cash Flow provided (used in) Financing Activities	10,299 - (54,244) (54,244) (43,945) [188] (2,156)	(90,313 (87,074 5,500 (7,156 (1,659

as at 29 December 20		
	YTD Actual 2017/18 \$ '000	Actual 2016/17 \$ '000
Total Cash & Cash Equivalents and Investments - year to date	170,723	167,5
Attributable to:		
External Restrictions (refer below)	75,768	75.7
Internal Restrictions (refer below)	66,036	57,3
Unrestricted	28,919	34,4
	170,723	167,5
External Restrictions		
Developer Contributions	18,856	16,3
RMS Contributions	378	
Specific Purpose Unexpended Grants	3,242	3,0
Special Rates Lew Wollongong Mall	260	
Special Rates Lew Wollongong City Centre	35	
Local Infrastructure Renewal Scheme	16,775	19,9
Unexpended Loans	7,547	7,4
Domestic Waste Management	12,056	11,
Private Subsidies	4,943	4,9
West Dapto Home Deposit Assistance Program	10,253	10,0
Stormwater Management Service Charge	1,332	1,4
West Dapto Home Deposits Issued	85	
Carbon Price	61	
Total External Restrictions	75,768	75,7
Internal Restrictions		
Property Development	3,913	3,9
Property Investment Fund	8,3/1	8,7
Strategic Projects	42,940	30,
Future Projects	4,942	5,2
Sports Priority Program	442	
Car Parking Stategy	1,322	1,
MacCabe Park Development	1,065	
Darcy Wentworth Park	171	
Garbage Disposal Facility	2,320	5,9
Telecommunications Revenue		į.
West Dapto Development Additional Rates	(264)	
West Dapto Development Additional Rates Southern Phone Natural Areas	269	
West Dapto Development Additional Rates	}	



File: FI-914.05.001 Doc: IC18/13

ITEM 13 STATEMENTS OF INVESTMENTS - NOVEMBER AND DECEMBER 2017

This report provides an overview of Council's investment portfolio performance for the months of November 2017 and December 2017.

Council's average weighted return for November 2017 was 3.30% which was above the benchmark return of 1.65%. The average weighted return for December 2017 was 2.85% which is above the benchmark return of 1.53%. The results were primarily due to positive marked to market valuation of the NSW TCorp Hour Glass Facilities and CBA Zero Coupon Bond in Council's portfolio for November 2017 and December 2017. The remainder of Council's portfolio continues to provide a high level of consistency in income and a high degree credit quality and liquidity.

RECOMMENDATION

Council receive the Statements of Investments for November and December 2017.

REPORT AUTHORISATIONS

Report of: Steve Packer, Manager Finance (Acting)

Ordinary Meeting of Council

Authorised by: Renee Campbell, Director Corporate Services - Connected and Engaged City

ATTACHMENTS

- 1 Statements of Investments November and December 2017
- 2 Investment Income Compared to Budget 2017-2018

BACKGROUND

Council is required to invest its surplus funds in accordance with the Ministerial Investment Order and Division of Local Government guidelines. The Order reflects a conservative approach and restricts the investment types available to Council. In compliance with the Order and Division of Local Government guidelines, Council adopted an Investment Policy on 19 October 2015. The Investment Policy provides a framework for the credit quality, institutional diversification and maturity constraints that Council's portfolio can be exposed to. Council's investment portfolio was controlled by Council's Finance Division during the period to ensure compliance with the Investment Policy. Council's Governance Committee's role of overseer provides for the review of the Council's Investment Policy and Management Investment Strategy.

Council's Responsible Accounting Officer is required to sign the complying Statements of Investments contained within the report, certifying that all investments were made in accordance with the Local Government Act 1993 and the Local Government Regulation 2005.

Council's investment holdings as at 24 November 2017 were \$155,429,161 (Statement of Investments attached) [25 November 2016 \$163,653,960] and as at 29 December 2017 were \$170,866,516 (Statement of Investments attached) [30 December 2016 \$168,354,973].

Council's average weighted return for November 2017 was 3.30% which was above the benchmark return of 1.65%. The average weighted return for December 2017 was 2.85% which is above the benchmark return of 1.53%. The results were primarily due to positive marked to market valuation of the NSW TCorp Hour Glass Facilities and CBA Zero Coupon Bond in Council's portfolio for November 2017 and December 2017. The remainder of Council's portfolio continues to provide a high level of consistency in income and a high degree credit quality and liquidity.

At 29 December 2017, year to date interest and investment revenue of \$2,444,953 was recognised compared to the year to date budget of \$2,296,827 (as revised in the September Quarterly Review). It is anticipated further adjustment will be made to the investment return budget in December.

Council's CBA Zero Coupon Bond experienced no change in valuation for November 2017 and an increase in value of \$33,200 in December 2017. While there have been short-term fluctuations along the



way, the investment's valuation has gradually increased to its \$4M maturity value. The valuation methodology used by Laminar (Council's investment consultants) discounts the bond using a margin for a straight four year CBA obligation but also considers the illiquidity premium, this being a restructured deal and there being limited bids on the security.

Council's 18 floating rate notes had a net increase in value of \$3,980 for November 2017 and net decrease of \$4,895 for December 2017.

Council holds two Mortgaged Backed Securities (MBS) that recorded a net decrease in value of \$4,796 for November 2017 and a net increase in valuation of \$1,565 in December 2017. These investments continue to pay higher than normal variable rates. While the maturity dates are outside Council's control, the investment advisors had previously indicated that capital is not at risk at that stage and recommended a hold strategy due to the illiquid nature of the investment.

Council has two investments holdings under the NSW TCorp Hour Glass Facility: the Long-Term Growth Facility and the NSW TCorpIM Cash Fund. The Long-Term Growth recorded an increase in value of \$33,582 for November and an increase of \$929 for December. The TCorp Cash Fund recorded an increase in value of \$24,626 in November and an increase of \$14,924 for December. The fluctuation in the Long-Term Growth Facility is a reflection of the current share market volatility both domestically and internationally, whereas the Cash Fund provides relatively stable returns with low potential for capital loss while maintaining high levels of liquidity, similar to an 11am, at call account. The fund only invests in Australian cash and fixed interests.

During the December 2017 RBA meeting, the official cash rate remained unchanged at 1.50%. The RBA has advised that it would continue to assess the outlook and adjust policy as needed to foster sustainable growth in demand and inflation outcomes consistent with the inflation target over time. The current inflation rate is quite low and below target.

This report complies with Council's Investment Policy which was endorsed by Council on 19 October 2015. Council's Responsible Accounting Officer has signed the complying Statements of Investments contained within the report, certifying that all investments were made in accordance with the Local Government Act 1993 and the Local Government Regulation 2005.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2022 goal 'We are a connected and engaged community'. It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2012-17	Annual Plan 2017-18
Strategy	5 Year Action	Annual Deliverables
4.4.5 Finances are managed effectively to ensure long	4.4.5.1 Effective and transparent financial management	Provide accurate and timely financial reports monthly, quarterly and via the annual financial statement
term financial sustainability	systems are in place	Continuous Budget Management is in place, controlled and reported
		Manage and further develop compliance program
		Monitor and review achievement of Financial Strategy

CONCLUSION

The investments for November and December 2017 have performed favourably compared to the year to date budget and the portfolio recorded an average weighted return above the annualised Bloomberg Bank Bill Index Benchmark.



Item 13 - Attachment 1 - Statements of Investments - November and December 2017

		<u>WO</u>	LLONGONG CITY COU	INCIL			
			TEMENT OF INVESTM				
			24 November 2017				
On Call & Term Deposits							
DIRECT INVESTMENTS							
Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Security	Purchase Date	Maturity Date	Interest / Coupor Rate
NAB Professional Maximiser	A-1+	-	3,458,168	Prof Fund A/c	24/11/2017	24/11/2017	1.90%
NAB General Fund	A-1+	-	1,102,204	General A/c	24/11/2017	24/11/2017	
CBA	AA-	2,000,000	2,000,000	T/Deposit	27/05/2016	27/11/2017	
IMB	A2	2,000,000	2,000,000	T/Deposit	31/05/2017	01/12/2017	
CBA	A1+	1,000,000	1,000,000	T/Deposit	10/03/2017	05/12/2017	2.68%
Bwest	A1+	5,000,000	5,000,000	T/Deposit	06/10/2017	05/12/2017	
BOQ	A-	2,000,000	2,000,000	T/Deposit	29/09/2016	28/12/2017	2.60%
ME BEN	A2	3,000,000	3,000,000	T/Deposit	06/09/2017	04/01/2018 08/01/2018	
ME ME	Fitch A- BBB	3,000,000 1,500,000	3,000,000 1,500,000	T/Deposit T/Deposit	08/12/2016 08/12/2016	08/01/2018	
CBA	A1+	2,000,000	2,000,000	T/Deposit	10/03/2017	05/02/2018	
Bwest	A1+	3,000,000	3,000,000	T/Deposit	06/09/2017	05/02/2018	
BOQ	A2	2,000,000	2,000,000	T/Deposit	22/06/2017	19/02/2018	
SUN	A1	2,000,000	2,000,000	T/Deposit	06/10/2017	05/03/2018	
IMB	A+	3,000,000	3,000,000	T/Deposit	08/12/2016	08/03/2018	
ME	BBB	1,000,000	1,000,000	T/Deposit	14/09/2016	14/03/2018	
STG	AA-	1,000,000	1,000,000	T/Deposit	16/02/2017	16/03/2018	2.62%
NAB	AA-	1,500,000	1,500,000	T/Deposit	28/02/2017	28/03/2018	2.63%
IMB	BBB	2,000,000	2,000,000	T/Deposit	28/02/2017	29/03/2018	2.61%
CBA	AA-	2,000,000	2,000,000	T/Deposit	10/03/2017	10/04/2018	2.74%
IMB	A2	3,000,000	3,000,000	T/Deposit	22/06/2017	20/04/2018	2.60%
NAB	AA-	2,000,000	2,000,000	T/Deposit	18/11/2016	18/05/2018	2.85%
BOQ	Fitch A-	3,000,000	3,000,000	T/Deposit	23/02/2017	23/05/2018	
CBA	A1+	3,000,000	3,000,000	T/Deposit	06/09/2017	18/06/2018	
NAB	Fitch A-	1,030,000	1,030,000	T/Deposit	19/12/2016	19/06/2018	2.79%
STG	A1+	2,000,000	2,000,000	T/Deposit	26/06/2017	26/06/2018	
BEN	Fitch A-	5,000,000	5,000,000	T/Deposit	22/06/2017	23/07/2018	2.75%
BOQ	Fitch A-	2,000,000	2,000,000	T/Deposit	09/09/2016	10/09/2018	2.65%
IMB	BBB	2,000,000	2,000,000	T/Deposit	12/09/2016	12/09/2018	2.60%
ME	BBB	2,000,000	2,000,000	T/Deposit	14/09/2016	14/09/2018	2.65%
BEN	Fitch A-	2,000,000	2,000,000	T/Deposit	29/09/2016	28/09/2018	2.90%
ME	A2	3,000,000	3,000,000	T/Deposit	16/10/2017	16/10/2018	
WBC	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	06/11/2018	
WBC	AA-	3,000,000	3,000,000	T/Deposit	23/02/2017	23/11/2018	
BOQ	Fitch A-	1,500,000	1,500,000	T/Deposit	08/12/2016	07/12/2018	
sun	A+	3,000,000	3,000,000	T/Deposit	08/12/2016	07/12/2018	
WBC	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	07/01/2019	
WBC	AA-	3,000,000	3,000,000	T/Deposit	31/01/2017	31/01/2019	
WBC	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	06/03/2019	
BEN	Fitch A-	1,000,000	1,000,000	T/Deposit	13/03/2017	13/03/2019	
BOQ Total	A2	1,000,000	1,000,000 92,090,372	T/Deposit	06/09/2017	06/09/2019	2.80%



Item 13 - Attachment 1 - Statements of Investments - November and December 2017

WOLLONGONG CITY COUNCIL STATEMENT OF INVESTMENTS 24 November 2017 continued

Bond and Floating Rate Note Securities

DIRECTINVESTMENTS							
Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Security	Purchase Date	Maturity Date	Interest / Coupon Rate
Commonwealth Bank Australia zero coupon							
bond with a \$4M face value	AA-	2,000,000	3,966,800	BOND	21/01/2008	22/01/2018	
CBA	AA-	1,000,000	1,007,390	FRN	19/10/2015	19/10/2018	2.48%
CUA	BBB	3,000,000	3,035,730	FRN	01/04/2016	01/04/2019	3.30%
Westpac	AA-	3,000,000	3,031,230	FRN	11/03/2016	10/05/2019	2.71%
Greater Bank Ltd	BBB	2,000,000	2,031,740	FRN	07/06/2016	07/06/2019	3.34%
Bendigo Bank	Fitch A-	1,000,000	1,008,810	FRN	16/09/2015	17/09/2019	2.65%
Bendigo Bank	Fitch A-	2,000,000	2,013,460	FRN	21/11/2016	21/02/2020	2.82%
CUA	BBB	2,000,000	2,017,940	FRN	20/03/2017	20/03/2020	3.01%
ME Bank	BBB	2,000,000	2,012,060	FRN	06/04/2017	06/04/2020	2.94%
NAB	AA-	3,000,000	3,037,500	FRN	24/06/2015	03/06/2020	2.54%
Bendigo Bank	Fitch A-	2,000,000	2,014,280	FRN	18/08/2015	18/08/2020	2.82%
SUN Corp	A+	1,500,000	1,528,170	FRN	20/10/2015	20/10/2020	2.95%
NAB	AA-	1,000,000	1,015,820	FRN	05/11/2015	05/11/2020	2.78%
SUN	A+	2,000,000	2,048,540	FRN	12/04/2016	12/04/2021	3.08%
AMP	A	2,000,000	2,038,580	FRN	24/05/2016	24/05/2021	3.08%
Westpac	AA-	3,000,000	3,071,700	FRN	03/06/2016	03/06/2021	2.90%
ANZ	AA-	2,000,000	2,034,460	FRN	16/08/2016	16/08/2021	2.85%
AMP	Α	3,000,000	3,037,140	FRN	30/03/2017	30/03/2022	2.76%
SUN	A+	1,501,530	1,508,115	FRN	30/08/2017	16/08/2022	2.69%
EMERALD A Mortgage Backed Security *	AAA	629,895	459,937	M/Bac	17/07/2006	21/08/2022	2.17%
EMERALD B Mortgage Backed Security*	Fitch AA	2,000,000	1,230,400	M/Bac	17/07/2006	21/08/2056	2.47%
Total			43,149,802				

Managed Funds & Other

MANAGED FUNDS						
Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Purchase Date	Monthly Return (Actual)	FYTD (Actual)
TcorpIM Cash Fund Facility	N/A	18,169,194	18,144,015	1/06/2017	0.16%	0.89%
Tcorp Long Term Growth Facility Trust	N/A	1,630,253	2,044,969	13/06/2007	1.67%	6.07%
Total			20,188,984			

Investment Body		Face Value			Security
Southern Phone Company	N/A	2			shares
	TOTAL INIVES	TAFAITC	_	155 420 161	

^{*} The maturity date provided is the weighted-average life of the security. This is the average amount of time that will elapse from the date of security's issuance until each dollar is repaid based on an actuarial assessment. Assessments are carried out on a regular basis which can potentially extend the life of the investment. Current assessments anticipate an extension of life of the investment.

This is to certify that all of the above investments have been placed in accordance with the Act, the regulations and Council's Investment Policies.

Steve Packer

RESPONSIBLE ACCOUNTING OFFICER (Acting)



Item 13 - Attachment 1 - Statements of Investments - November and December 2017

WOLLONGONG CITY COUNCIL							
		STA	TEMENT OF INVESTM	ENTS			
			29 December 2017				
On Call & Term Deposits							
DIRECT INVESTMENTS							
Investor and Badic	Dating	Describera Delas É	Fair Value of Halding 6	Committee	Purchase	Bantonia Data	Interest / Coupoi
Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Security	Date	Maturity Date	Rate
NAB Professional Maximiser	A1+		24,017,126	Prof Fund A/c	29/12/2017	29/12/2017	1.90%
NAB General Fund	A1+	-	4,934,878	General A/c	29/12/2017	29/12/2017	
ME	A2	3,000,000	3,000,000	T/Deposit	06/09/2017	04/01/2018	2.48%
CBA	A1+	1,000,000	1,000,000	T/Deposit	05/12/2017	04/01/2018	1.92%
BWest	A1+	5,000,000	5,000,000	T/Deposit	05/12/2017	05/01/2018	2.10%
BEN	Fitch A-	3,000,000	3,000,000	T/Deposit	08/12/2016	08/01/2018	2.70%
ME	BBB	1,500,000	1,500,000	T/Deposit	08/12/2016	08/01/2018	2.70%
CBA	A1+	2,000,000	2,000,000	T/Deposit	10/03/2017	05/02/2018	2.72%
Bwest	A1+	3,000,000	3,000,000	T/Deposit	06/09/2017	05/02/2018	2.45%
BOQ	A2	2,000,000	2,000,000	T/Deposit	22/06/2017	19/02/2018	2.65%
SUN	A1	2,000,000	2,000,000	T/Deposit	06/10/2017	05/03/2018	2.50%
IMB	A+	3,000,000	3,000,000	T/Deposit	08/12/2016	08/03/2018	2.63%
ME	BBB	1,000,000	1,000,000	T/Deposit	14/09/2016	14/03/2018	2.65%
STG	AA-	1,000,000	1,000,000	T/Deposit	16/02/2017	16/03/2018	2.62%
NAB	AA-	1,500,000	1,500,000	T/Deposit	28/02/2017	28/03/2018	2.63%
IMB	BBB	2,000,000	2,000,000	T/Deposit	28/02/2017	29/03/2018	2.61%
СВА	AA-	2,000,000	2,000,000	T/Deposit	10/03/2017	10/04/2018	2.74%
IMB	A2	3,000,000	3,000,000	T/Deposit	22/06/2017	20/04/2018	2.60%
NAB	AA-	2,000,000	2,000,000	T/Deposit	18/11/2016	18/05/2018	2.85%
BOQ	Fitch A-	3,000,000	3,000,000	T/Deposit	23/02/2017	23/05/2018	2.80%
CBA	A1+	3,000,000	3,000,000	T/Deposit	06/09/2017	18/06/2018	2.56%
NAB	Fitch A-	1,030,000	1,030,000	T/Deposit	19/12/2016	19/06/2018	2.79%
WBC	A1+	2,000,000	2,000,000	T/Deposit	26/06/2017	26/06/2018	2.52%
BEN	Fitch A-	5,000,000	5,000,000	T/Deposit	22/06/2017	23/07/2018	2.75%
BOQ	Fitch A-	2,000,000	2,000,000	T/Deposit	09/09/2016	10/09/2018	2.65%
IMB	BBB	2,000,000	2,000,000	T/Deposit	12/09/2016	12/09/2018	2.60%
ME	BBB	2,000,000	2,000,000	T/Deposit	14/09/2016	14/09/2018	2.65%
BEN	Fitch A-	2,000,000	2,000,000	T/Deposit	29/09/2016	28/09/2018	2.90%
ME	A2	3,000,000	3,000,000	T/Deposit	16/10/2017	16/10/2018	2.62%
WBC							
	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	06/11/2018	2.60%
WBC	AA-	3,000,000	3,000,000	T/Deposit	23/02/2017	23/11/2018	2.80%
IMB	A2	2,000,000	2,000,000	T/Deposit	01/12/2017	03/12/2018	2.55%
BOQ	Fitch A-	1,500,000	1,500,000	T/Deposit	08/12/2016	07/12/2018	2.95%
SUN	A+	3,000,000	3,000,000	T/Deposit	08/12/2016	07/12/2018	2.76%
WBC	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	07/01/2019	2.62%
WBC	AA-	3,000,000	3,000,000	T/Deposit	31/01/2017	31/01/2019	2.90%
WBC	A1+	2,000,000	2,000,000	T/Deposit	06/09/2017	06/03/2019	2.64%
BEN	Fitch A-	1,000,000	1,000,000	T/Deposit	13/03/2017	13/03/2019	2.90%
BOQ	Moody P2	2,000,000	2,000,000	T/Deposit	22/12/2017	24/06/2019	2.65%
BOQ	A2	1,000,000	1,000,000	T/Deposit	06/09/2017	06/09/2019	2.80%
WBC	A1+	2,000,000	2,000,000	T/Deposit	01/12/2017	02/12/2019	2.68%
IMB	A2	3,000,000	3,000,000	T/Deposit	22/12/2017	20/12/2019	2.65%
WBC	A1+	5,000,000	5,000,000	T/Deposit	22/12/2017	23/12/2019	2.77%
Total			124,482,005				



Item 13 - Attachment 1 - Statements of Investments - November and December 2017

WOLLONGONG CITY COUNCIL STATEMENT OF INVESTMENTS

Bond and Floating Rate Note Securities

Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Security	Purchase Date	Maturity Date	Interest / Coupon Rate
Commonwealth Bank Australia zero coupon							
bond with a \$4M face value	AA-	2,000,000	4,000,000	BOND	21/01/2008	22/01/2018	
CBA	AA-	1,000,000	1,009,220	FRN	19/10/2015	19/10/2018	2.48%
CUA	BBB	3,000,000	3,045,150	FRN	01/04/2016	01/04/2019	3.30%
Westpac	AA-	3,000,000	3,037,050	FRN	11/03/2016	10/05/2019	2.71%
Greater Bank Ltd	BBB	2,000,000	2,020,180	FRN	07/06/2016	07/06/2019	3.36%
Bendigo Bank	Fitch A-	1,000,000	1,004,640	FRN	16/09/2015	17/09/2019	2.71%
Bendigo Bank	Fitch A-	2,000,000	2,018,180	FRN	21/11/2016	21/02/2020	2.82%
CUA	BBB	2,000,000	2,011,820	FRN	20/03/2017	20/03/2020	3.10%
ME Bank	BBB	2,000,000	2,017,940	FRN	06/04/2017	06/04/2020	2.94%
NAB	AA-	3,000,000	3,024,780	FRN	24/06/2015	03/06/2020	2.55%
Bendigo Bank	Fitch A-	2,000,000	2,019,580	FRN	18/08/2015	18/08/2020	2.82%
SUN Corp	A+	1,500,000	1,531,965	FRN	20/10/2015	20/10/2020	2.95%
NAB	AA-	1,000,000	1,017,970	FRN	05/11/2015	05/11/2020	2.78%
SUN	A+	2,000,000	2,053,800	FRN	12/04/2016	12/04/2021	3.08%
AMP	Α	2,000,000	2,043,880	FRN	24/05/2016	24/05/2021	3.08%
Westpac	AA-	3,000,000	3,056,610	FRN	03/06/2016	03/06/2021	2.92%
ANZ	AA-	2,000,000	2,038,900	FRN	16/08/2016	16/08/2021	2.85%
AMP	A	3,000,000	3,023,730	FRN	30/03/2017	30/03/2022	2.84%
SUN	A+	1,501,530	1,512,375	FRN	30/08/2017	16/08/2022	2.69%
EMERALD A Mortgage Backed Security *	AAA	623,769	456,761	M/Bac	17/07/2006	21/08/2022	2.17%
EMERALD B Mortgage Backed Security *	Fitch AA	2,000,000	1,235,140	M/Bac	17/07/2006	21/08/2056	2.47%
Total			43,179,671				

Managed Funds & Other

MANAGED FUNDS						
Investment Body	Rating	Purchase Price \$	Fair Value of Holding \$	Purchase Date	Monthly Return (Actual)	FYTD (Actual)
TcorpIM Cash Fund Facility	N/A	1,171,088	1,158,940	1/06/2017	0.14%	1.04%
Tcorp Long Term Growth Facility Trust	N/A	1,630,253	2,045,898	13/06/2007	0.05%	6.11%
Total			3,204,838			

Investment Body		Face Value		Security
Southern Phone Company	N/A	2		shares
	TOTAL INVES	TMENTS	\$ 170,866,516	

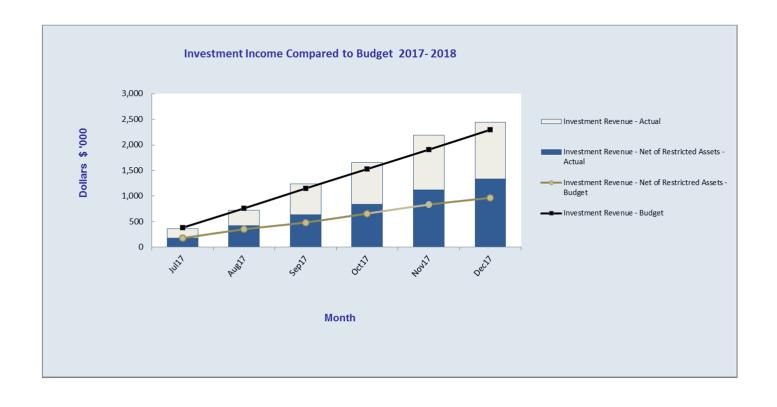
^{*} The maturity date provided is the weighted-average life of the security. This is the average amount of time that will elapse from the date of security's issuance until each dollar is repaid based on an actuarial assessment. Assessments are carried out on a regular basis which can potentially extend the life of the investment. Current assessments anticipate an extension of life of the investment.

This is to certify that all of the above investments have been placed in accordance with the Act, the regulations and Council's Investment Policies.

Steve Packer

RESPONSIBLE ACCOUNTING OFFICER (Acting)







File: IW-911.01.171 Doc: IC18/9

ITEM 14

CITY OF WOLLONGONG TRAFFIC COMMITTEE - MINUTES OF ELECTRONIC MEETING HELD ON FRIDAY 5 JANUARY 2018

An electronic meeting of the City of Wollongong Traffic Committee was held on 5 January 2018.

RECOMMENDATION

In accordance with the powers delegated to Council the Minutes and recommendations of the City of Wollongong Traffic Committee Electronic Meeting held on Friday 5 January 2018 in relation to the Regulation of Traffic be adopted.

REPORT AUTHORISATIONS

Report of: Peter Nunn, Manager Infrastructure Strategy and Planning (Acting)

Authorised by: Mike Dowd, Director Infrastructure and Works - Connectivity Assets and Liveable City

(Acting)

ATTACHMENTS

- 1 Standard Conditions for Road Closures
- 2 Illawarra Cycle Club Proposed Program 2018
- 3 Illawarra Cycle Club Traffic Management Plans
- 4 Huntley Hill Climb Traffic Management Plan

BACKGROUND

1 AVONDALE - WARD 3 (ITEM 14 OF TRAFFIC AGENDA) Illawarra Cycling Club – Various Events in 2018

Background

The Illawarra Cycling Club races are held on public roads between the western end of Avondale Road and the southern end of Marshall Mount Road in a number of different distances set out on the overall map on the attached Traffic Management Plan. The longer events are multiple laps of the courses shown. The races do not involve full road closures but traffic may be stopped until it is safe to proceed and temporary speeds are in place during the events. As the longer events involve a short section of Marshall Mount Road in the Shellharbour LGA, it is understood concurrent approval will need to be obtained.

The cycling events take place during Sunday mornings in summer where the regulation of traffic takes effect from 8.30am until 11.00am and during winter the Saturday regulation of traffic takes effect from 2pm until 5pm

Consultation

Community consultation is a condition of approval for this Agenda item.

Proposal

Road closures be approved subject to the submitted Schedule of Events (Attachment 2) and the Traffic Management Plans (Attachment 3) and Council's Conditions for Road Closures (Attachment 1).

2 HUNTLEY - WARD 3 (ITEM 15 OF TRAFFIC AGENDA) Huntley Hill Climb – Various Events in 2018

Background

Huntley Hill Climb are holding a series of events which involve the closure of the south western end of Avondale Road where there is space for vehicles to turn or wait until it is safe to proceed. The vehicle races are in the form of a time trial with only one competitor on the track at a time. As



required between races residents are permitted on the road to access their properties. The road closures take effect on each of the Sundays between 8am and 4.30pm.

Below are the dates for the 2018 races -

Sunday 11 February Sunday 18 March Sunday 22 July Sunday 15 September Sunday 16 September Sunday 4 November

Consultation

Community consultation is a condition of approval for this Agenda item.

Proposal

The road closures of the southern end of Avondale Road be approved subject to the submitted Traffic Management Plans (Attachment 4) and the Standard Conditions for Road Closures (Attachment 1).

Attachment 1 - WCC Standard Conditions

Standard Conditions for Road Closures

For Special Events and Work Related activities Within Council Road Reserves.

Following approval by Wollongong City Council, road closures are subject to the additional Council conditions:

- The Applicant must complete the Council form 'Application to Open and Occupy or Underbore a Roadway or Footpath' (Refer to Checklist below – relates to Section 138 of the Roads Act.)
- NSW Police Approval: The Applicant must obtain written approval from NSW Police, where required under the Roads Act.
- If the Road Closure is within 100m of any traffic control signals or on a 'State Classified Road' the Applicant must obtain a Road Occupancy Licence (ROL) from NSW Roads & Maritime Services (RMS).
- The Applicant must advise all affected residents and business owners within the closure area
 of the date/s and times for the closure, at least 7 days prior to the intended date of works.
- 5. **The Applicant must advise Emergency Services:** Ambulance, Fire Brigade and Police, Taxi and Bus Companies of the closure dates and times in writing, 7 days prior to the intended date of works. The Applicant must endeavour to minimise the impact on bus services during the closure.
- Traffic Management Plan: The closure must be set up in accordance with the approved Traffic Management Plan (TMP) prepared by an appropriately qualified traffic controller; a copy of whose qualifications must be included with the submitted TMP.
- Traffic Management Plan Setup: The Traffic Management Plan must be set up by appropriately
 qualified traffic control persons or the NSW Police.
- Access to properties affected by the road closure must be maintained where possible. Where
 direct access cannot be achieved, an alternative arrangement must be agreed to by both the
 applicant and the affected person/s.
- Public Notice Advertisement: The Applicant must advertise the road closure in the Public Notices section of the local paper, detailing closure date/s and times at least 7 days prior to the closure.
- 10. Public Liability Policy: The Applicant must provide Council with a copy of their current insurance policy to a value of no less than \$20 million dollars to cover Wollongong City Council from any claims arising from the closure.

Checklist:

☑ Completed Council Form:

'Application to Open and Occupy or Underbore a Roadway or Footpath'.

Required information as shown below MUST be attached:

- ☑ A copy of the letter from the Traffic Committee authorising the closure
- ☑ The Traffic Management Plan (TMP)
- ☑ The Road Occupancy Licence (ROL) if required
- Written approval from NSW Police
- ☑ Public Liability Insurance

Applications may be lodged in the Customer Service Centre located on the Ground Floor of Council's Administration Building, 41 Burelli Street Wollongong between 8.30am and 5pm Monday to Friday.

Z16/135267

ILLAWARRA CYCLE CLUB PROPOSED PROGRAM 2018

AT 10 AT 24 AT 12 AT 16 AT 14 AT 28 AT 11 JN 12 AT 25	
tt 24 n 11 n 25 AT 7 AT 21 AT 12 n 27 AT 16 AT 16 AT 14 AT 28 AT 11 JN 12 AT 25	Crit race at Sutherland 37km scratch race (2 x Top of MM) 37km Handicap race (2 x Top of MM) 21 ^{III} TOUR de HUNTLEY 44.5km Scratch Race GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
n 11 in 25 AT 7 AT 21 AT 12 in 27 AT 9 AT 16 at 30 AT 14 AT 28 AT 11 JN 12 AT 25	37km scratch race (2 x Top of MM) 37km Handicap race (2 x Top of MM) 21 ^{III} TOUR de HUNTLEY 44.5km Scratch Race GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 25 AT 21 AT 12 AT 12 AT 9 AT 16 AT 30 AT 14 AT 28 AT 11 JN 12 AT 25	37km Handicap race (2 x Top of MM) 21 ^{IIT} TOUR de HUNTLEY 44.5km Scratch Race GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 7 AT 21 AT 12 In 27 AT 9 AT 16 AT 16 AT 14 AT 28 AT 11 JN 12 AT 25	21 ^{III} TOUR de HUNTLEY 44.5km Scratch Race GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 21 AT 12 AT 27 AT 9 AT 16 AT 30 AT 14 AT 28 AT 11 JN 12 AT 25	44.5km Scratch Race GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 12 In 27 AT 9 AT 16 AT 16 AT 14 AT 28 AT 11 JN 12 AT 25	GOULBURN INTERCLUB Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 9 AT 16 AT 14 AT 28 AT 11 JN 12 AT 25	Dinnerville 95km 44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 9 AT 16 AT 30 AT 14 AT 28 AT 11 JN 12 AT 25	44.5km GRADED Scratch ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 16 AT 30 AT 14 AT 28 AT 11 JN 12 AT 25	ILLAWARRA INTERCLUB Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 14 AT 28 AT 11 JN 12 AT 25	Scratch race A,B,C 67km, D,E 44.5km Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 14 AT 28 AT 11 JN 12 AT 25	Club TT Championships Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 28 AT 11 JN 12 AT 25	Camden CC INTERCLUB Illawarra Jnr Tour Illawarra Jnr Tour
AT 11 JN 12 AT 25	Illawarra Jnr Tour Illawarra Jnr Tour
JN 12 AT 25	Illawarra Jnr Tour Illawarra Jnr Tour
AT 25	
	CLUB ROAD CHAMPIONSHIPS
AT 8	Club Hill climb championships
JN 15	Sthn HIGHLANDS INTERCLUB
t 29	Club Handicap 44km (2 x Long course)
JN 14	36km Scratch race (4 x summer short course)
JN 28	Hans Battaerd Memorial TT
ın 11	36km Graded Handicap (4 x summer short course)
25	36km Sealed Handicap (4 x summer short course)
ın 16	36km Scratch race (4 x summer short course)
	:
1	n 11 25

Item 14 - Attachment 2 - Illawarra Cycle Club Proposed Program 2018

Left over races

_eπ over ra	ces		
			BARBARA WYLES 54km H'CAP PATRICIA
	SUN	17	36km SCRATCH RACE
	SUN	24	CRITERIUM
	SUN	31	36km SEALED HANDICAP
FEB	SUN	7	_
	SUN	14	36km HANDICAP
	SUN	21	CRITERIUM
	SUN	28	44.5km SCRATCH RACE
MARCH	SUN	6	
	SUN	13	No Race
	SUN	20	SR A&B 90km, C&D 67km, E 44.5km
	SUN	27	STHN DIVISIONS ROAD BREADALBANE
NOV			
	SUN	6	
	SUN	13	CRITERIUM
	SUN	20	No Race
	SUN	27	36km SCRATCH RACE
DEC	SUN	4	36km HANDICAP
	SAT	10	TRACK OPEN
	SUN	11	36km SCRATCH RACE
	SUN	18	CLUB CHAMPIONSHIP CRITERIUMS
	SUN	25	No Race
JAN	SUN	3	36km SCRATCH RACE
	SUN	10	36km HANDICAP

18.5km – one lap to Marshall Mount hill 36km – four laps to Hooker Estate 50km sign 37.5km – two laps to Marshall Mount hill 44.5km – two laps to Calderwood Road

67km – three laps to Calderwood Road 90km – four laps to Calderwood Road

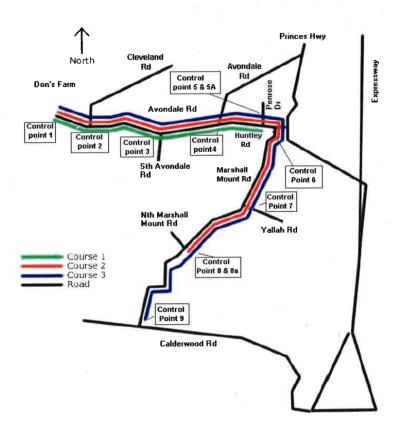
302



Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

Weekly Racing Route Descriptions 9, 18 & 22km Routes

Weekly Races Course Map



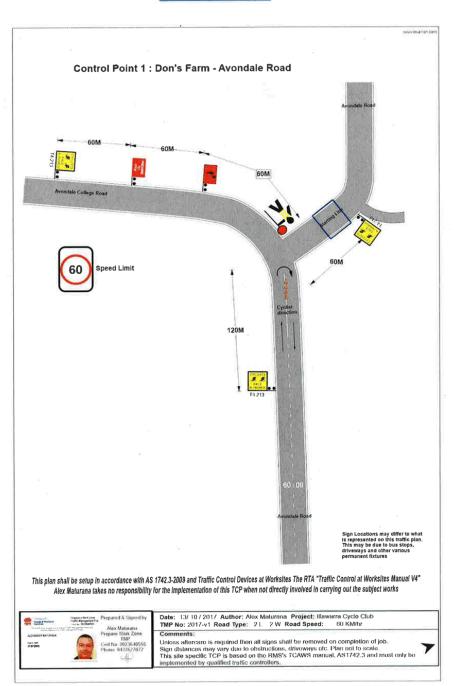
Don's Farm Avondale Road, Avondale Start:

Finish: Don's Farm Avondale Road, Avondale



Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

Masyarra Cycle Club

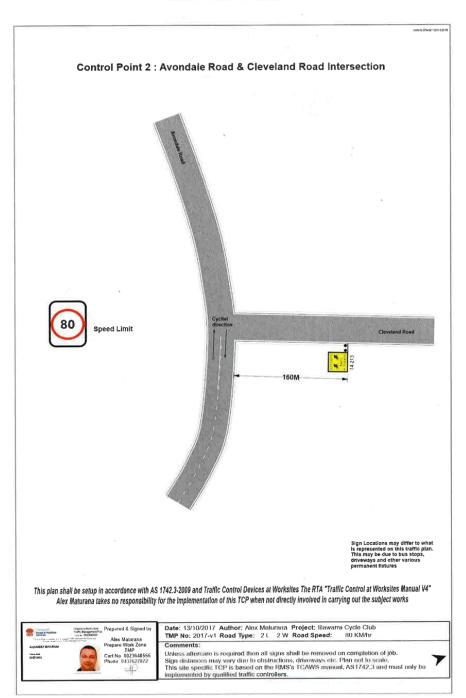


2018 -2018 TMP



Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management Plans

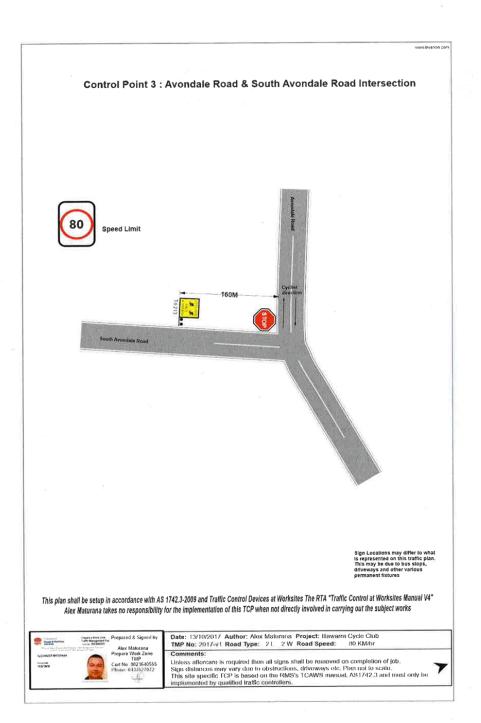






Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

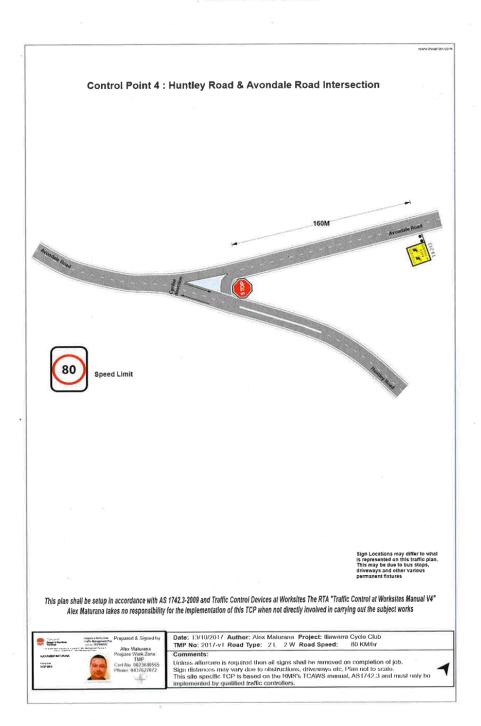






Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management Plans

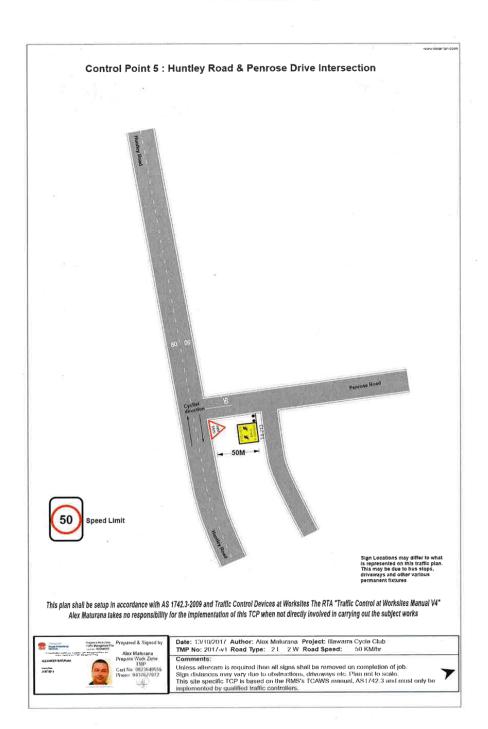






Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

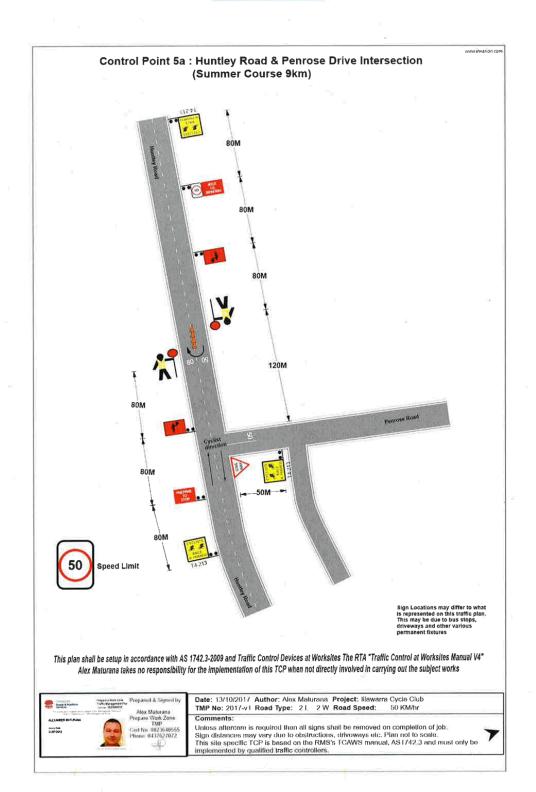






Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

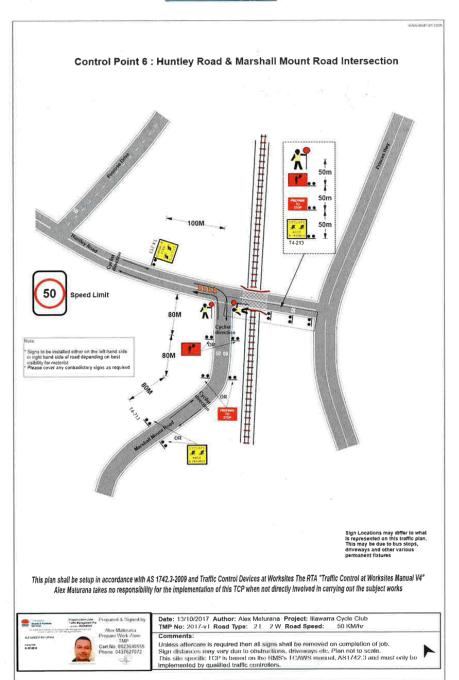
Mawarra Cycle Club





Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management Plans

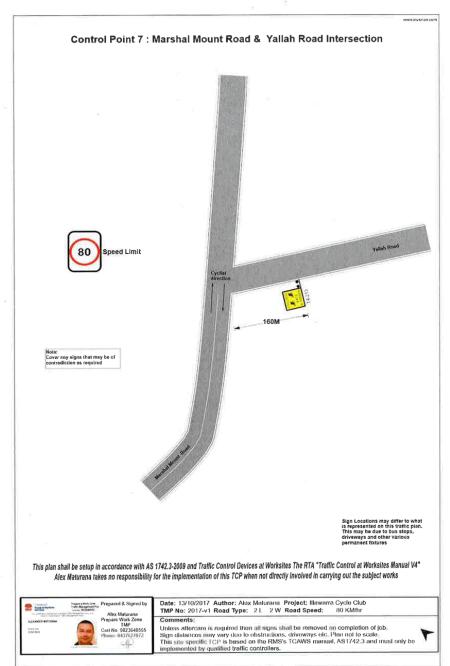






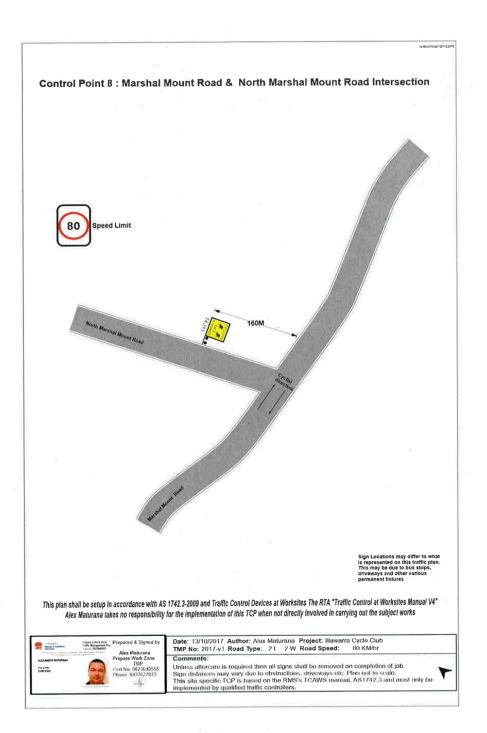
Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management







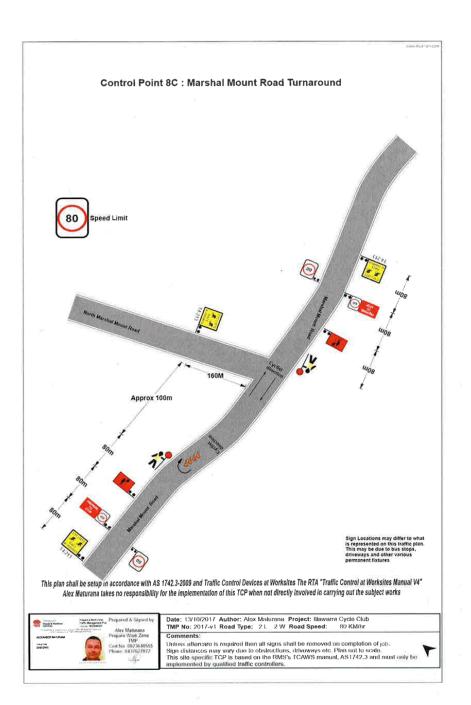
Alawarra Cycle Club





Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management

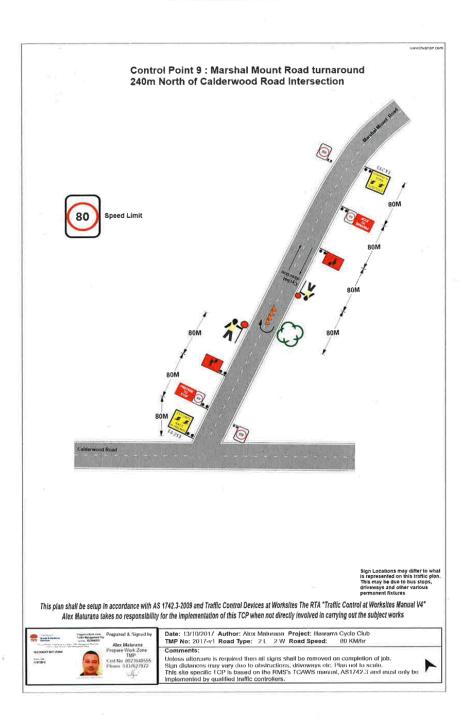






Item 14 - Attachment 3 - Illawarra Cycle Club Traffic Management





Item 14 - Attachment 4 - Huntley Hill Climb Traffic Management Plan

314



