ATTACHMENT BOOKLET

ORDINARY COUNCIL MEETING
26 FEBRUARY 2020





FRANCIS GREENWAY CENTRE
170 GEORGE STREET LIVERPOOL

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BIANNUAL PERFORMANCE REPORT.











Introduction

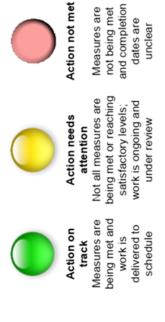
Section 404(5) of the Local Government Act 1993 requires every council to report on progress with respect to the principal activities detailed in its Delivery Program. This report outlines Council's progress for the period of 1 July to 31 December 2019.

A Snapshot of Integrated Planning and Reporting Suite of Documents

Liverpool City Council has prepared a suite of Integrated Planning and Reporting documents in accordance with sections 402-405 of the Local Government Act 1993. This suite of documents includes the 10-year Community Strategic Plan Our Home Liverpool 2027, the four-year Delivery Program delivered through four annual Operational Plans, the Workforce Management Plan, the Asset Management Plan and the Long-Term Financial Plan. The Delivery Program activates the Community Strategic Plan, which has been developed in consultation with the Liverpool community. Our Home Liverpool Program and Operational Plan details Council's actions including key performance indicators (KPIs) and milestones that have been provided to measure the 2027 outlines the long-term vision for Liverpool City by identifying four key directions that relate to the quadruple bottom line. The combined Delivery overall progress in achievement of the vision outlined in the Community Strategic Plan.

Summary of the Biannual Report July to December 2019

The Delivery Program 2017-2021 and Operational Plan 2019-20 include 107 actions that measure Council's progress in achieving the vision outlined in the Community Strategic Plan. The actions reported are on track and the status of each action is represented with the following symbols:



Highlights



iverpool Council in collaboration with the NSW Department of Education, Western Sydney Airport, Western Sydney University, Technology 4 Learning and Stem Share facilitated the second annual 2019 Western Sydney International (Nancy-Bird Walton) Airport Minecraft Competition

Schools from across Western Sydney competed to design the Western Sydney International (Nancy-Bird Western Sydney International Airport Minecraft Competition in August 2019. Malton) Airport using Minecraft to win a share of \$40,000 in prize money

competition, with McCallums Hill Public School being crowned the winners. Their winning design focused Students were asked to address some of the real-world challenges involved in creating such a significant piece of infrastructure and create their answers using the widely popular electronic building blocks game of Minecraft. Students from around 40 schools across Western Sydney took part in this year's on sustainability, customer experience and accessibility.



Liverpool City Council unveiled its futuristic "first contact" vision of how the Western Sydney International Airport will be connected to Sydney via Liverpool's CBD.

Developed in consultation with Curtin University, the Fifteenth Avenue Smart Transit (FAST) Corridor will transit connection along this 19km corridor. Council has begun design investigations for the upgrade of help deliver the connectivity the future airport needs to provide a high-quality, zero-emissions public Hoxton Park Road and Fifteenth Avenue, which form the corridor between Liverpool city centre and Western Sydney International Airport, in preparation for the airport opening in 2026.



-ove Livo Nights

Liverpool City Council invited the community to share an after-work drink, grab a bite to eat and enjoy live starting in September 2019. The new pop-up event series showcased the city's streetscapes by moving music with friends and colleagues at a new pop-up event series on the first Thursday of every month, to a new laneway for each event, helping to establish a vibrant night-time economy in the heart of Liverpool. The three pop-up events at 35 Scott St Laneway, Moore Coffee, and Northumberland Serviceway were successful and well attended



Liverpool Youth Council celebrates 20 years Liverpool Youth Council members past and pres

Liverpool Youth Council members past and present gathered in November 2019 to celebrate 20 years of giving young people a voice in the Liverpool area.

young people, including the creation of Kelso Skate Park and extended opening hours at Council libraries Government Area, was formed in 1999 to provide a way for young people to present issues and feedback to Liverpool City Council. Over the past two decades the Council has delivered several achievements for during HSC exams. As Sydney's third CBD, Liverpool is a growing hub for innovation excellence and Liverpool Youth Council will continue to help ensure Council meets the needs of young people. The Youth Council, made up of 12 young people aged 12-24 from across the Liverpool Local



Re-opening of Bigge Park Water Playground

Council is also working on tenders for new operators of the café buildings with the existing café at the northern end being refurbished to provide a larger café area after a new Council storage building was The water play area re-opened to the public in October 2019, with upgrades featuring automated accessible toilets, male and female toilets, family change rooms and individual changing stalls. constructed nearby



Casula Powerhouse Arts Centre Celebrates 25 years

Casula Powerhouse Arts Centre celebrated its 25th anniversary in October 2019. The local community was invited to share this milestone and enjoyed local residents' works and high-quality exhibitions, performances and programs from groups outside Liverpool.

Casula Powerhouse is a rapidly growing cultural facility of Liverpool City Council. It is a creative hub which highlights the skill and creativity of local artists.



Parking Improvement in Liverpool CBD

app in October 2019. Liverpool is among the first areas of Sydney to use the app, which allows drivers to Council and the Park'nPay app will assist in the reduction of parking fines by notifying drivers when their meter is running low or their park is about to turn into a No Stopping zone. Drivers can then top-up their Liverpool CBD. Pay By Plate parking means tickets are no longer issued from parking meters. Instead, account through the app. In August 2019, Liverpool City Council launched Pay By Plate parking in the Parking in the Liverpool CBD entered a new era with the launch of the NSW Government's Park'nPay bay for parking and top-up using their phones. Parking in the CBD is a key priority for Liverpool City drivers enter their car number plate into the meter.

Pay By Plate is the latest in a series of measures by Council to improve parking in the CBD. Council added 106 parking spaces at Woodward Park with a further 120 to be delivered in early 2020.

Major Projects

Works at Cirillo Reserve have commenced to convert the existing greenfield site into a local and regional sporting complex for the suburb of Middleton Grange.

Works at Cirillo are scheduled to be completed by December 2020. In addition, new recreational facilities The works will include the construction of two new sports fields, a cricket pitch, floodlighting, sports amenities building, a playground, an outdoor fitness gym and an off-leash dog park.

will be constructed at the adjoining Stante Reserve which will include a new water play facility, public amenities and change room, carpark and extended picnic facilities.



Western Sydney Councils Unite to Tackle Shopping Trolleys

Councils across Western Sydney joined together to advocate that the State Government assist in removing abandoned shopping trolleys off their streets. The councils wrote to the Minister for Local Government, Shelley Hancock, requesting amendments to the Impounding Act 1993. More than 1000 trolleys were collected from Western Sydney streets.

2019. Council led this initiative, which resulted in the Minister announcing a review of the Impounding Act. Liverpool City Council collected 300 trolleys in October 2019, following on from the 450 collected in June



Gift of Time ceremony

Volunteering provides valuable opportunities for people to develop new skills, gain work experience, meet Liverpool City Council proudly celebrated the efforts of local volunteers and workers at the annual Gift of prestigious awards in the past 12 months, including the Member of the Order of Australia, Medal of the Fime ceremony in August 2019 at Liverpool Catholic Club. More than 60 organisations and individuals opportunity for Council to recognise the achievements of community members who have received were recognised for their achievements, contributions and positive impact on the local community other dedicated people and strengthen their community. This year's Gift of Time also provided an Order of Australia and the Australian Fire Service Medal

Liverpool City Council Charity Ball 2019

themed event included fine dining, live entertainment, dancing and fundraising. More than \$50,000 was raised for the Ingham Institute for Applied Medical Research to support their student-focused programs The sixth annual Liverpool City Council Charity Ball was held in September 2019. The 'Tokyo Nights' for young people in Liverpool interested in health and science.



Liverpool Sculpture Walk

Liverpool City Council opened the inaugural Liverpool Sculpture Walk with Sculpture by the Sea founding director David Handley in December 2019. The 10 sculptures have been installed along the Georges River at Casula Parklands. The local community was invited to view the sculptures, which will be on display until August 2020.





All of the 22 actions in the Delivery Program 2017-2020 and Operational Plan 2019-2020 under direction 'Creating Connection' were marked as on track

Council continues to deliver high-quality childcare services with Casula Preschool, Prestons Early Education and Care Centre and Cecil Hills Early Education and Care Centre exceeding National Quality Standards.

Council and Liverpool Regional Museum in partnership with Moorebank Heritage Group won the '2019 Sustainable Cities Heritage & Culture Award, NSW' or the exhibition 'Peace Comes to Liverpool: Commemorating the Centenary of Armistice'

Council hosted 10 citizenship ceremonies and 1027 Liverpool residents became new Australian citizens.

successful event and experienced international food and music that celebrate the city's multicultural community. The 25 food stalls included mobile food Council's 'Liverpool on a Roll' food festival event took place in November 2019 at Greenway Park, West Hoxton. More than 7000 people attended the vendors, restaurateurs and performers from the Local Government Area. The Toda Sister City Student exchange to Japan was reinstated and nine Liverpool students and three teachers participated in the 2019 program. Council aims to foster the friendship between two nations, providing a positive education, cultural and international travel experience for young students. The Casula Powerhouse Arts Centre delivered a wide range of exhibitions, theatre performances, events, education and public programs. Highlights include the CPAC 25th Birthday exhibitions, performances and celebrations; Liverpool Art Society competition and exhibition and the 27th Annual Mil-Pra Aboriginal Education Consultative Group Indigenous (AECG) Art Prize Exhibition.

Liverpool's first Communication Board was installed at Collimore Park playground on 11 December 2019. This project was funded through the Stronger Communities program and promotes inclusion and access to all community members by providing tools to communicate and overcome barriers to communication such as disability, language, or limited expressive abilities.

Celebrate diversity, promote inclusion and recognise heritage

Action	Action Description	Comment	Status
C.01.01	Promote and manage heritage	 Council has recently reviewed the way it manages heritage properties. This was completed in accordance with heritage best practice, development of plans and supporting specifications for conservation work at the former Liverpool Court House and facilitation of the Liverpool Heritage Advisory Committee. 	On track
C.01.02	Manage Liverpool Regional Museum to attract visitors	 Council and the Liverpool Regional Museum in partnership with Moorebank Heritage Group won the '2019 Sustainable Cities Heritage & Culture Award, NSW' for the exhibition 'Peace Comes to Liverpool: Commemorating the Centenary of Armistice'. Liverpool Regional Museum continues to increase its visitor numbers with a focus on improving its visibility as a cultural venue. 	On track
C.01.03	Deliver citizenship ceremonies	 Council hosted 10 citizenship ceremonies in the six months. 1027 Liverpool residents became new Australian citizens. Due to population growth in the Liverpool LGA, citizenship numbers have increased and an additional ceremony will be held in January 2020. 	On track
C.01.04	Implement actions from the Reconciliation Action Plan	 Council continues to collaborate with local Aboriginal services and organisations to promote awareness of local Aboriginal issues. Cultural talks have been delivered at local childcare centres to educate Liverpool's young people on the Aboriginal history and culture of this area. Council secured funding to restore and upgrade the Maria Lock memorial signage at Brickmakers Creek. This funding is being provided through the Stronger Communities program, a funding initiative of the Federal Government. 	On track

Deliver a range of community events and activities

Action	Description	Comment	Status
	ts schedule	 Council delivered the Liverpool on a Roll event which attracted more than 7000 people to Greenway Park, West Hoxton. The event was successful with 25 food stalls that included mobile food vendors, restaurateurs and performers from the Local Government Area. Council successfully delivered the Seniors Concert at the Liverpool Catholic Club in November 2019. Nine hundred local senior citizens attended the Christmas luncheon and enjoyed entertainment including a performance by 	On track
C.02.02	Manage civic events calendar	 students from Liverpool Public School. The Toda Sister City Student exchange to Japan was reinstated and nine Liverpool students and three teachers participated in the 2019 program. Toda Mayor Sugawara and Councillors welcomed Liverpool students and teachers. An extensive itinerary of activities was designed for the students to provide a memorable cultural experience. 	On track
C.02.03	Manage Anzac Day Dawn Service ceremony	 Regular meetings with the Liverpool RSL sub branch have been held to grow/develop the Anzac Day Dawn Service. 	On track
C.02.04	Deliver engaging library programs	 The library is exploring specialist workshops and learning opportunities to engage with the community. The library hosted a Christmas-themed, succulent wreaths workshop for adults. The event was highly sought after by the community with an additional workshop added and sold out within four hours. The annual Summer Reading Club program has been redesigned to not only be more accessible for the community but also encourage participants to seek meaningful interactions with their family. The program aims to establish reading as routine and the new activity booklet model presents various ways to access literature, while acknowledging the International Year of Indigenous Languages. The library in partnership with Migrant and Refugee Progressive Pathways hosted a series of workshops to provide information and guidance around job seeking. The workshops were well received and proved to be a valuable tool to connect the community. 	On track

Status	On track
Comment	 The Casula Powerhouse Arts Centre continues to deliver a wide range of exhibitions, theatre performances, education and public programs, and community events for the Liverpool LGA. Highlights over the past six months include the CPAC 25th Birthday exhibitions, performances and celebrations; the Liverpool Art Society competition and exhibition; and the 27th Annual Mil-Pra Aboriginal Education Consultative Group Indigenous (AECG) Art Prize Exhibition. The theatre plays host to a wide variety of performing arts experiences, from kids' shows to seniors' matinees and all points between, including comedy and cabaret. Education activities continue to reach local residents of all ages, interests and abilities.
Action Description	C.02.05 Deliver Casula Powerhouse Arts Centre (CPAC) programs
Action	C.02.05

Implement access and equity for all members of the community

Action	Description	Comment	Status
C.03.01	Deliver high-quality childcare services	 Casula Preschool, Prestons Early Education and Care Centre and Cecil Hills Early Education and Care Centre received a rating of exceeding National Quality Standards in all seven quality areas. 	
		 Holsworthy Early Education and Care Centre were also assessed in December 2019. Council is yet to receive notification of the outcome of the assessment 	On track
		 Children's services are currently working in partnership with the NSW Health Childhood Obesity Prevention Officer to enhance families' understanding of the 	
		 importance of making appropriate decisions to support the nutritional and physical activity needs of their children. Transition to School and supported playgroups are facilitated within local and city libraries. 	
C.03.02	Provide appropriate resources at Liverpool libraries that are well used	Liverpool Libraries are providing well-used and best practice library collections. The library continues to focus on responding to customer requests and building a collection that reflects the interests of the community.	
		 The growth in usage of Council's eCollections has been very strong, in turn increasing access to collections 24/7 and to customers who cannot visit buildings. The number of eCollections loans for the period was 14,888. 	On track
C.03.03	Strengthen social inclusion in new developments	 School holiday activities were held in July, with 160 young people participating in skateboard lessons, outdoor obstacle training and basketball workshops across the Liverpool Local Government Area. 	
		 The school holiday program continued in October 2019. Liverpool City Council in partnership with with the Lebanese Muslim Association delivered a series of youth outreach events at the Cames Hill Community Centre and Recreation Precinct. This project aims to provide support and activities to young people who access the Carnes Hill Skate Park and community centre. 	On track
C.03.04	Implement actions from the Disability Inclusion Action Plan (DIAP)	 Council installed an accessible Communications Boards at Collimore Park. This project was funded through the Stronger Communities program. 	
		 International Day of People with Disability (IDPwD) event was held in partnership with Civic Disability Services at Casula Powerhouse Arts Centre. More than 600 community members participated in this event which included an artists' market for artists with disability, art workshops and information stalls. 	On track

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Status	On track	On track
Comment	 Council has implemented several diverse community capacity-building initiatives over the last six months. Through the ClubGRANTS scheme, \$789,943.30 has been invested into programs and activities to benefit the community. The "Living Library" event in October 2019 provided opportunities for local community members to engage with stories and share their lived experiences of mental health as consumers, carers and professionals. 	 Forty members of the 2168 Children's Parliament, teachers and parents/carers met on 19 November 2019 to discuss topics, including public speaking, debating, speech writing and presentation skills. Forty Parliamentarians, teachers, principals, families, ambassadors, project partners and local service providers attended the Parliament sitting to debate issues including healthy eating, cultural discrimination and policy change. Forty-six students participated in an art project with a focus on health and wellbeing in their community during a Mental Health Week event at Miller Square. Participating schools (approximately 450 students) were engaged in a community pride flag making project. The students will parade their flags at a 2168 gateway launch in 2020.
Action Description	Deliver Council-led programs that strengthen social inclusion and build community capacity	Deliver the 2168 Children's Parliament in partnership with Department of Social Services and Mission Australia
Action	C.03.05	C.03.06

Provide community facilities which are accessible to all

Action	Description	Comment	ent	Status
C.04.01	Meet demands for community- connected spaces	• •	Council completed the upgrade of the office space at Carnes Hill Community Centre during the period. Works have been scheduled at Greenway Park Community Centre, Heckenberg Community Centre.	On track
C.04.02	Deliver Council's adopted upgrade and renewals program for Council's building assets	•	A wide variety of community buildings are being renewed or constructed. These include heritage building conservation projects, community and childcare buildings, library and museum upgrades, sports amenities buildings and leisure centre upgrades. Major projects include the construction of an amenities building at McGirr Park in Miller and Cirillo Reserve in Middleton Grange.	On track
C.04.03	Facilitate usage of Council sporting venues and leisure centres		The summer sporting season has commenced with more than 95% of available sporting venues supporting summer user groups. More than 400,000 visits at four aquatic and leisure centres were recorded in the past six months. The leisure centres report substantial membership and program growth in the latter part of the reporting period that has resulted in a marginal increase in attendance.	On track
C.04.04	Enhance access to facilities and resources through place-based planning initiatives	• • •	Planning for social infrastructure in Edmondson Park and Austral is in progress. Council continues to oversee the operation and management of Carnes Hill Recreation and Community Precinct. Council is supporting Frasers with the place planning community engagement strategy for the development of Edmondson Town Centre.	On track
C.04.05	Manage Library spaces to attract and inspire visitors	• •	Libraries continue to be one of the most used services, with thousands of customers each week. There was a total of 365,030 visitors across all Liverpool Council libraries during the period.	On track
C.04.06	Manage the Liverpool Animal Shelter	•	The Liverpool Animal Shelter exceeded all targets with 100% of cats and 100% of dogs rehomed within the required timeframe during the period.	On track

Create a dynamic, inclusive environment, including programs to support healthy living

Status		On track
Comment	 Several playgrounds have been upgraded (Fassifern Park, Liverpool; Whitlam Park No. 2, Liverpool; Syme Park, Moorebank; Tall Gums Park, Casula; Voyager Park, Voyager Point; Clinches Pond, Moorebank; and Rosedale Oval, Warwrick Farm). 	 Major projects are being undertaken at Cirillo Reserve and Stante Reserve, Middleton Grange. Concept design of Phillips Park, Lurnea has been completed.
Description	Deliver Council's adopted upgrade, renewal and conservation program for recreation and green assets	
Action	C.05.01	



All of the 25 actions in the Delivery Program 2017-2020 and Operational Plan 2019-2020 under direction 'Strengthening and Protecting our Environment' were marked as on track.

Council has seen a 20% increase in the community's disposal of rubbish at the Community Recycling Centre over the past six months.

Nater quality monitoring at selected locations along the Georges River and South Creek catchment is underway under the ongoing water quality monitoring program. Council has developed a water quality monitoring report card, which indicates whether targets are being met to improve water quality. The report card is published on Council's website and is updated quarterly Council's environmental education program continues to engage the community. In November 2019 Council trialled a science talk 'Sounds of Summer: Talk & Tea'. This session was well received by the community who were encouraged to provide their feedback. Council aims to introduce this as a regular program.

Commission for a formal assurance review. The planning proposal for the Local Environmental Plan has been referred to the Department of Planning for a The final Local Strategic Planning Statement (LSPS) was endorsed by Council on 11 December 2019 and has been referred to the Greater Sydney Gateway determination.

A Mosquito Management Plan has been implemented. A contractor has been engaged and is currently waiting for optimal conditions to conduct the first

Manage the community's disposal of rubbish

Liverpool City Council | Biannual Performance Report December 2019

Status	side ils in for On track	On track	gn g
Comment	 The six-monthly diversion rate for kerbside waste is 33%, and 39% for kerbside bulky waste. Council has participated in eight 'Project 24' meetings with partnering councils in the past six months to discuss future waste processing and disposal options for their communities. 	 There has been a 20% increase in the community's disposal of rubbish at the Community Recycling Centre over the past six months. 	 There has been a 5.81% increase in the number of illegal dumping requests compared with this time last year. About 96% of the street sweeping program and 98% of the public bin servicing and CBD cleaning program was completed within schedule.
Description	Provide waste disposal services to the community to maximise recovery of materials	Manage the Community Recycling Centre and household problem waste	Maintain the cleanliness of public spaces
Action	S.01.01	S.01.02	S.01.03

Protect and enhance bushland, rivers and the visual landscape

Action	Description	Comment	Political	Status
S.02.01	incil's park maintenance	٠	The parks workforce has been realigned to allocate specific teams for	
		•	A program for tree planting is being developed for implementation in autumn. Tree planting has been placed on hold due to the lack of rain, onset of the heat of summer and water restrictions.	On track
		•	Council also intends to commence the beautification of roundabouts and median strips in autumn.	
		•	Detailed design of seven bush regeneration sites covering 74 hectares has been undertaken and works are currently going through Council's tender process.	
S.02.02	Develop and implement improvement strategies, policies and programs for	•	Water quality monitoring at selected locations along the Georges River and South Creek catchment is underway.	
	the management of stormwater	•	Council has developed a quarterly water quality monitoring report card, which measures targets to improve water quality. The report card is available on Council's website.	On track
		•	Vegetation condition assessment of riparian zone across the LGA for the development of riparian areas plan of management (PoM) has been completed.	
		•	Development of Vegetation Management Plan (VMP) for Cabramatta Creek has been completed.	
S.02.03	Make informed environmental decisions through the development of strategy.	•	All responses to requests on ecological related advice from key service areas were completed within 10 business days and include:	
	education and engagement	•	The completion of the updated biodiversity mapping and report for the LGA.	
		•	Promotion of energy and water efficiency-related initiatives and opportunities to the community.	On track
		•	Contribution to the development of strategic directions in partnership with the	
			Western Sydney Regional Organisation of Councils" (WSROC) Western Sydney Energy program.	
		•	Delivery of sustainability community engagement and promotion including	
			railwater tain workshops, eilergy and water-related alliches in the Sustaining Liverpool newsletter.	
				16

Status	On track	On track	On track
Comment	 In total, 98% per cent of applications to prune or remove trees on private property were completed within 10 business days. 	 Council actively implements strategies and manages contaminated land as required by the Contaminated Land Management Act 1997. 	 Council supported 10 environment volunteer groups, facilitated four community environmental volunteering requests and delivered four community tree planting activities in the period.
Action Description	Assess applications to prune or remove trees	S.02.05 Manage contaminated lands under Council control	Engage the community in protection of natural areas
Action	S.02.04	S.02.05	S.02.06

Encourage sustainability, energy efficiency and the use of renewable energy

	Description	Comment	Status
Develo	Develop and implement environmental education for the community	 In November 2019 Council trialled a science talk 'Sounds of Summer. Talk & Tea'. This session was well received by the community who were encouraged to provide their feedback. Council aims to introduce 'Sounds of Summer: Talk & Tea' as a regular program. 	On track
Educate disposal	Educate the community in waste disposal	 Council delivered nine education initiatives and participated in two waste and recovery projects including stage four of the Litter Regional Implementation Program and the Waste Infrastructure Site Analysis. 	On track
Develo	Develop and implement energy efficiency program	 State Government initiatives on energy efficiency and renewable energy were actively promoted in the Winter and Summer editions of the Sustaining Liverpool newsletter. 	On track

Action	Action Description	Comment	Status
S.03.04	Promote local and sustainable food sources	 The Organic Kitchen Garden continues to be a popular feature of the Bellbird Bar and Dining experience, also hosting garden tours for various interested groups. The garden was trialled at the annual Wow festival in July 2019, including garden discovery experiences and a fence decorating workshop. A garden volunteer program has also been introduced which will gradually expand over the coming year. 	On track
S.03.05	Upgrade Council properties to increase sustainability	 The 33 Moore Street sustainability assessment has been completed and the rating is current. National Australian Built Environment Rating System (NABERS) certificates will be completed by the end of financial year. 	On track

Exercise planning controls to create high-quality, inclusive, urban environments

Status	On track	On track	On track
Comment	 Council processed 546 Development Applications (DA) during the period contributing significantly to the economy and housing diversity of Liverpool. Approximately 45% of the DA's were determined within 40 working days, which is a significant improvement in assessment and determination times over the last six months. When considering the final quarter of 2019 between October to December 2019, the percentage of DAs determined within 40 working days has further increased to 49.4%. 	 The Overland Flow Path Study for the rural catchment areas in South Creek catchment is underway. The detailed design of stormwater infrastructure in East Leppington is underway. The flood risk constraint study for Liverpool Collaboration Area is underway. 	 The outcomes for health and safety compliance exceeded the set targets including the actioning of customer requests, determination of construction certificates and development applications under the fast track process.
Action Description	Provide development assessment services	Facilitate floodplain management strategies, policies, systems and programs for the controlled occupation of flood-prone land	Manage and maintain public health and safety compliance
Action	S.04.01	S.04.02	S.04.03

Status	On track	On track	On track	On track
Comment	 The final Local Strategic Planning Statement (LSPS) was endorsed by Council on 11 December 2019 and has been referred to the Greater Sydney Commission for a formal assurance review. The planning proposal for the Local Environmental Plan has been referred to the Department of Planning for a Gateway determination. 	 The Land Development unit is committed to delivering efficient customer service and processing times have improved in the delivery of public infrastructure in the past six months. 	 Building works and compliance requests for Liverpool City Council buildings are either occurring on schedule or earlier than scheduled in consultation with the asset owners and asset users. 	 The draft Liverpool City Centre Public Master Plan has been finalised and is currently on public exhibition Work will begin in early 2020 for the development of project plans and business cases for new projects.
Description	Develop planning strategies	Manage land development engineering	Manage building maintenance including fire safety	Manage the design of public spaces
Action	S.04.04	S.04.05	S.04.06	S.04.07

Develop and advocate for, plans that support safe and friendly communities

Action	Description	Comment	ent	Status
S.05.01	Undertake a program of upgrades and renewals for drainage infrastructure	• •	Relining and structural patches of stormwater drainage pipes is being completed. These works will significantly increase the service life of the stormwater drainage system, which will reduce flooding of roads and properties. Gross Pollutant Traps (GPT) projects are progressing well.	On track
S.05.02	Investigate, survey, design and estimate cost of Council's infrastructure delivery projects	•	Investigations and design of capital works projects are in progress including the Fifteenth Avenue upgrade from Cowpasture Road to Devonshire Road, Edmondson Avenue upgrade from Bringelly Road to Fifteenth Avenue and M7 underpass and shared path at Middleton Grange.	On track
S.05.03	Provide assistance and support to the Rural Fire Service and State Emergency Service	• • •	Funding has been provided to the Rural Fire Service (RFS) and State Emergency Service (SES) as per budget allocation and local government agreement. Both SES and RFS are fully engaged in local emergency management committee meetings with complete collaboration between Council and both services. Bushfires, floods or other emergency incidents are managed in a collaborative manner with the appropriate response agency.	On track
S.05.04	Develop plans to support community wellbeing	•	A Mosquito Management Plan has been implemented. A contractor has been engaged and is waiting on optimal conditions to conduct the first spray.	On track



All of the 19 actions in the Delivery Program 2017-2020 and Operational Plan 2019-2020 under direction 'Generating Opportunity' were marked as on track.

Council's Early Education and Care Services and Preschool reported a high level of utilisation with current data depicting that services are utilised at an average rate of 99%

Council's Liverpool Civic Place Masterplan is currently under assessment and the Early Works Development Application has been lodged.

The community engagement for the Woodward Place Master Plan is scheduled to commence in January 2020

Council's Pop Up Shop program ended in December 2019 and nine businesses were supported with a retail shopfront and business advisory support. Council is investigating opportunities to continue this program in the future.

Council was successful in securing the National Economic Development Conference 2020 Conference to be held in Liverpool in November 2020

Eat Your Heart Out received a Place Leaders Award for Small Scale Place Project.

Approximately 8300sqm of road pavement has been repaired and resurfaced at various locations and 41km of road shoulder areas have been regraded and maintained. In addition, approximately 5100 linear metre of concrete footpath, 1000 liner metre of kerb and gutter and 200sqm of paved footpath have been reconstructed at several locations.

Meet the challenges of Liverpool's growing population

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Action	Description	Comment	ient	Status
G.01.01	Demonstrate financial sustainability	•	The current forecast of Operating Performance Ratio at 2.8% is better than the Fit for the Future projected at -1.0%.	
		•	The current forecast of Own Source Operating Revenue Ratio at 58.8% is slightly lower than the benchmark. However, the forecast is higher than the Fit	
			for the Future projection at 64.7%. Liverpool is a growth council and its income from developer works has significant impact on this ratio.	On track
		•	The current forecast of Debt Service Ratio at 4.3% is lower than the projected Fit for the Future indicator of 6.4%. However, the forecast is still below the	
		•	benchmark of less than 20%. Dobt outstanding ratio for the quarter at 0.6% is clichtly high mainly due to	
			Several large unpaid debts, which are being pursued in accordance with Council policy.	
		•	Council's current average return on investment of 2.77% is higher than the 1.58% Ausbond Bank Bill Index.	
G.01.02	Manage Council childcare centres' sustainability	•	Council's Early Education and Care Services and Preschool reported a high level of utilisation with current data depicting that services are utilised at an average rate of 99%.	
		•	Current wait list figures highlight the significant demand on services within the community. Council is working alongside internal and external stakeholders to ensure it is able to meet the challenges of Liverpool's growing population.	On track
G.01.03	Deliver strategic property projects	•	Liverpool Civic Place Masterplan is under assessment and the Early Works Development Application has been lodged	
		•	Community engagement for the Woodward Place Master Plan is scheduled to commence in January 2020.	
		•	Moorebank Sports Club negotiations and concept planning is continuing.	On track
		•	Casula Mall and Wattle Grove town centre proposals are progressing well.	
G.01.04	Build effective relationships with State and Federal departments and governments	•	Council met with State Members of Parliament and Council staff attended State and Federal department meetings to discuss topics such as Western Sydney International (Nancy Bird Walton) Airport, planning proposals, road upgrades	
			and public transport.	On track

Attract businesses for economic growth and employment opportunities

Status	On track	On track	On track	On track	O the contract of the contract
ment	Council has recruited an Employment Officer to work with local businesses on the "Local Jobs for Local People" campaign.	A CBD prospectus has been completed to showcase commercial stock coming online. Events held include Liverpool on A Roll and Spark Festival, developing a model to encourage visitation and tourism into the region, raise the profile of Liverpool as a food and event destination and supporting development of local and start-up businesses. As part of the launch of the Innovation Hub, the Liverpool Innovation Precinct is piloting a program to assist medtech start-ups with referrals and commercialisation.	Council referred more than 30 businesses to external and internal programs and advisors over the past six months. These programs and advisers assist businesses with broad-ranging advice on business planning, marketing, social media, staffing issues, corporate structures and other aspects of business formation and development. Council's Pop Up Shop program ended in December 2019. Nine businesses were supported with a retail shopfront and business advisory support. Council is investigating opportunities to continue this program in the future.	Innovation activities are in progress with additional projects, including a 12-month car share trial to commence in 2020. City Deal digital commitments are in progress with the Digital Action Plan expected to be endorsed by the City Deal Implementation Board in 2020. The Centre for Civic Innovation proof-of-concept has been completed. The pilot was successful, two ideas were incubated and one was developed into a viable business.	Council continues to advocate for the airport and Aerotropolis and actively promotes the city centre as a vital component of the airport's development. Council is preparing a submission on the Western Sydney Aerotropolis Plan and continues to advocate for the Fifteen Avenue Smart Transit corridor.
Comment	•	• • •	•	• • •	•
Description	Attract new jobs within Liverpool's industry focus areas	Market Liverpool as a business destination	Develop the economic capacity of local businesses and residents	Develop Liverpool as an Innovation City	Monitor and advise Council on matters relating to the development of Western Sydney International Airport
Action	G.02.01	G.02.02	G.02.03	G.02.04	G.02.05

Status	On track
Comment	 Council is delivering actions from the Destination Management Plan including the development of Liverpool's first Visitor Guide. Council was successful in securing the National Economic Development Conference (NEDC) in November 2020 as the Destination Sponsor. The Love Liverpool brand has been well-received and is being rolled out across Council events and activations.
Description	Promote Liverpool as a visitor destination
Action	G.02.06

Create an attractive environment for investment

Status	On track	On track
nent	The delivery of the City Activation Strategy initiatives, including Love Livo Nights, is on track. These small, medium and large-scale events, activations, studies, street art and installations attract residents and visitors, increase economic activity, and increase vibrancy of the city centre. Eat Your Heart Out received a Place Leaders Award for Small Scale Place Project.	Approximately 8300sqm of road pavement has been repaired and resurfaced at various locations and 41km of road shoulder areas have been regraded and maintained. Approximately 5100 linear metre of concrete footpath, 1000 liner metre of kerb and gutter and 200sqm of paved footpath have been reconstructed at several locations. A number of faded and missing line markings were reinstated on various streets including replacements and new installations of traffic signs at approximately \$160,000. In total, 105 gross pollutants traps were cleaned four times. Repairs of damaged drainage structures, collection of rubbish and waterways weed removal was collected as per the cleaning schedule. In addition, a number of street drainage pits were checked and cleaned. Due to NBN rollout and electrical, water and gas supply upgrades to cater for new developments, there was an influx of requests for restoration works. As a result there is a slight delay in completing permanent restoration works as scheduled. Council received 1050 customer requests for various maintenance works. These have been inspected and necessary actions taken within the timeframe.
Comment		
Action Description	Activate and develop vibrant places that attract residents, visitors and workers to Liverpool	Manage maintenance and repair program
Action	G.03.01	G.03.02

Status	On track
Comment	 Council continued to provide Property Services, including responding to requests for outdoor dining and implementing permanent easements and road closing negotiations. The acquisition of properties for Basin 14, Edmondson Park and provision of Austral Basins was completed during the period. The Liverpool Civic Place Master Plan has also been lodged.
	(0
Description	Deliver Property Services
Action	G.03.03

Advocate for, and develop, transport networks to create an accessible city

Comment
 Council's adopted upgrade and renewals program for roads and transport-related assets have been delivered successfully. These include the construction of additional car parking at Woodward Park, resurfacing of Fifteenth Avenue between Devonshire Road and Ramsay Road, and stormwater pipe renewal works across the LGA.
•
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• •
•
 All new street light designs were reviewed and approved in consultation with the street lighting provider Endeavour Energy within 14 days.
 Advice on the Intermodal traffic impacts, including construction traffic, were provided within 14 days of the request and included in Council's submission Department of Planning on the Intermodal.

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Comment
Representations have been made to Roads and Maritime Services (RMS) and Transport for NSW (TfNSW) for traffic and transport improvements and services including upgrades of classified road sections and public transport services in Inventoral
In response to these representations, RMS has completed upgrades to the following three critical intersections: Hoxton Park Road/Whitford Road intersection, Elizabeth Drive/Marsden Street intersection, Hume Highway/Hoxton Park Road/Terminus Street.
In addition, Council has provided input for road works being carried out around Western Sydney International Airport along Bringelly Road and The Northern Road.
There were 460 road opening applications received between July-December 2019. More than 90% of the applications have been processed and approved within the time frame.
There have been 820 driveway inspections carried out and approved for construction.



All of the 41 actions in the Delivery Program 2017-2020 and Operational Plan 2019-2020 under direction 'Leading Through Collaboration' were marked as on

Council has met and delivered its reporting and governance obligations for the period.

Council submitted entries for 11 awards. Five successful entries included Local Government Procurement Awards 2019 – Procurement Professional of the Awards - Flammable Cladding; Keep Australia Beautiful NSW 2019 Sustainable Cities Awards in two categories - Aboriginal Cultural Heritage Award and Year 2019; Australian Hearts – Corporate Heart Hero; Place Leaders Asia Pacific Conference – 2019; Small Scale Place Project Award; CivicRisk Mutual the Heritage and Culture Award. Council was highly commended for its submission to the LGNSW Excellence in the Environment Awards 2019 – Asbestos and Waste Management System.

Casula Powerhouse Arts Centre (CPAC) continues to host community events of various sizes and also seeks to be able to deliver activities to the community through partnerships with other organisations. Recent examples including Branch Nebula's DEMO, Ironfest and the Palestinian Film Festival. New attractions ncluding the Parklands and the Sculpture Walk have been well received by the community.

Council assisted in the delivery of the Local Government NSW (LGNSW) Annual Conference 14-16 October 2019, held at the William Inglis Hotel and the opening reception event at CPAC. Liverpool welcomed 872 delegates and registered guests who were given the opportunity to participate in a local education tour where Council staff presented key locations and discussed the growth and future of our growing city.

now and into the future. These strategies include the adaption of more flexible working arrangements and improvements in hiring approach and practice, to Council continuously strives to effectively attract, engage, develop, recognise and retain talented people who can respond to emerging community needs optimise Council's ability to attract and retain the best and a diverse range of talent.

Seek efficient and innovative methods to manage our resources

Action	Description	Comment	Status
L.01.01	Provide support to Councillors and Executive Team	 There were 423 Councillor requests received and actioned, with 73% responded to within the two-day timeframe. A report on Councillor requests was prepared and provided to the Mayor, Councillor and the Executive Team each month. Eight Councillor Briefing Sessions and three Council Mobile Offices were held. The Mobile Offices received and actioned 45 requests. Council's ward boundaries were reviewed and adopted by Council at the September 2019 Council Meeting. 	On track
L.01.02	Deliver Council meeting Secretariat	 Council Agenda and minutes were prepared and published within timeframes. All resolutions from Council meetings were assigned to relevant officers within 48 hours of the meeting. A report on outstanding resolutions was prepared and provided to Councillors and the Executive Team each month and 87% of the 212 resolutions were completed within timeframes 	On track
L.01.03	Monitor and improve Council's processes for Enterprise Risk Management	 Council has established an Enterprise Risk Management Framework and annual risk plan to improve overall risk maturity within the organisation. 	On track
L.01.04	Deliver professional, timely and authoritative governance services for Council	 The Governance Unit continues to provide support to Council to ensure that ethical business practices are established, and transparency of business processes are maintained across Council. 	On track
L.01.05	Manage recruitment framework to attract and engage diversity in our new employees	A new Flexible Working Policy was adopted to help attract, develop and retain a diverse workforce.	On track
L.01.06	Manage IT Business Strategy	 During the period, Council enhanced its security position major projects including, finalisation of the Disaster Recovery Plan (DRP), completion of the CBD 3D model, delivery of standard operating system conformity, upgrade of Council's applications and implementation of the Server Environment Patching schedule. 	On track

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Action	Description	Comment	Status
L.01.07	Manage computer/infrastructure hardware administration program	 Council ensured the continual software patching of operating systems to enhance protection and integrity of data. The network has been updated to ensure sustained service time and connectivity. 	On track
L.01.08	Conduct, review and improve Council's internal audit activities	 Council has a robust process to conduct, review and improve activities across the organisation through a balanced Enterprise Risk Management Framework which includes a risk policy, risk strategy, annual risk plan and a structured reporting methodology. 	On track
L.01.09	Manage Council properties	 Council is currently preparing Property Asset Plans to guide its property management into the future. Parking improvements implemented during the period include the introduction of the UbiPark system in the 33 Moore Street carpark basement and upgrading parking meters to Pay by Plate and Park'n Pay. During the period, the lease of Level 3, 33 Moore Street to the University of Wollongong commenced. 	On track
L.01.10	Coordinate the development of Council award submissions and industry recognition for Council	 Council submitted entries for 12 awards in the past six months. Five were successful, one highly commended and another will be announced in March 2020. Successful entries include Local Government Procurement Awards 2019 – Procurement Professional of the Year 2019; Australian Hearts – Corporate Heart Hero; Place Leaders Asia Pacific Conference – 2019 Small Scale Place Project Award; CivicRisk Mutual Awards – Flammable Cladding; Keep Australia Beautiful NSW 2019 Sustainable Cities Awards in two categories - Aboriginal Cultural Heritage Award and the Heritage and Culture Award. In addition, Council was highly commended for its submission of the LGNSW Excellence in the Environment Awards 2019 – Asbestos and Waste Management System. 	On track
L.01.11	Provide support to various Council committees	 Support was provided to 27 Council committee meetings. The Order of Liverpool Awards were presented in November 2019. Nominations for Australia Day Awards were adopted by Council at the November 2019 Council meeting. 	On track

Status	On track	On track	On track
Comment	 Management and delivery of high-quality, cost-effective legal services have been met. 	 In total 82% of eligible employees have a People Achieving Plan. A new hire, onboarding and offboarding survey will be implemented in 2020 and coincides with a new onboarding framework for Council. These surveys are aimed at enhancing employee engagement and providing insight into people practices and initiatives. 	 All regulatory requirements were met including, condition of public infrastructure report, Grants Commission Annual Return for Local Roads and Bridges and the Local Roads Data System Survey.
Action Description	Manage the delivery of high-quality, cost-effective legal services	Engage employees to manage performance achievement and development planning	Prepare asset-related statutory reports in a timely manner to meet regulatory requirements
Action	L.01.12	L.01.13	L.01.14

Increase community engagement

Status		On track	On track		On track
Comment	 Council produced a comprehensive program of communications including Facebook and Instagram posts, media releases and responses. 		 The Communications team supported a range of events, including Ideas 2170, Eat Your Heart Out and Liverpool On a Roll, through media releases and social media posts. 	 Council successfully delivered a range of community events, the Liverpool City Charity Ball, Gift of Time Ceremony, CPAC 25th Anniversary, Light Up the Lake (New Years Eve), Liverpool on a Roll, Way Out West and Eat Your Heart Out food festivals. 	 The annual 'Gift of Time' volunteers recognition dinner hosted 180 representatives from volunteer organisations in recognition of their efforts to improve Liverpool.
Action Description	Promote Liverpool through marketing and communications		Increase attendance at Council events through marketing	Manage community events to increase community engagement	
Action	L.02.01		L.02.02	L.02.03	

Description		Comment
Assist with the promotion, coordination and growth of sporting codes • Co	• •	Council continues to support local athletes as they achieve regional, state and national team selection in their chosen sport. Council provided \$3,200 in sporting donations to 15 recipients.
Partner with organisations to increase Casula Powerhouse Arts Centre's h (CPAC) audience reach f	•	Casula Powerhouse Arts Centre (CPAC) continues to be a popular venue to host community events of various sizes, including monthly free events such as the Italian Community Film Screenings and The Welcome Choir, plus one-off free events including the Sacred Music Festival and the Craft Film Festival
•	•	CPAC also seeks to be able to deliver exciting events and activities to the community through partnerships with other organisations including Sculpture By The Sea, the US Consulate, the Sydney Latin American Film Festival and the Powerhouse Voices Choir.
Promote Casula Powerhouse Arts Centre (CPAC) through marketing and communications	•	New attractions including the Parklands and the Sculpture Walk have delivered an increase in public profile and media coverage, receiving extensive national reporting with stories on Channel 9 News, the Sydney Morning Herald and other media channels.
7 •	•	A total of 680 media items were secured for Casula Powerhouse Arts Centre On track during the period.

Encourage community participation in decision-making

Ctatue	Signs	On track
Commont	Comment	 Council's committees and forums continue to provide an opportunity for organisations, services and community members to engage with Council and participate in decision-making processes. During the period, there were 8000 visits to the Liverpool Listens website and 299 new registrations. Key matters discussed included crime and safety, illegal dumping, development proposals and future development planning.
Decorintion	Lesci puon	Encourage community participation in programs and decision-making processes
Action	TOEST TOEST	L.03.01

Strive for best practice in all Council processes

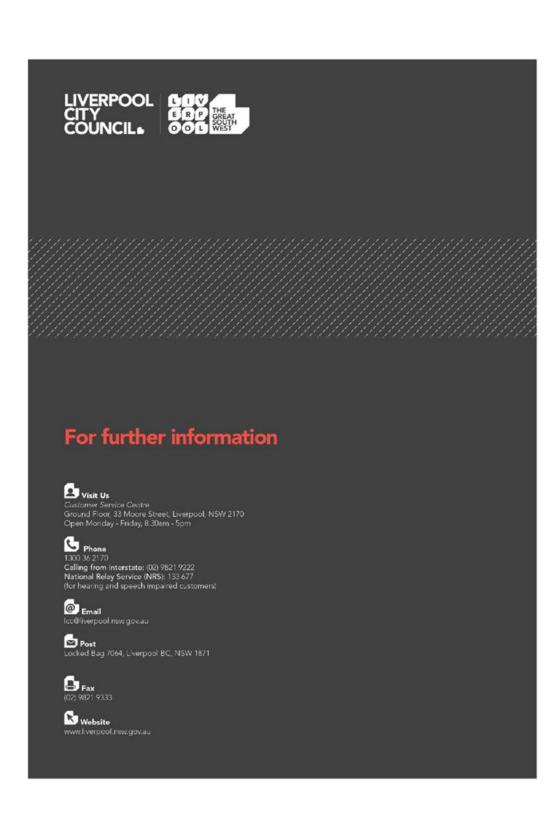
Action	Description	Comment	ient	Status
L.04.01	Manage Council's customer service operations	•	Council continues to improve and refine the way it communicates with the community, to enhance personal interaction through online services, counter and call centre functions that reflect the ever-changing needs of customers.	On track
L.04.02	Manage and expand ePlanning Portal	•	Council continues to invest resources into developing and implementing online systems to support improved customer engagement/transitions and streamlined internal processes. These initiatives include application tracking, development enquiry and online lodgement tools and result in broader benefits to customers and the council.	On track
L.04.03	Manage and complete Integrated Planning and Reporting requirements	•••	Council is meeting its Integrated Planning and Reporting requirements. The Biannual Report for July to December 2019 will be submitted to Council in February 2020. The Annual Report was delivered and published in November 2019.	On track
L.04.04	Comply with financial legislative requirements	• • •	Council's Business Activity Statements for the past five months were lodged by the due dates. Council's auditors, Audit Office of New South Wales, issued an unqualified audit opinion on the financial statements on 28 October 2019. The audited financial statements were lodged with Office of the Local Government on 31 October 2019.	On track
L.04.05	Manage the delivery of monitored, transparent and accountable procurement services	••	An Ethical and Sustainable Procurement Policy was completed. A risk-based performance measurement framework project in procurement services is in progress.	On track
L.04.06	Identify and report hazards to promote a safe workplace	• •	Hazard reporting continues to increase, allowing Council to address matters of concern within a timely manner to further reduce risk. Site inspections will be completed by the end of the financial year Work Health and Safety site inspections have commenced and will be reported on at the end of the financial year.	On track

Action	Description	Comment	ent	Status
L.04.07	Manage and report on workplace Work Health and Safety (WHS) risks through injury management and proactive engagement with staff and stakeholders	•	There were 10 lost time injuries reported in July-December 2019. Council continues to identify, manage and report on workplace WHS risks in a timely manner.	On track
L.04.08	Manage staff Health and Wellbeing Program (HWB)	• •	The Health and Wellbeing claims for session 2 2018 was 149 and a total claim amount of \$19,236. The Health and Wellbeing claims for session 2 2019 was 201 and a total claim amount of \$26,309.	On track
L.04.09	Manage and deliver strategic initiatives	• • •	Council assisted with the delivery of the Local Government NSW (LGNSW) Annual Conference, which was held at the William Inglis Hotel 14-16 October 2019, attracting councillors and council staff from across the state. The review of the Council Pathway Customer Request process is underway with consultations scheduled to be completed in February 2020. Council continues to work with metropolitan councils on the Resilient Sydney strategy. The 35 actions are being delivered to improve safety and quality of life in metropolitan Sydney.	On track
L.04.10	Manage Council's process mapping system	• •	Council continues to identify, review and create new business unit processes. The review of critical Council services is underway.	On track
L.04.11	Utilise an effective resolutions model to promote a bullying and harassment-free workplace	•	Council continues to deliver Dignity and Respect in the Workplace training.	On track
L.04.12	Manage fleet and outdoor machinery and equipment	•	The workshop continues to deliver maintenance work and is on track with service schedules.	On track

Action	Description	Comment	ent	Status
L.04.13	Engage employees through internal communication	• •	Staff continue to benefit from internal communications delivered through Council's staff staff e-newsletter In the Loop, CEO Presentations, Leadership Forums and Yammer, helping to improve engagement, staff morale and productivity. Following feedback received through a staff survey, minor improvements to internal communications channels, namely the intranet upgrade project and the format of the quarterly CEO Presentations and Leaders' Forum, have been	On track
L.04.14	Coordinate code of conduct and privacy complaints and public interest disclosures	•	made. The Internal Ombudsman has assessed and finalised most of the 150 complaints received over the past six months.	On track
L.04.15	Develop, review and update asset management plans for Council's infrastructure and building assets		Reviewing and updating of asset management plans for Council's transport and drainage portfolios are progressing satisfactorily. Inventory verification and condition assessment of Council's detention basins and wetlands have been completed. Condition assessment of Council's childcare centres is underway. Condition assessment of park amenity buildings is scheduled in February 2020. Substantial works on the road network data verification, and pavement management system calibration have been completed.	On track
L.04.16	Manage Council's insurance-related matters	•	All targets have been met for the reporting period.	On track
L.04.17	Manage Council's equipment Stores	• •	Cycle counts are conducted monthly. Annual and biannual stock take was conducted.	On track

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Status	On track	On track	On track
Comment	 Council is working to increase the transparency and efficiency of all elements of the infrastructure planning framework. This includes enhancements to governance, systems and policies that provide community, developers and Council with certainty around what infrastructure is needed, what it will cost and when it will be delivered. Changes, including updates to various contributions plans and release of digital tools, will be implemented over the next 12 months. 	 Council has initiated works to develop and implement a Project Management Framework to manage projects within Council. 	 A trial test on footpath assets and development of predictive modelling of various asset classes is underway. Council is implementing the Council Assetic Strategic Maintenance Planning software to further improve maintenance planning and programming of Council's assets.
Action Description	Manage the review of developer contributions systems and policies	Manage Council projects effectively	Maintain Council's Asset Management System
Action	L.04.18	L.04.19	L.04.20





LIVERPOOL CONTRIBUTIONS PLAN 2018 ESTABLISHED AREAS

(incorporating Amendment no.1)

Adopted: XXXX

Content Manager 018841.2019



Liverpool Contributions Plan 2018 – Established Areas

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1. Introduction

This Plan has been prepared to authorise the imposition of development contributions on:

- Residential development in the Established Areas of Liverpool under Section 7.11 of the Environmental Planning and Assessment Act 1979; and
- Non-residential development in the Established Areas of Liverpool under Section 7.12 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Section 7.11 of the *EP&A Act* allows a consent authority responsible for determining a development application to grant consent to the proposed development subject to a condition requiring the payment of a monetary contribution, or the dedication of land free of cost, or a combination of them, towards the provision of public amenities and public services to meet the development.

Where the consent authority is a council or an accredited certifier, such a contribution may be imposed on a development only if it is of a kind allowed by and determined in accordance with a contributions plan, such as this Plan.

Section 7.12 of the *EP&A Act* gives Council the power to impose a levy on developers for public services and public amenities based on a percentage of the cost of the development. Council cannot impose, as a condition of the same development consent, a condition under this section as well as a condition under Section 7.11.

Money required to be paid by a condition imposed under S7.12 is to be applied towards the provision, extension or augmentation of public amenities or public services (or towards recouping the cost of their provision, extension or augmentation). The application of the money is subject to any relevant provisions of the contributions plan. A condition imposed under S7.12 is not invalid by reason only that there is no connection between the development the subject of the development consent and the object of expenditure of any money required to be paid by the condition.

This Plan has been prepared:

- in accordance with the EP&A Act and Environmental Planning and Assessment Regulation 2000 (EP&A Regulation); and
- having regard to the latest Practice Notes issued by the NSW Department of Planning and Environment.

2. Schedule of Contribution Rates

As a condition of development consent, Council will require payment of money as a contribution to the cost of the provision of infrastructure required to enable the development in the Established Areas of Liverpool.

Council, when it adopted this contributions plan, resolved that proposed increases in contributions on development in the Established Areas over those formerly contained in the Liverpool Contributions Plan 2009 be phased in over a 2 year period.

Table 1 provides a summary of contribution rates for residential development from 9 January 2019 to 9 January 2020 at the June 2018 Quarter, subject to Indexation as specified in Section 3.8. Table 2 provides a summary of contribution rates for residential development from 10 January 2020 at the June 2018 Quarter, subject to Indexation as specified in Section 3.8.

Please note that development determined in the period from 9 January 2019 to 9 January 2020 will not pay the rates shown in Table 2 even if paid after 9 January 2020.

Table 1 Contribution rates for residential development from 9 January 2019 to 9 January 2020

Purpose	Lots	Lots	Residential a Boarding hou s	Boarding houses, group homes, hostels,		
	> 450 sqm	< 450 sqm	3 Bedroom +	2 Bedroom	1 Bedroom	seniors housing
Community Facilities						
District - Works	\$709	\$686	\$686	\$509	\$399	\$192
Recreation						
District Sporting Fields - works	\$2,422	\$2,346	\$2,346	\$1,741	\$1,362	\$655
District Passive Open Space - works	\$1,255	\$1,216	\$1,216	\$902	\$706	\$339
Local Passive Open Space - works	\$3,412	\$3,305	\$3,305	\$2,452	\$1,919	\$922
District						
Transport - works	\$1,118	\$1,008	\$1,001	\$672	\$551	\$334
District						
Drainage - works	\$245	\$201	\$201	\$201	\$201	\$66
Other						
Administration	\$135	\$131	\$131	\$97	\$77	\$38

Non-residential development will be levied under S7.12 of the Environmental Planning and Assessment Act 1979. In the period from 9 January 2019 to 9 January 2020, contributions will be levied at half of the maximum amount permitted under Cl 25K of the EP&A Regulation, subject to Indexation as specified in Section 3.8. In the period from 9 January 2020, contributions will be levied at the maximum amount permitted under Cl 25K of the EP&A Regulation, subject to Indexation as specified in Section 3.8.

Please note that development determined in the period from 9 January 2019 to 9 January 2020 will not pay the maximum amount permitted under Cl 25K of the EP&A Regulation even if paid after 9 January 2020.

Table 2 Contribution rates for residential development from 10 January 2020

Purpose	Lots	Lots	boarding hou	Residential accommodation (other than boarding houses, group homes, hostels, seniors housing		Boarding houses, group homes, hostels,	
	> 450 sqm	< 450 sqm	3 Bedroom +	2 Bedroom	1 Bedroom	seniors housing	
Community Facilities							
District - Works	\$1,187	\$1,150	\$1,150	\$853	\$668	\$371	
Recreation							
District Sporting Fields - works	\$3,992	\$3,867	\$3,867	\$2,869	\$2,246	\$1,248	
District Passive Open Space - works	\$2,495	\$2,417	\$2,417	\$1,793	\$1,403	\$780	
Local Passive Open Space - works	\$3,493	\$3,384	\$3,384	\$2,511	\$1,965	\$1,092	
District							
Transport - works	\$2,223	\$1,991	\$1,991	\$1,327	\$1,095	\$664	
District							
Drainage - works	\$488	\$400	\$400	\$400	\$400	\$40	
Other							
Administration	\$208	\$198	\$198	\$146	\$117	\$6	

Non-residential development will be levied under S7.12 of the Environmental Planning and Assessment Act 1979. In the period from 10 January 2020, contributions will be levied at the full amount of the 1% contributions levy, subject to Indexation as specified in Section 3.8.

3. Administration

3.1 Name of Plan

This plan is called Liverpool Contributions Plan 2018 - Established Areas.

This Contributions Plan has been prepared in accordance with the provisions of Sections S7.11 and 7.12 of the EP&A Act 1979 and the provisions of the EP&A Regulation 2000.

3.2 Applies to

This Contributions Plan applies to development lodged after 12 December 2018 on land shown on the Catchment Map, a separate document that can be viewed at a large scale and shows the precise boundaries of where this plan applies.

3.3 Definitions and abbreviations used in this Plan

Except where indicated in this clause, the definitions of terms used in this Plan are the definitions included in the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulation 2000* are adopted by this Plan.

In this clause, 'existing' means at the date on which this Plan came into effect.

In this Plan, the following words and phrases have the following meanings:

Bank Guarantee means an irrevocable and unconditional undertaking without any expiry or end date in favour of the Council to pay an amount or amounts of money to the Council on demand issued by an Australian bank, non-bank financial institution, or insurance company subject to prudential supervision by the Australian Prudential Regulatory Authority and has a credit rating of 'A' or above (as assessed by Standard and Poors) or 'A2' or above (as assessed by Moody's Investors Service) or 'A' or above (as assessed by Fitch Ratings).

Catchment Map means a map showing the area to which this plan applies, the District and Local Catchments referred to in this plan.

Council means Liverpool City Council.

CPI means the Consumer Price Index (All Groups - Sydney) published by the Australia

EP&A Act means the Environmental Planning and Assessment Act 1979.

EP&A Regulation means the Environmental Planning and Assessment Regulation 2000.

GPT means Gross Pollutant Trap.

Infrastructure Map means a map, separate to this document, entitled Established Areas Contributions Infrastructure Map showing the location of proposed and possible infrastructure referred to in this plan.

LGA means Local Government Area.

Planning Agreement means a Planning Agreement referred to in S7.4 of the EP&A Act.

Residential accommodation has the same meaning as in the Standard Instrument.

Works In Kind means the undertaking of a work or provision of a facility by an applicant which is already nominated in the works schedule of a contributions plan as a means of either fully or partly satisfying a condition of consent requiring development contributions to

Works Schedule means the schedule of the specific public amenities and public services for which contributions may be required as set out in Parts 5 and 6 of this Plan.

3.4 **Purpose of Plan**

The purpose of the Contributions Plan is to:

- Provide an administrative framework under which specific public facilities strategies may be implemented and coordinated;
- Ensure that adequate public facilities are provided for as part of any new (b) development;
- Authorise the Council to impose conditions under S7.11 and S7.12 of the EP&A Act 1979 when granting consent to development on land to which this plan applies;
- Provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of development contributions on an equitable basis;
- Ensure that the existing community is not burdened by the provision of public amenities and public services required as a result of future development; and
- Enable the Council to be both publicly and financially accountable in its assessment (f) and administration of the contributions plan.

3.5 Adoption of Contributions Plan

Council adopted the plan on 12 December 2018. The plan originally came into force on 9 January 2019. The value of works is at the June 2018 Quarter. The CPI for this quarter was 114.0.

This plan applies to development lodged after 12 December 2018 and determined after the date on which the plan came into effect.

Amendment 1 applies to any application determined after the date on which the amendment came into effect.

Amendments to Contributions Plan

Liverpool Contributions Plan 2018 - Established Areas has been amended as follows:

<u>No</u>	Adoption date	Amendment date	Description of Amendment
1	Xxxx	Xxxx	Enacted Council resolution of 11 December 2019 regarding instalment payment for secondary dwellings and clarified relationship between CDC and contributions.

Previous Contributions Plans

Liverpool Contributions Plan 2018 - Established Areas replaces Chapter 6 in Liverpool Contributions Plan 2009.

3.6 Relationship to other Plans

The land to which this contributions plan applies is also subject to the following plans:

- Liverpool Local Environmental Plan 2008;
- Liverpool Development Control 2008; and
- Various Planning Agreements.

3.7 Types of development to be levied

Except as provided for by this clause, this Plan applies to:

- Residential accommodation, insofar as the Plan authorises the imposition of a requirement for a development contribution for the types of public amenities and public services described in this Plan; and
- All development, other than residential accommodation insofar as the Plan authorises
 the imposition of a requirement for a development contribution for the types of public
 amenities and public services described in this Plan.

This plan does not apply to development:

- for the purposes of public infrastructure provided by or on behalf of State Government or the Council;
- for the purposes of public amenities or public services under this Plan or another contributions plan prepared under section 7.13 of the EP&A Act;
- for works to be carried out by Sydney Water, Endeavour Energy, Telstra or equivalent water, sewer, energy or telecommunications provider; or
- that in the opinion of Council does not increase the demand for the categories of public amenities or public services addressed by this Plan.

There may be Planning Agreements made under the EP&A Act that will apply to land in the Established Areas. In some instances the Planning Agreement may require the provision of infrastructure instead of payment of contributions under this Contributions Plan. This would normally be in the case of a major development, which would provide infrastructure on site, which would be consistent with the scope of contributions payable under this Contributions

The Minister for Planning and Environment may from time to time exempt certain forms of development from being subject to contributions.

3.8 Payment of Contributions

Levying of Contributions for residential accommodation under S7.11 of EP&A Act

Council will require, as a condition of development consent, the payment of a monetary contribution for the provision of public facilities specified in this Contributions Plan, from residential accommodation and subdivisions designed for residential accommodation, which it considers will contribute to the need for those facilities. The Contributions Plan applies to development applications determined after the plan comes into force.

Contributions for subdivisions will be calculated according to the number of dwellings proposed on the allotment.

Should the ultimate number of dwellings proposed on that allotment increase, post subdivision development consent, then contributions for additional dwellings must be paid to Council

Levying of Contributions for non-residential accommodation development under S7.12 of EP&A

Council will require, as a condition of development consent, the payment of a monetary contribution for the provision of public facilities specified in this Contributions Plan, from development other than residential accommodation, which it considers will contribute to the need for those facilities.

This plan authorises Council to grant consent to development to which this plan applies subject to a condition requiring the applicant to pay to the Council a levy in accordance with Table 3:

Table 3

Estimated cost of development	Value of Levy
Up to \$100,000	Nil
\$100,001-\$200,000	0.5% of the cost of the development
More than \$200,000	1.0% of the cost of the development

The proposed cost of carrying out the development will be determined in accordance with clause 25J of the *EP&A Regulation*. The procedures set out in Appendix 1 to this plan must be followed to enable Council to determine the amount of the levy to be paid.

The value of the works must be provided by the applicant at the time of the request and must be independently certified by a Quantity Surveyor who is registered with the Australian Institute of Quantity Surveyors or a person who can demonstrate equivalent qualifications.

Without limitation to the above, Council may review the valuation of works and may seek the services of an independent person to verify the costs. In these cases, all costs associated with obtaining such advice will be at the expense of the applicant and no construction certificate will be issued until such time that the levy has been paid.

Method of Payment

A monetary contribution is the most common method of payment of a levy. However, Council may consider the provision of works in kind, but only as detailed in the schedule of facilities in this Contributions Plan. If applicable, and only if acceptable to Council, such a transfer or works in kind may be an offset to the monetary contribution otherwise applicable to the development under this plan.

The value of the offset will be as agreed with Council in accordance with the value of the works identified in the Contributions Plan. Applicants will be required to provide details of the works to be undertaken, financial guarantees, bank guarantees and administration.

Where works and / or land identified in the contributions plan are proposed to be provided in conjunction with the development, Council will reimburse the developer for the cost of the works in accordance with Council's Development Contributions Land Dedication and Works in Kind Policy.

Timing of payment of the contributions

Monetary contributions are required to be paid to Council:

- a) for development approved as a development application, –prior to the issuing of the Construction Certificate; or
- b) for development approved as a complying development certificate, prior to the commencement of works,

whether by Council or a Private Certifier.

If a secondary dwelling is approved by Council as a development application, the payment of contributions may be made in the following instalments:

a) 50% prior to the issue of approval of a CC; and a)b)50% prior to the issue of an occupation certificate

CDC, CC Construction Certificates and the obligation of accredited certifiers

In accordance with Cl 146 of the EP&A Regulation 2000, a certifying authority must not issue a construction certificate for building work or subdivision work under a development consent unless it has verified that each condition requiring the payment of levies has been satisfied.

In accordance with Cl 136L of the *EP&A Regulation 2000*, a certifying authority must not issue a complying development certificate for work unless it has included a condition requiring payment of contributions prior to commencement of work.

In particular, the certifier must ensure that the applicant provides a receipt(s) confirming that levies have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with Cl142(2) of the of the *EP&A Regulation 2000*. Failure to follow this procedure may render such a certificate invalid. The only exceptions to the requirement are where a works in kind, material public benefit, dedication of land or deferred payment arrangement has been agreed by the Council.

In such cases, Council will issue a letter confirming that an alternative payment method has been agreed with the applicant.

Deferred Payments

Council will allow payment of contributions to be deferred in the following cases only:

- Where the applicant has the intention and ability to provide a material public benefit in part or to full satisfaction of a condition imposed by development consent; or
- In other circumstances, to be outlined in writing by the applicant and determined formally by Council on the merits of the case.

Deferred payments as outlined above are acceptable only where an unconditional bank guarantee is provided for the amount deferred. Bank guarantees will be accepted on the following conditions:

- The bank guarantee must carry specific wording, for example, a description of the development, address, development application number and staging where applicable;
- The bank guarantee will be for the contribution amount plus the estimated amount of compound interest foregone by Council for the anticipated period of deferral (Refer to the formula below).
- · Council may call up the bank guarantee at any time without reference to the applicant,

however, the guarantee will generally be called up only when cash payment has not been received, and land is not dedicated or material public benefit not provided by the end of the period of deferral;

- The period of deferral must be for a limited time only as agreed where land is to be
 dedicated or a material public benefit is to be provided. In merit cases, the period of
 deferral will be as approved by Council. The period of deferral may be extended subject
 to providing a renewed bank guarantee, which includes anticipated future interest; and
- Council will discharge the bank guarantee when payment is made in full by cash payment, land transfer or by completion of works in kind.

The following formula to be applied to all bank guarantees for contributions is:

Guarantee Amount = $P + P(C \mid x \mid Y)$, where:

P = Contribution due.

CI = Compound interest rate comprised of Council's estimate over the period plus 3 percent (allowance for fluctuations).

Y = Period of deferral (years).

Indexation of Monetary Contribution

As the date of the consent may vary to the actual time of payment of the contribution, Clause 32(3) of the *EP&A Regulation* allows Council to adjust the contribution to reflect increased costs between the date of the consent and the time of payment. Contributions required as a condition of consent under the provisions of this plan will be indexed quarterly in accordance with movements in the Consumer Price Index (All Groups Index) for Sydney issued by the Australian Bureau of Statistics.

The following formula for indexing contributions is to be used:

Contribution at time of development consent

$$C_2 = \underline{C_1 \times C P I_2}$$

$$C P I_1$$

Contribution at time of payment

$$C_3 = \frac{C_2 \times C P I_3}{C P I_2}$$

where:

 C_1 = Monetary contribution as shown in this contributions plan.

 C_2 = Monetary contribution imposed on the development consent.

 C_3 = Monetary contribution at the time that the contribution is to be paid.

 $CPI_1 =$ Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics at the time that the contributions plan was prepared - i.e. June 2018 Quarter

C P I₂ = Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics as at the time of granting the relevant development consent.

C P I₃ = Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics at time that the contribution is to be paid.

Future reviews will not affect any consent granted in accordance with this contributions plan.

This is distinct from Section 3.9, which deals with future reviews of the contributions plan. Future reviews will not affect any consent granted in accordance with this contributions plan.

Goods and Services Tax

No Goods and Services Tax (GST) is applicable to the payment of contributions made under Section 7.11 or Section 7.12 of the *EP&A Act*.

3.9 Review of Plan and Contributions

Council will review the contributions plan on a regular basis. The review process will canvass the following, where data is available:

- Development activity in terms of latest information on net additional dwellings and populations;
- Likely total development activity to be experienced in the future;
- Progress in the delivery of public facilities and amenities identified in the schedules of facilities
- Modification of facility concepts, changes in anticipated facility costs, facility timing and land values;
- Annual contributions received and expenditure information;
- Any other factors likely to affect the delivery of works identified in this contributions plan; and
- Changes resulting from amendments to Liverpool DCP 2008 or Liverpool LEP 2008.

Any significant reviews of this contributions plan must be undertaken in accordance with the *EP&A Act* and *EP&A Regulation* and placed on public exhibition for a period of 28 days. The nature of the proposed changes and reasons for these changes would be clearly outlined as part of the exhibition.

Contributions will be adjusted, taking account of more recent information and, where relevant, the following:

- · Consumer Price Index;
- Annual changes in land values;
- · Actual costs of completed works;
- · Reviewed costs yet to be completed works and land acquisition;
- Adjustment in projected project management and contingency costs associated with works; and

Management and legal costs associated with land acquisition.

This section is distinct from Indexation of Monetary Contribution, which deals with future adjustment of contributions granted in accordance with the contributions plan. Future reviews under Section 3.8 will not affect any consent granted under this contributions plan.

3.10 Administration of contribution funds

Council will administer money obtained from the contributions and make decisions on the funding and provision of the projects in accordance with the EP&A Act and EP&A Regulation.

The funds collected under this plan may be pooled for projects and applied progressively for those purposes, the priorities of which will be determined by the various Council Strategies for purposes and by the timing and scale of development in the Established Areas.

Council's ability to forward fund services and amenities identified in this Plan is very limited. Consequently their provision is largely contingent upon the availability of contributions funds.

To provide a strategy for the orderly delivery of the public services and amenities, this Contributions Plan authorises monetary contributions paid for different purposes in accordance with the conditions of various development consents authorised by this Plan and any other contributions plan approved by the Council to be pooled and applied progressively for those purposes.

The priorities for the expenditure of pooled monetary contributions under this Contributions Plan are the priorities for works as set out in the Works Schedule.

In any case of the Council deciding whether to pool and progressively apply contributions funds, the Council will have to first be satisfied that such action will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.

4. Expected Development Outcomes

4.1 Development history

Development has taken place in Liverpool has taken place since 1810. The original area of Liverpool is largely located within the Liverpool City Centre. This area is not covered by this contributions plan.

The "Established Areas" of Liverpool are the areas surrounding the Liverpool City Centre. The initial areas consist of older subdivisions on generally rectilinear streets with widths of about 20 m. There were also semi-rural subdivisions with a rectilinear pattern, which subsequently were subdivided into conventional residential subdivisions. There was also some industrial development near Liverpool City Centre and the Georges River as well as the military area at Moorebank. Commercial development was concentrated in Liverpool City Centre and some along the Hume Highway.

In the 1950's subdivision for residential development occurred to the west and south-west of the city centre. Some industrial development occurred in Warwick Farm and the Moorebank areas.

In the 1960's substantial development began around Miller and at Moorebank. There was also development at Casula and Lurnea. Industrial development continued at Warwick Farm and at Moorebank. Local retail areas began to be built in the new suburbs.

In the 1970's development occurred in Chipping Norton and Moorebank and to a lesser extent at Green Valley and Casula. There was also some urban redevelopment adjacent to Liverpool City Centre for town houses and 3 storey residential flat buildings. Industrial development also began in Prestons.

In the 1980 / 90's development commenced Green Valley / Hinchinbrook Release Area, Casula West Release Area and Casula East Release Area, Wattle Grove and Voyager Point. Infrastructure in these areas was largely funded by development contributions under the EP&A Act.

Since the 1950's the average area of residential lots has decreased from around 800 sqm to 450 sqm by the 1990's.

Since this time major urban release development has and continues to occur west of Liverpool.

4.2 Current development trends

In the Established Areas of Liverpool redevelopment is taking place in response to increases in the value of land across Sydney. This manifested as follows:

- High rise apartment buildings and mixed use developments involving large sites or an amalgamation of sites in and around Liverpool City Centre;
- Medium rise apartment buildings involving large sites or an amalgamation of sites in locations further from Liverpool City Centre, often on major roads;
- Scattered multi-dwelling developments involving large sites or an amalgamation of sites often in suburbs immediately adjoining Liverpool City Centre;
- Attached dwellings / semi-detached involving redevelopment of single sites of at least 500 sqm;

- Subdivision of single sites of at least 500 sqm;
- Redevelopment of existing industrial development for high rise apartments and mixed use developments;
- Redevelopment of existing industrial development for newer industrial buildings or bulky goods retail developments;
- Redevelopment of existing retail or commercial developments along major roads for newer retail developments; and
- Redevelopment of dwelling houses for child care centres.

Cumulatively the impact of this redevelopment is manifested in increased demand on local facilities as follows:

- Increasing traffic congestion at local intersections;
- Additional use of community and recreation facilities;
- Increased hard surfaces increasing runoff and heat reflection;
- Increased stormwater runoff and increased pressure on water quality of waterways.

4.3 Expected residential development outcomes

The Liverpool Housing, Population and Social Infrastructure Study was undertaken in 2016 by Judith Stubbs and Associates. It provided population projections for the various suburbs of Liverpool up to 2031. It provided 3 development scenarios within the population projections of the NSW Department of Planning and Environment for Liverpool to 2031. The three models are for the base case; for marginally increased consolidation and corresponding release area reduction; and for substantially increased consolidation and corresponding release area reduction.

Recent experience with development trends in Liverpool suggest that the substantially increased consolidation scenario is likely in the Established Areas of Liverpool. Table 2 provides figures an existing and estimated future population and dwelling numbers for the Established Areas.

An analysis of the figures for the substantially increased consolidation scenario suggest approximately an additional 11,084 people in the Established Areas of Liverpool by 2031. The Established Areas in 2016 had an average occupancy rate of 3.2 persons per dwelling. An average occupancy rate of 3.1 persons per dwelling in 2031 would result in an additional 5,024 dwellings across the Established Areas. Refer to Table 4 for the expected occupancy rates for the size of dwelling. Refer to Tables 5 and 6 for details on population and dwelling numbers.

Table 4 Occupancy rates

Lots Lots		Oth	er dwellings		
> 450 sqm	< 450 sqm	3 Bed +	2 Bed	1 Bed	
3.2	3.1	3.1	2.3	1.8	

Table 5 Population for each Established Area Suburb Group

Locality	2016	2021	2026	2031
Casula	15,938	16,199	16,458	16,715
Chipping Norton	9,476	9,597	9,781	9,901
Miller Area	21,088	21,664	22,115	22,561
Hammondville, Holsworthy & Wattle Grove	17,683	18,092	18,500	18,874
Green Valley & Hinchinbrook	24,833	24,771	24,776	24,713
Moorebank	9,963	10,710	11,419	12,124
Lurnea	9,471	10,017	10,590	11,159
Liverpool / Warwick Farm (other than city				
centre)	19,577	20,705	21,890	23,066
Voyager Point	1,837	1,837	1,837	1,837
Total	129,865	133,592	137,365	140,949

Table 6 Dwelling numbers for each suburb group

Locality	2016	2031
Casula	5,092	5,392
Chipping Norton	3,107	3,257
Miller Area	7,122	8,742
Hammondville, Holsworthy & Wattle Grove	5,639	6,089
Green Valley & Hinchinbrook	6,748	6,808
Moorebank	3,332	4,082
Lurnea	3,095	3,695
Liverpool / Warwick Farm (other than city		
centre)	6,137	7,231
Voyager Point	545	545
Total	40,817	45,841

4.4 Expected non-residential development outcomes

An analysis of recent development trends in the non-residential development in the Established Areas, excluding the Liverpool City Centre suggests that the annual value of development applications being received as being about \$120 M. Most of this comes from industrial redevelopment plus some business redevelopment.

5. Established Areas Planning Context

Community Strategic Plan 2017 - 2027 "Our Home, Liverpool 2027"

Our Home Liverpool 2027 is Liverpool's Community Strategic Plan. It outlines a 10 year plan to transform Liverpool into an inclusive place to learn and grow and to become the destination of choice for business, investment, living and recreation.

The plan identifies four strategic directions which have been developed following extensive community consultation. Each direction includes a number of community goals and Council strategies which will achieve the community's vision for Liverpool. *Our Home Liverpool 2027* was adopted by Council at its meeting on 26th April 2017 and commenced on 1st July 2017.

The following provides information on the challenges that face Liverpool and the four strategic directions including the relevance to the contributions plan.

Challenges for Council

The Community Strategic Plan 2017 – 2027 makes reference to challenges that Liverpool, being a growing area will face. These are as follows with reference to relevance to the contributions plan:

Community pride and heritage

Liverpool has a rich heritage with a major cultural and arts focus. There are a number of significant heritage buildings and places which are protected at the local and state levels, including Rosebank Cottage, Pioneers' Memorial Park, the Casula Powerhouse Arts Centre, the TAFE college building which is formerly Liverpool Hospital (1820-1958), and St Luke's Church (1810-present). These historical and cultural attributes all contribute to Liverpool's identity.

Maintenance of historic buildings often involves significant building works which are at a higher cost than normal works. At times grants are available to assist with funding such works but these are limited and are subject to State and Federal budget constraints. A challenge for Council is balancing the need to protect its community identity and heritage with alternate demands on its income.

Relevance to the contributions plan

This will inform the provision of any public infrastructure in the vicinity of any items of heritage or items or landscapes that reflect the identity of Liverpool in the Established Areas.

Social connection

Liverpool is one of the most culturally diverse cities in NSW with almost one in three people born overseas and almost half the population speaking a language other than English at home. It also has a significant Aboriginal community. Liverpool needs to continue efforts to create a harmonious society where differences are appreciated and celebrated. There is also a challenge for the Council to ensure its services reach a broad range of citizens in an equitable way while still accommodating those most in need, such as people with disabilities.

Finding social connection within a community has become increasingly complex with the numerous demands of everyday life. We are a time poor society with commitments to work, family, friends, health, fitness and many other activities that demand our attention. In addition, we are increasingly relying on technology and social media to communicate, which changes the frequency and nature of our social interactions and brings new challenges.

Relevance to the contributions plan

This informs the provision of community and recreation facilities that will be needed by the additional population and workforce that is anticipated from new redevelopment in the Established Areas.

Economic development

Liverpool continues to experience growth in commercial and industrial development. Its status as a strategic commercial centre of South West Sydney, and its good transport links to other areas of Sydney, place it in prime position to attract a range of industries. This is heightened with the development of the Western Sydney Priority Growth Area and the new Western Sydney airport at Badgerys Creek.

The revitalisation of the city centre is a key Council priority. Council has implemented several strategies which are aimed at revitalising the city centre, developing key economic, cultural, recreational and entertainment precincts and creating a place which draws people from across the South West Sydney Region.

Relevance to the contributions plan

This informs the provision of infrastructure will help mitigate the impact of additional development in the Established Areas. This infrastructure will include traffic management facilities, bus stops, bikeways and also community and recreation facilities to service the needs of additional population and workforce.

Environmental sustainability

Liverpool has a wide variety of plants, animals and ecosystems, including a significant number of threatened species. Approximately one third of Liverpool is covered in vegetation including more than 500 open space reserves. Liverpool is also home to a significant portion of the Georges River. Council has increased bushland restoration to ensure native areas are maintained.

Expanding urban development in Liverpool can place considerable pressure on the natural environment including the waterways and air quality. Liverpool's environment is exposed to a range of pollutants from industrial, commercial and household waste and increased traffic. Council has introduced systems for sustainable water and energy consumption in new developments, however the challenge continues with existing dwellings.

The growth in Liverpool, while increasing opportunities for the community, also places pressure on the environment and will be a challenge over the coming years for Council to balance.

Relevance to the contributions plan

In the context of an already built up area, new infrastructure to that would service new development can contribute to environmental sustainability with streetscape and open space works that increase the tree cover and works to improve the quality of stormwater discharge to the Georges River.

Transport accessibility

Liverpool's growing population places demands on our existing infrastructure and has caused a high traffic volume that is prominent throughout Sydney. Additionally, the construction of the Moorebank Intermodal and Western Sydney Airport will further create pressure on our transport networks.

Liverpool has good access to Sydney's major motorways, including the M5 and M7. However, congestion during peak periods is a major challenge. Many residents own and use cars as opposed to public transport.

Relevance to the contributions plan

This informs the need to manage the impact of increasing traffic on streets in Liverpool other than the classified roads. The cumulative impact of numerous individual additional dwellings or redevelopment for non-residential developments in the Established Areas will lead to increasing traffic congestion and pedestrian / cyclist conflicts.

There is a need to manage these increases to maintain and improve pedestrian accessibility to make it easier to cross local streets that may be experiencing increased car movements. This may include footpath widening or median strips either mid-block or at intersections.

Directions for Council

The Community Strategic Plan is a ten-year plan that defines the vision and priorities of the community. It is the overarching plan that sets the direction not only for Council but for all stakeholders, including government, business, the not-for-profit sector and residents. The directions from the CSP provide a guide for stakeholders to work together and to capitalise on the opportunities which will keep Liverpool moving forward.

The CSP has been created through extensive community consultation and review of the previous CSP. The consultation for this plan involved the active engagement of more than 1,500 members of the community, and an estimated 150,000 other members who were contacted for their opinions. Engagement activities included stalls at community events, community forum activities, rates mail-outs, a phone survey and numerous outreach activities through social media. Through this community consultation Council identified the community's key priority areas and captured these priorities in four directions, based on the quadruple bottom line (social, economic, environmental, and civic leadership).

The directions and the relevance to the contributions plan are as follows:

Direction 1 Creating Connection

The community want:

- An area where connection is created between all people in the community
- · More community activities and events;
- Facilities to be well maintained and multipurpose;
- Access provided to all (youth, seniors, people with disability) and
- Our history to be respected.

Council will:

Elements of Direction	Relevance to the contributions plan
Celebrate diversity, promote inclusion and recognise heritage	This element will inform the design of any the public infrastructure in the vicinity of any items of heritage or items or landscapes that reflect the identity of Liverpool in the Established Areas.
Deliver a range of community events and activities	These elements will inform the design of the facilities that will be provided by contributions.

Elements of Direction	Relevance to the contributions plan
Implement access and equity for all members of the community	These elements will inform the design of the facilities that will be provided by contributions.
Provide community facilities which are accessible to all	This element has informed the inclusion of community facilities in the contributions plan.
	This element will inform the design of the facilities that will be provided by contributions.
Create a dynamic, inclusive environment, including programs to support healthy living	These elements have informed the inclusion of community and recreation facilities and bikeways in the contributions plan.
	These elements will inform the design of the facilities that will be provided by contributions.

<u>Direction 2 Strengthening and Protecting Our Environment</u>

This direction is about planning high-quality, sustainable urban environments to create a great place to live, work and play.

The community want:

- Clean public places;
- Creation of more green spaces;
- Increased use of renewable energy;
- Well-managed development;
- Creation of well-planned, attractive and people-friendly urban environments; and
- Improvement to access and safety in public areas.

Council will:

Elements of Direction	Relevance to the contributions plan
Manage the community's disposal of rubbish	Not applicable.
Protect and enhance bushland, rivers and the visual landscape	These elements have informed the inclusion of stormwater quality measures help protect the Georges River and natural environment.
Encourage sustainability, energy efficiency and the use of renewable energy	These elements have informed the inclusion of various facilities in the contributions plan These elements will inform the design of the
Exercise planning controls to create	facilities that will be provided by contributions. These elements have informed the inclusion of
high-quality, inclusive, urban environments	various facilities in the contributions plan.
	These elements will inform the design of the facilities that will be provided by contributions.

Elements of Direction	Relevance to the contributions plan
Develop and advocate for plans that support safe and friendly	These elements have informed the inclusion of various facilities in the contributions plan.
communities	These elements will inform the design of the facilities that will be provided by contributions.

Direction 3 Generating Opportunity

This direction underlines the need for Council to support economic growth, including employment and investment options.

The community want:

- To attract more jobs and businesses to the area;
- To upgrade shopfronts;
- · Improved traffic management;
- · Small business to be supported

Council will:

Elements of Direction	Relevance to the contributions plan
Meet the challenges of Liverpool's growing population	This element informs the inclusion of various facilities in the contributions plan needed to accommodate the demand for infrastructure created by Liverpool's growing population.
Attract businesses for economic growth and employment opportunities	This element informs the inclusion of various facilities in the contributions plan needed to create an attractive environment to attract businesses.
Create an attractive environment for investment	This element informs the inclusion of various facilities in the contributions plan needed to create an attractive environment to attract businesses.
Advocate for, and develop, transport networks to create an accessible city	This element informs the inclusion of traffic facilities and bikeways to facilitate accessibility within Liverpool.

Direction 4 Leading through Collaboration

This direction highlights the importance of a Council proactively leading the community, while continually engaging the community to ensure an aligned vision.

The community want:

- More collaboration;
- Stakeholders who listen and actively seek out their opinions;
- To be led to achieve the best outcomes; and
- Well managed use of their resources.

Council will:	
Elements of Direction	Relevance to the contributions plan
Seek efficient and innovative methods to manage our resources	This element will inform the design and implementation of the facilities that will be provided by contributions
Increase community engagement	This element will inform the implementation of many facilities funded by contributions by involve engagement with the community prior to construction
Encourage community participation in decision-making	The contributions plan was adopted following public consultation in accordance with the EP&A Act
Strive for best practice in all Council processes	This element will inform seeking to implement best practice design of all infrastructure funded by this contributions plan
This suggests that additional developments the need for the following range of infra	ent in the Established Areas of Liverpool will generate astructure:
Infrastructure item	Need generated by

<u>Infrastructure item</u>	Need generated by
Community facilities	Residential accommodation
Recreation facilities	Residential accommodation
Traffic management facilities	Residential accommodation and non- residential accommodation
Bikeway links	Residential accommodation and non- residential accommodation
Water quality management facilities	Residential accommodation and non- residential accommodation

6. Residential Development

6.1 Community Facilities

Background

Residential redevelopment in the established areas will increase the demand for community facilities. Community facilities are typically Council-owned buildings which provide accessible and affordable space for a range of activities that benefit the community. Community facilities are a valuable community asset because they:

- Are a physical space where a range of information, services, programs and activities are delivered to the community, which can change over time;
- Provide an avenue for development of social capital, community involvement and community ownership – in short, agents of social inclusion;
- Are a location of cultural, leisure, educational, recreational and entertainment activities which are accessible to all;
- Are a cultural identity or focus for a community which may become a community icon, a community landmark, or historically significant; and
- Ensure equity of access for those of all ages, incomes, abilities and backgrounds.

Council has adopted a Community Facilities Strategy in 2017. The aim of this Strategy is to transform Liverpool City Council's ageing stock of community facilities into a world-class network of modern facilities that are attractive, flexible, address community need, and become a hub for community interaction — a focal point for community life. Three assertions may be made at the outset:

- Best practice indicates that older style, single purpose facilities are limited in their ability to support strong, connected communities;
- Owning and maintaining a large number of single-purpose facilities is not financially sustainable in the long-term and results in an inefficient use of resources; and
- Strong current and future population growth will place additional pressure on these facilities, necessitating a long-term vision for Council's community facilities.

There are a number of key strategies within the strategy. The most relevant for the Established Areas are:

- Consolidate ageing assets to provide new, modern facilities that benefit the broader community; and
- Plan for a work hub/small business incubator as part of a community hub.

In the Established Areas the strategy is to consolidate community facilities in larger multipurpose centres to maximise the best utilisation of the centres. District Community Centres have the capacity to accommodate a range of community activities across a number of neighbourhood areas. The multi-purpose design of these facilities ensures an efficient use of space. The design may include the provision of a large hall, kitchen, library, office space, and meeting rooms, which can be easily re-configured for meetings and activities subject to the requirements of the user.

The multi-purpose layout enables a range of functions to be provided simultaneously. This flexibility ensures that the facility has the capacity to easily respond to changing community

needs thus ensuring ongoing viability and utilisation. There is need for such space in established residential areas judging by regular requests from community organisations for permanent and sessional office accommodation with associated meeting spaces.

Additional residential development, although scattered across the Established Areas will contribute to the usage of these larger multi-purpose centres. Accordingly it is considered reasonable that new residential development contribute to the cost of establishing new or augmenting existing centres to create multi-purpose centres.

The Community Facilities Strategy suggests that a District Community Facility would service 20 - 50,000 people and would have a floor area of 1,500 - 2,500 sqm. A neighbourhood Community Facility would have a floor space 600 sqm servicing 8 - 10,000 people.

Libraries

There are already libraries servicing the established areas at Casula, Green Valley, Miller, Liverpool and Moorebank. However additional residential development in the Established Areas will increase the demand for lending of books from the library system.

Council levies residential development in its release areas for the provision of library items (items include books, audio-visual, multi-media and periodicals in conjunction with the construction of libraries. Council has been levying at the rate of approximately 1 book per person.

Redevelopment in the established areas will increase the demand for book lending in the library system. Books may take the form of hard copies or digital form. Accordingly new development in the established areas should contribute to the increase in the supply of books in the library system. It is a one-off capital cost. Council will bear the cost of replacement stock.

Cost of Facilities

The cost of a new community facility provides the basis of contributions for community facilities. The proposed Lurnea Community Facility has a proposed floor space of 1,100 sqm at a cost of about \$7M. Based on the Community Facilities Strategy referred to above it is estimated that .05 sqm of floor space is required per person. This equates to a cost per person of \$318. This is consistent with the estimated cost of provision of community facilities in the Austral Leppington North Precincts.

It is also estimated that the cost per library book or equivalent is \$53 per person.

The formulae for contributions is in Section 5.7.

Apportionment

The contributions only fund the additional demand created by additional development, taking into account changes in occupancy rates.

Location Criteria for Expenditure

As community facilities are expected to be provided on a District Basis it is proposed to maintain two catchments for District Community Facilities within the Established Areas although contributions for each will be the same. Expenditure on particular community facilities has not yet been confirmed. Accordingly funds collected in a particular catchment will be expended on a community facility within the catchment.

The catchments are shown in Figure 2 and also on the Infrastructure Map, which is at a larger scale.

6.2 Recreation Facilities

Background

Residential redevelopment in the Established Areas will increase the demand for public open space and recreational opportunities. Although there are already open space and recreation facilities within the Established Areas of Liverpool, infill development will increase the demand on the existing facilities. Much of the open space in the Established Areas is along the river corridors and which is flood liable.

Council plans to augment existing recreation facilities. Contributions will be used to provide additional capacity in response to the increase in demand arising from redevelopment. Council's Recreation Strategy will inform the priorities for expenditure of contributions received. Contributions will not reduce any existing shortfalls in the current level of embellishment.

It is proposed that works in the Established Areas consist of comprehensive projects rather than minor upgrades in order to avoid works that are replacement or maintenance works. It is also proposed that the scope of works be limited to particular types so as to avoid replacement or maintenance works. These restrictions are considered necessary as the plan provides flexibility on the location and content in the works schedule for the reasons stated in hereunder.

A park embellishment will involve a generic list of facilities that are not considered to be replacement or maintenance works. The list of works proposed for each park will of course vary depending on the circumstances of the locality. Accordingly each park embellishment will not be required to include all of the facilities.

Cost of Recreation Facilities

Contributions for recreation facilities are based on the embellishment of existing open space at the rate of 2.83 ha per additional 1,000 people, a standard often recognised by the Land and Environment Court. This is also consistent with Council's Recreation, Open Space and Sports Strategy

The costs are consistent with those in the Austral Leppington North Release Area, which is one of the most recent release areas in Liverpool.

It is estimated that the cost per person for embellishing open space is \$3,119.

The formulae for contributions are in Section 6.7.

Apportionment

The contributions only fund the additional demand created by additional development, taking into account changes in occupancy rates.

Location Criteria for Expenditure

The location criteria for augmenting recreation facilities are based on where development is estimated to take place. An estimate has been made as to the amount of development that will take place in various suburbs. This is considered the lowest order of detail that such forecasts can take place.

Unlike the release areas the location of redevelopment in the established areas is not as predictable. Accordingly the plan does not in many cases identify particular sites for recreation facilities. Instead it identifies the number of parks within each suburb based on likely development trends where recreation facilities could be upgraded. The particular

parks will be determined as development takes place. The rate at which the proposed number of parks is embellished will depend on the rate of development. If redevelopment is slower than forecast, the rate of embellishment of parks will also be slower. Likewise where redevelopment is faster than forecast, the rate of provision of parks will also be faster.

The location of an embellishment work may take place in the adjoining suburb depending on the circumstances. In some situations boundary between suburbs is not a barrier between the location of new dwellings and the location of facilities to serve the new dwellings. The intent of the boundaries is to ensure that contributions received from development are spent in a location to adequately serve the occupiers of that development.

While specific parks have not yet been identified over the period up to 2031 for embellishment works parks have been identified for both local and district facilities where expenditure may take place. These are identified on the Infrastructure Map.

District and Local Facilities

Higher level facilities such as active recreation and higher order passive facilities will be collected on a District basis in accordance with the areas shown in Figure 2. This will also allow meaningful amounts to be collected so as to fund useable embellishments.

Local level Passive Facilities will be collected by suburb or suburb groups in accordance with the areas shown in Figure 3. The catchments exclude the Liverpool City Centre, which is subject to Liverpool Contributions Plan 2018 - Liverpool City Centre.

The District and Local catchments are on the Infrastructure Map, which is at a larger scale.

The proportion of District and Local Facilities is based on the planning of the Austral and Leppington North Release Areas as follows:

- Local Passive Open Space embellishment 35%
- District Passive Open Space embellishment 25%
- District Sporting Fields embellishment 40%

District Active Recreation Facilities

Active recreation facilities include tennis, netball, basketball, pools and sports fields. It is considered that Active Recreation Facilities are at higher than a local or suburb basis and therefore are provided at a District Level. Their scope is limited to the following facilities.

- Amenities buildings
- Seating
- Mounding
- Flood lighting

The cost is based on those used for the Austral and Leppington North Release Areas and expressed in current figures.

District passive recreation facilities

District Playgrounds

Local passive recreation facilities

The scope of Embellishment is limited to the following facilities.

- · Additional and widened paths
- Bicycle paths
- BBQ facilities
- Playgrounds
- · Seating, benches and shelters
- Lighting
- Fencing
- · Planting to screen, beautify, control circulation paths, and provide shade;
- Earthworks: creating more useable areas by levelling/mounding and associated retaining walls or embankments

6.3 Traffic Management Facilities

Background

Residential redevelopment in the Established Areas will increase traffic on both the local street network and on classified roads. Amplification of classified roads is the responsibility of the NSW Government.

The width of the existing street network in the Established Areas is largely fixed being the result of subdivision for urban development. The increased traffic experienced on the local streets will be felt in the following ways:

- Increased pedestrian conflicts caused by decreasing gaps in traffic flow for pedestrians to cross and by increased pedestrian numbers caused by residential redevelopment;
- Increased queuing at intersections due to increased traffic movements;
- Increased turning movements at intersections and entrances to major developments due to increased traffic movements;
- Increased speeds;
- Increased demand for bikeway and footpath links caused by residential redevelopment;
 and
- Increased demand for bus shelters caused by residential redevelopment.

Bikeways and footpaths

There is an increasing need for bikeway and footpath links in residential, commercial and industrial areas. Council plans to augment the existing bikeway network to provide the missing links to enhance the use of these links. Council's Bike Plan and Footpath Strategy will inform the priorities for expenditure of contributions received.

Bus shelters

There is an increasing demand for bus shelters in residential, commercial and industrial areas. Council plans to augment the number of existing bus shelters. Council's Bus Shelter Strategy will inform the priorities for expenditure of contributions received.

Traffic Management Facilities

There is an increasing demand for facilities to manage traffic safety. Council plans to provide traffic management facilities such as:

- Roundabouts;
- Medians;
- Refuge islands;
- · Traffic signals; and
- · Minor intersection works.

Council's Traffic Facility Delivery Priority Program will inform the priorities for expenditure of contributions received.

Cost of Traffic Facilities

The cost of future traffic facilities in the Established Areas is as shown in Table 7:

Table 7 Cost of Traffic Facilities

Item	Location	Suburb	Description	Cost
Governor Macquarie Drive	Hume Highway to	Warwick Farm / Chipping	Widening from 2 to 4	
upgrade	Newbridge Road	Norton	lanes	\$4,688,814
Pedestrian Refuge	Webster Road	Prestons	Refuge	\$150,000
Kerb Return / traffic signals	Helles Av / Moorebank Av	Moorebank		\$300,000
Raised threshold	Charlton Av (Ascot- Wolverton Av)	Chipping Norton	Raised threshold	\$60,000
Intersection upgrade	Governor Macquarie Drive / Ernest Ave	Chipping Norton	Roundabout	\$250,000
Intersection	Williamson Cres / Lawrence Hargrave	Manusials Farms	Down dobowt	¢250,000
upgrade	Rd	Warwick Farm	Roundabout	\$250,000
Bikeway extensions	Established Areas		Shared path	\$2,000,000
				\$7,698,814

The figure for Governor Macquarie Drive Upgrade is an adjusted amount based an amount of \$55M divided by the total eventual population at 2036 of the Established Areas and Liverpool City Centre.

The formulae for contributions is in Section 6.7.

Apportionment

It is considered that the above formula provides appropriate apportionment of costs, whereby contributions are only funding the share of works in proportion to the additional development.

Location Criteria for Expenditure

It is considered that traffic facilities can be best expended on a District Basis rather than a suburb basis as this will allow sufficient funds to be collected to fund useable amounts. The catchments are shown in Figure 2 and also on the Infrastructure Map, which is at a larger scale.

6.4 Stormwater Quality Management Facilities

Background

Council is responsible for the management of stormwater quantity and quality to ensure developments within the Liverpool LGA are sustainable, water quality is improved and the ecological health of our waterways and wetlands are preserved. In the Established Areas the priority will be to improve stormwater quality discharges to the Georges River catchment.

This Water Quality Management Strategy is a key element of Council's water management planning process and provides a framework for undertaking water quality improvement projects in a coordinated manner. The Water Quality Management Strategy will inform the priorities for expenditure of contributions received.

Residential redevelopment in the Established Areas will increase the stormwater runoff and impact on stormwater quality.

Cost of Stormwater Quality Management Facilities

An assessment of the number of proposed Gross Pollutant Traps (GPT) that would manage stormwater discharge from residential development in the Established Areas was identified. A cost per GPT was identified, which provided an estimated total cost. A contribution per dwelling is determined when this total figure is divided by the estimated number of dwellings in 2031 in the Established Areas.

The estimated cost of the GPTs in the Established Areas is \$22,384,384 (109 x 204,100). This would equate to \$488 per dwelling based on the total number of dwellings in 2031).

The formulae for contributions is in Section 6.7.

Apportionment

The above formula spreads the total cost of the GPTs over all the existing and future dwellings up to 2031. In this way the future dwellings will only contribute their portion of the cost of the stormwater quality management.

Location Criteria for Expenditure

The required location for GPTs are determined largely by the natural layout of the creek and river system in the Established Areas rather than suburb boundaries.

Accordingly contributions will be expended on a District Basis. This will also allow meaningful amounts to be collected so as to fund stormwater quality management facilities. The catchments are shown in Figure 2 and also on the Infrastructure Map, which is at a larger scale.

6.5 Catchment Area Maps

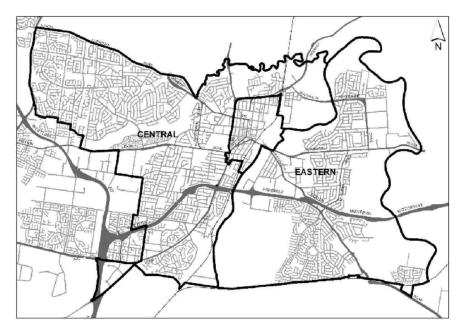


Figure 2 District Catchments (refer to the Infrastructure Map for detail on boundaries)

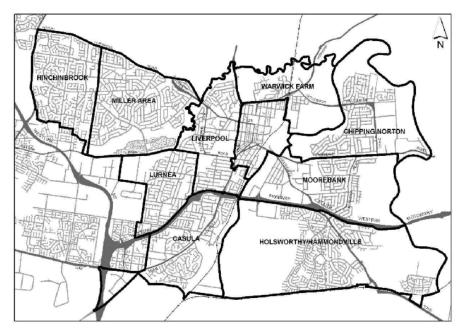


Figure 3 Local Catchments (refer to the Infrastructure Map for detail on boundaries)

6.6 Administration Costs

There are significant costs associated with administering funds of this magnitude. Both the plan preparation / review and implementation aspects of contributions are administered staff within Council. A core team of employees are engaged to provide support in coordinating such a process, as well as prepare status reports, review and relevant data, liaise with Council staff and external agencies.

In accordance with the directive of the NSW Department of Planning and Environment, the administration costs are comprised of those expenses relative only to those personnel directly responsible for the formulation and / or administration of a Contributions Plan. The cost per lot per year has been averaged across all of the Contribution Plan areas.

6.7 Contribution Formulae

The following formulae are used to calculate contributions in the Established Areas.

Community and Recreation Facilities

Residential accommodation and subdivision for residential accommodation (other than boarding houses, group homes, hostels, seniors housing)

Contribution per $\frac{C \times OR}{dwelling / lot} = 3.1$

where C = Cost of capital works per person

OR = Occupancy rate for lot size or dwelling type (refer to Table 4)

Boarding houses, group homes, hostels, seniors housing

Contribution = $C \times R$

where C = Cost of capital works per person

R = Number of residents in development

Transport facilities

Residential accommodation and subdivision for residential accommodation

Contribution Rate = \underline{C} x \underline{V} (per dwelling / lot) N 6.7

where C = Cost of capital works identified for the Established Areas

N = Estimated number of additional dwellings in the Established Areas in 2031 (refer to Table 4)

V = Vehicle trips per day for lot size or dwelling type etc. (refer to Table 8)

Table 8 Vehicle Trips per day per dwelling

<u>Dwelling Type or Lot Size etc.</u>	Vehicle Trips per day
Residential Subdivision Lots 450 sqm or larger	6.7
Residential Subdivision Lots smaller than 450 sqm	6.0
Residential accommodation (other than boarding houses, group homes, hostels, seniors housing)	
3 or more bedrooms	6.0
2 bedrooms	4.0
1 bedroom	3.3
Boarding houses, group homes, hostels, seniors housing (total development)	Total vehicle trips per day

Stormwater Quality Management Facilities

Subdivision for lots 450 sgm and over

Contribution Rate = $\frac{C}{N}$

where C = Cost of capital works identified for the catchment area

N = Total estimated number of dwellings in the Established Areas in 2031

All other residential accommodation

Contribution = Conventional Lot Contribution x 0.8 x Site Area (total development) 0.65 x 450

Where 0.8 = Runoff coefficient for Residential accommodation.

The relative impacts of different types of land development on any drainage system can be estimated by comparing the peak discharge rates of runoff that the different types of development would produce. The rational formula estimates the peak discharge rates by use of a runoff coefficient that is directly related to the proportion of a site that is impervious to rainfall infiltration.

Administration

The cost of administering contributions plans over the coming years has been estimated at 1.5% of the value of contributions.

6.8 Staging of Facilities

Council will construct facilities as the population threshold for their augmentation is reached unless a developer provides these. These will be provided, as funds become available.

Attachment 1

7. Non-residential Development

7.1 **Traffic Management Facilities**

Background

Non-residential redevelopment in the Established Areas will increase traffic on both the local street network and on classified roads. Amplification of classified roads is the responsibility of the NSW Government.

The width of the existing street network in the Established Areas is largely fixed being the result of subdivision for urban development. The increased traffic experienced on the local streets will be felt in the following ways:

- Increased pedestrian conflicts caused by decreasing gaps in traffic flow for pedestrians to cross and by increased pedestrian numbers caused by residential redevelopment;
- Increased queuing at intersections due to increased traffic movements;
- Increased turning movements at intersections and entrances to major developments due to increased traffic movements;
- Increased speeds:
- Increased demand for bikeway and footpath links caused by residential redevelopment;
- Increased demand for bus shelters caused by residential redevelopment.

Bikeways and footpaths

There is an increasing need for bikeway and footpath links in residential, commercial and industrial areas. Council plans to augment the existing bikeway network to provide the missing links to enhance the use of these links. Council's Bike Plan and Footpath Strategy will inform the priorities for expenditure of contributions received.

Bus shelters

There is an increasing demand for bus shelters in residential, commercial and industrial areas. Council plans to augment the number of existing bus shelters. Council's Bus Shelter Strategy will inform the priorities for expenditure of contributions received.

Traffic Management Facilities

There is an increasing demand for facilities to manage traffic safety. Council plans to provide traffic management facilities such as:

- Sub-arterial Roads;
- Roundabouts;
- Medians;
- Refuge islands;
- Traffic signals; and
- Minor intersection works.

Council's Traffic Facility Delivery Priority Program will inform the priorities for expenditure of contributions received.

Location of Expenditure

The catchments within which contributions will be kept for expenditure are shown in Figure 2 and also on the Infrastructure Map, which is at a larger scale.

7.2 Stormwater Quality Management Facilities

Background

Council is responsible for the management of stormwater quantity and quality to ensure developments within the Liverpool LGA are sustainable, water quality is improved and the ecological health of our waterways and wetlands are preserved. In the Established Areas the priority will be to improve stormwater quality discharges to the Georges River catchment.

This Water Quality Management Strategy is a key element of Council's water management planning process and provides a framework for undertaking water quality improvement projects in a coordinated manner. The Water Quality Management Strategy will inform the priorities for expenditure of contributions received.

Non-residential redevelopment in the Established Areas are likely to increase the amount of run-off in the existing stormwater systems and thereby increase the demand for stormwater quality management.

Location Criteria for Expenditure

The required location for GPTs are determined largely by the natural layout of the creek and river system in the Established Areas rather than suburb boundaries. Accordingly contributions will be expended on a District Basis in accordance with the areas shown in Figure 4. This will also allow meaningful amounts to be collected so as to fund useable embellishments.

The catchments within which contributions will be kept for expenditure are shown in Figure 2 and also on the Infrastructure Map, which is at a larger scale.

7.3 Expenditure of 1% levy

The 1% levy on Non-residential Development is to be expended on the following categories in the following proportions in Table 7:

Table 7 Proportion of expenditure

Item	%
Drainage	40%
Bikeways	7.5%
Bus shelters	2.5%
Traffic management	50%

7.4 Contribution Formulae

This plan authorises Council to grant consent to development to which this plan applies subject to a condition requiring the applicant to pay to the Council a levy in accordance with Table 10.

Table 10 Contribution Levy

Estimated cost of development	Value of Levy
Up to \$100,000	Nil
\$100,001-\$200,000	0.5% of the cost of the development
More than \$200,000	1.0% of the cost of the development

The proposed cost of carrying out the development will be determined in accordance with clause 25J of the *EP&A Regulation*. The procedures set out in Appendix 1 to this plan must be followed to enable Council to determine the amount of the levy to be paid.

The value of the works must be provided by the applicant at the time of the request and must be independently certified by a Quantity Surveyor who is registered with the Australian Institute of Quantity Surveyors or a person who can demonstrate equivalent qualifications.

Without limitation to the above, Council may review the valuation of works and may seek the services of an independent person to verify the costs. In these cases, all costs associated with obtaining such advice will be at the expense of the applicant and no construction certificate will be issued until such time that the levy has been paid.

7.5 Staging of Facilities

Council will construct facilities as the development threshold for their augmentation is reached unless a developer provides these. These will be provided, as funds become available.

Attachment 1

Appendix 1 Determination of cost of development

Clause 25J of the EP&A Regulation sets out how the proposed cost of carrying out development is to be determined. That clause provides as follows:

25J Section 7.12 levy—determination of proposed cost of development

- 1) The proposed cost of carrying out development is to be determined by the consent authority, for the purpose of a section 7.12 levy, by adding up all the costs and expenses that have been or are to be incurred by the applicant in carrying out the development, including the following:
 - if the development involves the erection of a building, or the carrying out of engineering or construction work—the costs of or incidental to erecting the building, or carrying out the work, including the costs (if any) of and incidental to demolition, excavation and site preparation, decontamination or remediation;
 - if the development involves a change of use of land—the costs of or incidental to doing anything necessary to enable the use of the land to be changed; and
 - if the development involves the subdivision of land—the costs of or incidental to preparing, executing and registering the plan of subdivision and any related covenants, easements or other rights.
- 2) For the purpose of determining the proposed cost of carrying out development, a consent authority may have regard to an estimate of the proposed cost of carrying out the development prepared by a person, or a person of a class, approved by the consent authority to provide such estimates.
- 3) The following costs and expenses are not to be included in any estimate or determination of the proposed cost of carrying out development:
 - a) the cost of the land on which the development is to be carried out,
 - b) the costs of any repairs to any building or works on the land that are to be retained in connection with the development,
 - c) the costs associated with marketing or financing the development (including interest on any loans),
 - d) the costs associated with legal work carried out or to be carried out in connection with the development.
 - project management costs associated with the development,
 - the cost of building insurance in respect of the development,
 - the costs of fittings and furnishings, including any refitting or refurbishing, associated with the development (except where the development involves an enlargement, expansion or intensification of a current use of land),
 - h) the costs of commercial stock inventory,
 - any taxes, levies or charges (other than GST) paid or payable in connection with the development by
 - the costs of enabling access by disabled persons in respect of the development,
 - the costs of energy and water efficiency measures associated with the development,
 - the cost of any development that is provided as affordable housing,
 - m) the costs of any development that is the adaptive reuse of a heritage item.

References

Community Facilities - A Blueprint for a Modern Network of Community Facilities

Bike Plan

Footpath Strategy

Traffic Facility Delivery Priority Program

Water Quality Management Strategy

Bus Shelter Strategy

Council's Traffic Facility Delivery Priority Program

Recreation, Open Space and Sports Strategy



Liverpool Development Control Plan 2008 Part 1 General Controls for all Development

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1. Preliminary

Applies to

This plan applies to all land in Liverpool Local Government Area (LGA). The plan is known as Liverpool Development Control Plan 2008.

Structure of Liverpool Development Control Plan 2008

Part 1	General Controls for all Development		
Part 2	2 Locality Specific Controls		
	Part 2.1	Green Valley (Subdivision of land)	
	Part 2.2	Hoxton Park, Carnes Hill and Prestons (Subdivision of land)	
	Part 2.3	Georges Fair Moorebank (Subdivision of land and residential development)	
	Part 2.4	Moorebank Defence Lands (Subdivision of land and industrial development)	
	Part 2.5	Middleton Grange (Subdivision of land and residential development)	
	Part 2.6	Holsworthy Station Area (Subdivision of land and residential development)	
	Part 2.7	Greenway Views (Subdivision of land and residential development)	
	Part 2.8	Voyager Point (Subdivision of land and residential development)	
	Part 2.9	Former Hoxton Park Airport (Subdivision of land)	
	Part 2.10	Moorebank East (Subdivision of land and residential development)	
	Part 2.11	Edmondson Park (Subdivision of land and residential development)	
	Part 2.12	Repealed	
	Part 2.13	Pleasure Point (Subdivision of land)	
	Part 2.14	Elizabeth Hills (Subdivision of land and residential development)	
	Part 2.15	New Brighton Golf Course (Subdivision of land, residential and golf course development)	

Part 3 Development in Residential Zones

Part 3.1	Dwelling houses in the R5 Zone
Part 3.2	Dwelling houses on lots greater than 400sqm in the R2, R3 & R4 zones
Part 3.3	Dwelling houses on Hatchet Shaped Lots
Part 3.4	Semi-Detached and Attached Dwellings in the R2 and R3 zones
Part 3.5	Dwelling houses on lots less than 400sqm
Part 3.6	Multi Dwelling Housing in the R3 & R4 zones
Part 3.7	Residential Flat Buildings in the R4 zones
Part 3.8	Non Residential Development in Residential Zones
Part 3.9	Boarding House Development

Part 4 Liverpool City Centre

Part 5 Development in Rural and E3 Zones Part 6 Development in Business Zones Part 7 Development in Industrial Zones

Adoption of Plan

This plan was made under Section 74C of the Environmental Planning and Assessment Act 1979 and Part 3 of the Environmental Planning and Assessment Regulation 2000.

The plan was adopted by Council on 28 July 2008. The plan came into force on 29 August 2008.

This plan was subsequently amended as follows:

Amendment No.	Trim Container	Date of amendment	Part(s) Amended
1	2008/1477	8 July 2009	Part 1.1, 1.2, 2.2, 2.5, 2.10, 2.11, 2.13, 3.1, 3.2 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 4, 5, 6 & 7
2	2008/0171	9 June 2010	Part 1.1 & 2.14
3	2009/1725	15 September 2010	Part 1.1, 1.2, 2.2, 2.3, 2.5, 2.7, 2.8, 2.9, 3.1, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 4, 5, 6 & 7
4	2010/0769	15 September 2010	Part 1.1 & 6
5	2010/1253	8 December 2010	Part 1.1 & 5
6	2011/6089	11 April 2012	Part 1.1, 1.2, 2.2, 2.3, 2.5, 2.8, 2.9, 2.10, 2.11, 2.14, 3.2, 3.3, 3.4, 3.5 & 6
7	RZ-9/2011	19 April 2013	Insertion of Part 2.15
Reformatted as	s part of Amendme	nt No 10	
10	2012/3187	19 February 2014	Merging of Parts 1.1 and 1.2, 2.3, 2.11, 3.3, 3. and 7.
9	2012/1606	4 April 2014	Part 3.1 and Part 5
16	2013/2409	18 June 2014	Part 5 and Part 7
13	2014/0925	2 July 2014	Part 1
12	2013/3913	25 July 2014	Part 1, Part 4 and Part 6
15	2014/1149	3 September 2014	Parts 2.2, 2.3, 2.5, 2.14, 3.1 and 7
14	2014/0929	12 November 2014	Part 2.11
17	2014/1508	1 April 2015	Part 5
20	2014/3813	26 May 2015	Part 1
21	2015/1066	8 July 2015	Part 1
18	2014/3695	19 August 2015	Part 2.11
19	2015/1050	9 September 2015	Part 1
22	RZ-4/2015	20 April 2016	Part 2.11
23	2016/1961	2 November 2016	Part 1
26	2014/1947	22 February 2017	Part 8
24	2016/3822	8 March 2017	Part 1.27
27	2017/0584	23 August 2017	Part 1.15
29	2016/1769	18 April 2018	Part 2.11
30	2006/0610	21 November 2018	Part 1.20
31	2018/3364	6 March 2019	Insertion of Part 3.9
32	2018/4071	20 March 2019	Part 1
33	2018/4049	17 April 2019	Part 1, 4 and 7
34	2019/0942	11 October 2019	Part 1
25	2016/2714	TBD 2020	Part 1 and 4

Liverpool Development Control Plan Part 1 Preliminary

Background

Council's Corporate Plan provides an overview of its Strategy for the Liverpool LGA. It also provides a framework for the objectives of this plan. The Corporate Plan is divided into the following strategic areas:

- The regional city for south west Sydney
- Neighbourhoods and villages
- the land between two rivers, where city and country meet
- Communities and governments working together
- A place for people
- Sustainability
- Improved organisational management and development

Liverpool Local Environmental Plan 2008

The Liverpool Local Environmental Plan (LEP) 2008 provides the broad land use controls for Liverpool LGA. It covers most of the Liverpool LGA. In some cases land will be covered by other planning controls such as a State Environmental Planning Policy or a Regional Environmental Plan. It is advisable to check the zoning of land prior to the use of the DCP.

Some planning controls are contained in the *Liverpool LEP 2008* rather than in the DCP. These are not part of the DCP for the purpose of the *Environmental Planning and Assessment Act 1979*.

State and Regional Planning Provisions

In some cases a *State Environmental Planning Policy* or *Regional Environmental Plan* may also apply to land. It is advisable to check the impact of this prior to use of the DCP.

Contributions

Council requires contributions from development to fund infrastructure needed to support that development. Part 2 of the DCP includes a number of new areas where land is converted from rural to urban. The maps that accompany each chapter in Part 2 show public infrastructure needed to support development in the area. Much of this public infrastructure is to be funded from contributions from development.

The extent and anticipated staging of development in an area, the scope and cost of infrastructure required to service it, and the cost to development for the infrastructure is embodied in the contributions plans, which is a companion document to the DCP and LEP.

For details on current contribution rates, please refer to Council's web page at, www.liverpool.nsw.gov.au.

Standards in the Liverpool Development Control Plan 2008

Any variation to the standards in the DCP that will apply to a development will need to be justified before Council can consider any variation.

1.1 The Vision of Liverpool Development Control Plan 2008

Background

Liverpool Directions provides the background for Council's Management Plan, Liverpool Local Environmental Plan 2008 and forms the framework for the vision for Liverpool Development Control Plan 2008.

Liverpool Development Control Plan

Preliminary

The NSW Government's Sub Regional Plan for South West Sydney provides the context for Council's guiding document Liverpool Directions.

Change

Liverpool will experience significant growth as a result of Sydney's growth. This will involve creation of new suburbs as well as redevelopment in existing suburbs.

Some areas in Liverpool will experience substantial change over a short period. These include the new residential suburbs that were previously rural areas. Areas around Liverpool City Centre and some other centres will also experience substantial change with redevelopment. Other areas will also experience more gradual redevelopment, which will nevertheless bring change.

Liverpool Development Control Plan 2008, in conjunction with Liverpool Local Environmental Plan 2008 aims to manage this change so that any change, which is inevitable, will make Liverpool a better place.

The Vision

Liverpool – A highly connected and vibrant City, with a strong City Centre supported by a hierarchy of neighbourhood and local centres. Identified as one of five Regional Cities for Sydney, Liverpool will experience rapid population and employment growth.

Liverpool Development Control Plan 2008 will guide this growth to ensure high quality and sympathetic urban development outcomes are achieved, significant environmental land is protected, appropriate open space is provided and the rural character outside the Growth Centres will be maintained and enhanced.

The Future

- There will be new suburbs in Liverpool. These will have leading urban design outcomes for both individual developments and public areas that will be created.
- 2. Some existing localities, particularly Liverpool City Centre, will experience significant change through substantial redevelopment, although largely within the existing street pattern. There will be increased development that will result in a different but improved urban design outcome for the locality, which enhances the local amenity. It will also create opportunities for improved public spaces.
- Other suburbs will experience more gradual redevelopment. New development will have an urban outcome that will be compatible with existing development.
- Liverpool City Centre will be the Regional Centre for employment, health, education, recreation and cultural life.
- High quality medium and high density infill development will occur in a targeted manner along public transport routes near shops, which will provide greater choice for all people as to what type of housing that they want, and enable greater access to public transportation.
- There will be a concentration of activities such as shops, community, health, high
 density housing around local centres in new and existing suburbs. Local centres
 will be enhanced with shop-top housing, which are apartments above these shops.
- Local centres in new and existing suburbs will have active and attractive street frontages, including out of hours.
- Centres in new suburbs will be designed to be public transport user friendly. Centres in existing suburbs will become more public transport user friendly as they redevelop.
- New suburbs will have attractive landscaped streetscapes while existing areas will have improved streetscapes as development takes place.
- New suburbs and redevelopment in existing suburbs will be compatible with adjoining creeks, parkland and major transport corridors.
- 11. There will less development that is subject to risks such as flooding, salinity etc.

9

- Development in new and existing suburbs will assist in making creeks and rivers attractive and clean.
- 13. Development in new and existing suburbs will preserve attractive natural areas.
- Development in new and existing suburbs will contribute to a clean and sustainable environment.
- Development in new suburbs will provide attractive and easily accessible open space.
- 16. There will continue to be open space linked along creek networks.
- 17. New development near the Georges River will allow access to the foreshore.
- 18. Development in new suburbs will have attractive and efficient transport corridors. Redevelopment in existing suburbs will improve the attractiveness and efficiency of existing transport corridors.
- Development in new and existing suburbs will allow for good safe access to cycle and pedestrian ways.
- 20. There will be a sense of community
- 21. Conflict between land uses will be minimised.
- New industrial areas will be attractive. Redevelopment in existing industrial areas will improve the amenity of these areas.
- 23. Industrial/Employment areas will provide employment and provide sufficient space for local and start-up industry with some ancillary land uses to service the local workforce.
- 24. New industrial areas will be easily serviced and accessible. Redevelopment in existing industrial areas will improve the serviceability and accessibility of these areas.
- Rural areas will keep a high level of rural amenity, with new development sympathetic and appropriate to the locality.

1.2 The Objectives of Liverpool Development Control Plan 2008

The objectives of this DCP are:

- a) To provide more detailed provisions for regulating the carrying out of development.
- b) To protect and improve the natural environment in the City of Liverpool.
- c) To protect and improve the amenity of the City of Liverpool.
- To protect personal safety and to minimise the risk of damage to areas subject to environmental hazards, particularly flooding.
- e) To promote a high standard of urban and environmental design.
- f) To conserve, protect and enhance the environmental heritage of the City of Liverpool.
- g) To encourage a diversity of housing to meet the needs of the residents of the City of Liverpool.
- h) To facilitate development that is environmentally sustainable.

There are also additional specific objectives for each section of each part of the DCP.

2. Tree Preservation

Applies to

This section applies to applications to remove trees with or without a development application for a development and involves:

- a) Any perennial plant that has a:
 - Height greater than 3.5m and/or
 - Canopy spread of greater than 4m and/or
 - Primary trunk diameter greater than 400mm when measured 1m above the existing ground level of the tree.
- Any tree that forms part of a heritage item or is situated within a heritage conservation area.

This section does not apply to:

- a) Any species, populations or communities listed under the provisions of the Threatened Species Conservation Act (TSC) 1995; or their habitats.
- b) Any plant that is on the Noxious Weeds Register for Liverpool City Council or listed in Appendix 3. (These plants must be removed, and destroyed in a way to ensure that they do not spread. It can be an offence to leave a noxious weed on a site.)

Background

Trees provide a natural amenity and appeal to urban environments. They are an integral part of built and natural landscapes and perform a key role in recycling oxygen, energy and important soil nutrients within ecological systems. They provide many benefits by reducing climatic extremes, improving air quality and providing habitat, which supports much of life on earth. Insects, birds, frogs and mammals and including familiar wildlife such as parrots and possums are attracted to the areas where we live.

Consequently, tree preservation is an important consideration for urban dwellers and Council. This DCP and Council's Tree Preservation Policy will help ensure these values are preserved for the future. The DCP overrides any inconsistency between these two documents.

Any proposal to prune or remove a tree located on private property requires development consent from Council. Legal action may be taken against any person in either the Local Court or Land and Environment Court who fails to obtain consent prior to pruning or removing a tree.

<u>Objectives</u>

- To ensure the protection of trees that are contributing to the ecological and aesthetic values of the Liverpool LGA.
- b) To protect the integrity of heritage items through preservation of all trees occurring within the heritage place, precinct or land.
- To ensure trees are maintained in an appropriate manner as not to cause harm or damage to the tree or community.
- To ensure that construction works and the ultimate design treatments protect the identified trees.
- To ensure that trees that provide high ecological or amenity benefits are protected wherever possible.

Controls

 Any approvals to remove or prune trees issued with a development consent shall lapse when the development consent lapses or becomes invalid or void.

- 2. An application to remove a tree may be refused by Council if the tree:
 - Form(s) a prominent part of the streetscape
 - Stands alone and is thus of more significant than if it were part of a group of
 - Is of historic or cultural significance or is/are registered on any Council register of significant trees.
 - Is prominent due to its height, size, position or age.
 - Is a locally indigenous, rare or endangered species.
 - Provides a significant visual screen
 - Is part of an important habitat for wildlife
 - Is part of remnant or riparian vegetation
 - Can be effectively treated by applying appropriate remedial treatment such as pruning of branches, pruning of roots and removal of deadwood or by other appropriate action as recommended by an arborist.
 - Is listed under the provisions of the Threatened Species Conservation Act 1995. (Listed as a threatened species, is habitat to a threatened species or is part of a threatened ecological community).

Note: Council may refuse an application to remove a tree(s) but may give conditional consent for the appropriate remedial "branch or root pruning" for that tree(s).

- 3. An application to remove a tree may be consented to by Council if the tree:
 - Has sustained severe damage, e.g. from wind, lightning, flood or impact from a vehicle, and cannot respond to remedial treatment.
 - Causes or is likely to cause structural damage to property including any building or pipeline, only if the damage cannot be contained by appropriate pruning of the tree's roots and installation of a root barrier.
 - Is causing an allergic reaction in any local resident, and the reaction has been certified in writing by a medical allergy specialist.
 - Causes considerable overshadowing to dwellings (restricts potential sunlight penetration to habitable rooms to under three hours per day).
 - Obstructs the line-of-sight for motorists and presents dangerous traffic conditions.
 - Is essential to mitigate a fire hazard.
 - Is dead, dying, or has become dangerous.
- 4. Applications for trees that have Aboriginal markings and/or constitute an item of Aboriginal significance shall be referred to the NSW Department of Environment and Climate Change (DECC). Intensive management options such, as fencing or buffer provisions will be considered to ensure adequate preservation.
- Any pruning shall be undertaken in accordance with AS 4373/2007 Pruning of amenity Trees.
- All existing indigenous trees shall be retained or replaced. Where approval is given to remove trees, appropriate replacement planting will be required.
- Significant trees that are identified as having habitat value shall not be relocated or removed.

Landscaping and Incorporation of Existing **Trees**

<u>Applies to</u>

This section applies to land, which will need to provide landscaping or retain existing trees as part of a development.

Background

Vegetation is an integral part of the environment, with the type and quantity of vegetation provided being one of the key influences in determining the quality and character of Liverpool's urban and rural environments. Many urban and even rural environments have been largely cleared of trees and shrubs. The provision of landscaping is a step to reintroduce vegetation into these environments in a way that complements the built environment.

Landscaping provides visual interest and amenity, provides recreation areas, and assists in managing the climate of the built environment. The use of existing vegetation assists with the provision of landscaping. In particular native trees in urban and rural environments have many valuable functions:

- Soften the visual impact of large-scale developments and increased densities.
- Assist in managing the climate of the built environment
- Supports native plants and animals by providing habitat.
- Add to aesthetic and environmental values
- Serve as a natural screen to the sun, wind and noise.

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants, neighbours and the public domain. Landscape design builds on the existing site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Objectives

- a) Promote landscape planning and design as part of a fully integrated approach to site development.
- b) Assist in improving the climate of the local environment.
- c) Retain as many existing trees as possible.
- d) To provide habitat for locally indigenous plants and animals and contribute to
- e) To encourage landscaping that is appropriate to the natural, cultural, built and heritage characteristics of its locality.
- f) Improve the amenity of developments and adjoining areas by ensuring proposals adequately complement the proposed building forms and surrounding streetscape.
- g) Ensure that the proposed landscape designs provide functional attributes such as privacy, shade and wind protection, while discouraging the opportunity for crime and vandalism

3.1 Retention of existing on site trees

Controls

- Existing trees and native vegetation are to be retained, protected and incorporated into the development proposal. This is particularly important for vegetation which forms part of a ridgeline tree canopy and in foreshore and riparian areas (with the exception of weed species).
- Prior to the commencement of the design of a development existing trees should be identified. The design of a development should consider options to retain existing trees.
- Existing indigenous trees within any building setback should be retained where
 possible, as an integral component of the site's landscaping, and to protect local
 habitats
- 4. It is important that all plans accompanying the development application including engineering and hydraulics plans are consistent with the landscape plan. This is particularly important where trees are to be retained. For example storm water lines and excavation should not be within the drip line of trees to be retained.

Note: Where trees are located outside the normal building envelope for a development, Council will give particular attention to the retention of those trees.

The following shows some ideas for retention of existing on site trees.

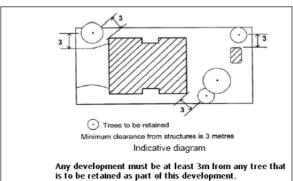


Figure 1 Retention of trees

3.2 Retention of existing street trees

Controls

- Prior to the commencement of the design of a development existing street trees should be identified. The design of a development should consider options to retain existing street trees.
- The design and location of access driveways should wherever possible be located to avoid removal of any existing street trees.

Protection of existing trees during construction

Controls

- Trees nominated for protection must be enclosed within a 1.8m high protection fence that is installed to conform to a Tree Protection Zone (TPZ) that is consistent with current Arboriculture industry standards
- 2. A report which outlines the condition, dimensions and species of existing trees contained within a development site is to be included as part of any development application documents and is to be accompanied by a Tree Retention Management Plan which shows the dimension of any proposed TPZs and outlines any other protection/enhancement methods that are appropriate to encourage the viable
- All reports pertaining to trees on development sites are to be prepared by a suitably qualified person.

3.4 Landscape Specifications

Controls

- Landscape planting should be principally comprised of native species to provide an integrated streetscape appearance. Species selected in environmentally sensitive areas should be indigenous to the locality. However, Council will consider the use of deciduous trees in small private open space areas such as courtyards for control of local microclimate and to improve solar access. Environmental and noxious weeds in Liverpool shall not be used in the landscape design
- 2. The landscaping shall contain an appropriate mix of canopy trees, shrubs and groundcovers. Avoid medium height shrubs (0.6-1.8 m) especially along paths and close to windows and doors.
- Landscaping in the vicinity of a driveway entrance must not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
- 4. Trees, which are planted around high use facilities such as car parking areas, children's, play areas and walkways should have clean trunks to a height of 1.8m.
- All topsoil used shall be sourced from a recognized commercial topsoil supplier. Site topsoil will only be considered suitable where the material has a high organic content. The consultant shall inspect and approve all top soiling prior to commencement of planting and application of mulch. An imported light and free draining topsoil mix is to be used in all planters.
- 6. The following minimum topsoil and mulch depths are to apply:

Garden beds Turfed areas 750mm Mulch over garden beds

7. Trees shall be planted well clear of underground services or overhead wires. Trees shall be planted in general accordance with the following minimum distances from buildings:

- Small trees less than 6m mature height - Medium trees 6 - 15m mature height - Large trees more than 15m mature height

Refer to Appendix 2 for the Preferred Species.

- 8. To maintain tree health, all trees in lawn areas are to have a 75mm deep x 1m diameter layer of mulch around its base. The mulch layer is to be reduced in depth directly around the base of the stem to form a shallow watering dish. The tree is to be staked well clear of the root ball and tied using Hessian ties as required.
- 9. All approved landscaping must be maintained at all times to the satisfaction of Council.
- 10. All trees are to be planted at not less than 45 litre pot size
- 11. Use low water/low maintenance plant selection by selecting drought tolerant species.
- 12. Applicants need to demonstrate that plant selection is suitable for the particular soil type of the site and comply with any site constraints such as Bushfire Prone Land.
- 13. Where possible, all landscaping designs should incorporate permeable paving options. Permeable paving includes the use of porous paving units, ornamental gravel and paving on a compacted sand bed. Permeable paving ensures that air and water is made available to tree roots while providing a safe and stable pedestrian surface and around trees. Benefits include:
- Ensuring that air and water are available to tree roots to ensure healthy and secure growth.
- 15. Assisting in the protection of established trees where the root system extends beyond the drip line.
- 16. Reducing the amount of surface water runoff entering the stormwater system.
- 17. Maintaining the existing natural drainage patterns
- 18. All landscaping should consider soil salinity. Sites identified as having moderate to high levels of salinity shall incorporate the following measures in the landscape plan:
- 19. Selection of salt tolerant plant species (generally natives).
- 20. Use mulch in all gardens beds
- 21. Minimise large areas of lawn, as this requires large quantities of irrigation.
- 22. Use "water-wise" garden and landscape design.
- 23. Plant large native trees and shrubs.

4. Bushland and Fauna Habitat Preservation

Applies to

This section applies to:

- a) All land, which contains or is adjacent to bushland.
- All land that contains known or potential habitat for threatened species, populations or communities
- c) Any Land zoned:
 - W1 Natural Waterways
 - SP1 Drainage
 - Land shown on the Environmental Significant Land Maps of the Liverpool LEP 2008
 - E2 Environmental Conservation
 - E3 Environmental Management
 - Any land under the definition of a waterbody in the Liverpool LEP 2008.
- d) Development that has potential to directly or indirectly destroy or adversely affect bushland.

Backgroung

Bushland provides a variety of positive values to an urban area, including education, conservation, scientific and aesthetic values. It consists of native groundcovers, shrubs and trees that combine to produce a community that provides habitat for fauna. In many areas only a small number of native species remain and their health and existence are increasingly threatened by urban development.

As well the positive contributions at a local level to the urban and rural environments, bushland preservation contributes to total catchment health and preservation of biodiversity.

<u>Objectives</u>

- a) To protect and manage natural assets in association with the development of land
- b) To conserve the natural heritage of Liverpool.
- c) To maintain and improve the amenity and scenic qualities of Liverpool.
- d) To maintain and enhance the biodiversity and natural ecology of Liverpool.

Controls

- Bushland, particularly that identified as a threatened community or habitat for a threatened species shall be substantially retained and incorporated within a development. Clearing of bushland in association with any development shall be limited to the extent necessary to facilitate the safe and orderly use of the land.
- Where impacts on threatened biodiversity are unavoidable, offsetting utilising the NSW Government BioBanking Scheme will be required where practicable.
- Where bushfire management measures are required that involve clearance or alteration to bushland, details of proposed measures shall be submitted. Clearing for the purposes of bushfire management involving a substantial loss of bushland shall not be permitted.
- Prior to the commencement of the design of a development, existing bushland and fauna habitat should be identified. The design of the development should consider retention of this bushland and fauna habitat.

- Development shall not adversely impact on the long term viability of bushland. Existing connectivity and contiguity of bushland stands and fauna corridors shall be retained.
- Where a proposal is likely to adversely impact on bushland, a Vegetation Management Plan (VMP) for the conservation of the bushland shall be submitted. The VMP shall be undertaken in accordance with pertinent NSW Office of Water Guidelines.
- Any imported soils and/or mulches used shall be purchased from an appropriate supplier and be free of contaminants, seeds, propagules of weeds and undesirable species. Mulch shall not be used on flood liable land and/or areas where it is likely to be washed away.
- 8. Any proposed re-vegetation shall:
 - Augment remaining bushland
 - Consist predominately of species which occur naturally on the site or are of local provenance.
 - Reflect the structure of natural bushland.
 - Be undertaken in accordance with a vegetation management plan which forms part of the consent.
- Any proposed re-vegetation, seed collection and weed removal to be undertaken as part of the implementation of the approved vegetation management plan shall be undertaken by an appropriately qualified and licensed bushland restoration contractor.
- Council may require measures to restrict access to bushland areas where it considers necessary, to ensure the conservation of bushland.
- 11. A flora and fauna assessment is required where a site is identified as containing native vegetation or habitat for threatened flora or fauna. The flora and fauna assessment shall consider all impacts associated with the development on the habitat, including the impacts of APZ's and water management practices. Flora and Fauna Assessments should be prepared in accordance with pertinent NSW Office of Environment and Heritage survey and assessment guidelines. The assessment must be prepared by a suitably qualified person.

5. Bush Fire Risk

Applies to

This section applies to:

- Land identified as being Bushfire Prone Land or designated as Bushfire Prone Lands Buffer Zones on Liverpool City Council Bushfire Prone Land Maps.
- 2. All land that requires bushfire hazard reduction (burning).

Background

The desire to live close to nature means that many homes are built in areas that are at risk of bush fire. The NSW Rural Fire Service advises that 80% of homes destroyed by bushfire are built within 100m of bushland.

Council maintains many areas of bushland and reserves systems. As development continues to expand throughout the southwest there is an increasing number of developments encroaching or in close proximity to areas of bushland and are subsequently placed at bushfire risk.

Adequate planning and construction provisions need to be implemented and maintained to ensure the protection of developments in bushfire prone areas. Bushfire hazard maps have been developed by Bush Fire Risk Management Committees to assist in identifying areas of low, moderate and high bushfire hazard, based upon the surrounding vegetation and topography of the area.

It should be noted that despite planning and construction provisions to protect developments from bushfire risk, these would not guarantee the lifetime safety of the development though it will assist in minimising the severity of the risk.

Objectives

- To reduce the possible loss of life or property in the event of a bushfire and provide a safer environment.
- To ensure that development in bushfire prone areas is accessible by emergency services at all times.
- c) To ensure that development in bushfire prone areas is designed to enhance the survivability of the building and is prepared for its defence in the event of a bushfire.
- Implement an ongoing maintenance regime to manage surrounding vegetation and asset protection zones to reduce possible bushfire fronts and protect the development.
- To ensure that Asset Protection Zones (APZ) do not have a significant impact upon biodiversity.

Controls

- Construction of single dwellings on or adjacent to bushfire prone land is to be carried out in accordance NSW Rural Fire Service's Single Dwelling Application Kit
- All development shall comply with provisions of the Rural Fires and Assessment Act 2002 and Planning for Bushfire Protection 2006.
- Asset Protection Zones shall be provided within the boundary of the land on which a development is proposed but may include public streets located between the land and bushland.
- Development controls which shall be addressed to ensure bushfire risk is reduced include the following.

- Clearing for the purposes of bushfire management shall not be permitted where loss of bushland is deemed to be unacceptable by Council in terms of quantitative and qualitative aspects.
- Where development requires bushfire management measures involving clearance or other alteration to bushland, details of proposed measures shall be submitted with a development application.
- Asset Protection Zones are to be placed primarily within the Residential zones. APZs shall not be located on land in the E1, E2 or E3 zones, particularly where altering these lands to create an APZ may conflict with the LEP objectives. Key aspects of an APZs are illustrated below.
- 5. The key components of APZs are illustrated below in Figure 2.

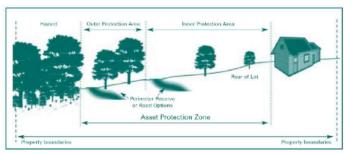


Figure 2 Key Components of an APZ (NSW Rural Fire Service 2002)

- The APZs are to be placed as restrictions on the burdened allotments. No habitable
 or storage structures are permitted within those zones. Developments permitted in
 these zones include cycleways, footpaths, children's playgrounds and gas
 barbeques.
- 7. APZs shall be combined with active recreational uses where possible.
- 8. APZs may be landscaped with native grassland species that occur naturally on the site or on surrounding lands.
- Minimal quantities of combustible materials shall be stored within inner protection zone.
- 10. New subdivisions in bushfire interface areas shall include a perimeter road.
- 11. A perimeter fire trail instead of a perimeter road may be acceptable where:
 - The perimeter fire trail is located on an east facing slope.
 - A small subdivision is being added to an existing urban area, where the pattern
 of development does not allow for a perimeter road.
 - Adequate arrangements are provided for ongoing maintenance of the perimeter trail.
- Development shall be located to minimise the risk of loss of life and property from bushfire.
- 13. Development applications relating to land identified on the Bushfire Prone Land Map shall be accompanied by a bushfire hazard assessment report prepared by a suitably qualified professional.
- Any development in a bushfire interface area shall not reduce the effectiveness of any existing APZ.

- 15. The APZ shall be located and designed to allow ongoing maintenance to be readily carried out by the responsible landowners or occupiers.
- 16. Hazard reduction (burning or mechanical) proposals shall be in accordance with the Liverpool Bush Fire Risk Management Plan and the Bush Fire Environmental Assessment Code. Landowners wishing to undertake hazard reduction shall contact the NSW Rural Fire Service (NSWRFS) for any requirements. Applications to undertake hazard reduction will be assessed by the NSWRFS.
- 17. Guidelines for hazard reduction include:
 - As far as possible, the frequency, time of year and intensity of any hazard reduction burning in native vegetation is to approximate the natural regime.
 - Periodic weed monitoring and control shall be undertaken after bushfires and hazard reduction burning, and appropriate action taken as necessary.
 - All Asset Protection Zones shall be provided within the boundary of the subject land. National Parks, Crown Reserves, water catchments, easements, Council managed reserves and riparian corridors shall not be considered as part of Asset Protection Zones.

6. Water Cycle Management

Applies to

This section applies to all developments, which involve additional buildings or hard surface areas.

It does not involve on site disposal of sewage. Refer to Section 15 – On Site Sewage Disposal.

Background

Stormwater has the potential to cause loss of life, serious property damage, erosion and sedimentation. The management of stormwater is however part of a larger management of the water cycle. This management not only includes managing stormwater events, the quality of rainwater runoff, erosion and sedimentation but also the use of rainwater to supplement reticulated water supplies. The management of the water cycle has its impacts on the design of developments.

Objectives

- a) To ensure that there is no adverse impact from stormwater runoff on downstream properties as a result of development in the catchment for all storm events up to and including a 100-year ARI event.
- b) To collect and use rainwater from roof tops to reduce town water consumption.
- c) To ensure adequate drainage is provided for developments.
- d) To protect properties from localised flooding.
- e) To prevent contaminated run-off from entering watercourses.
- f) To minimise erosion and reduce the volume of waste water entering waterways.
- g) To minimise sedimentation and pollution in waterways and drainage systems.
- <u>h</u>) To maintain and enhance the quality of natural water bodies such as creeks, rivers and groundwater.
- i) To reduce cost of providing and maintaining water infrastructure.

h)

6.1 Gravity Drainage to Council's drainage system

Applies to

This sub-section applies to development, which drains to a drainage system constructed by or on behalf of Council. This includes drainage to the pipe system, constructed drains, detention basins and constructed swales.

Controls

Stormwater runoff shall be connected to Council's drainage system by gravity means. Mechanical means (i.e. pump) for disposal of stormwater runoff will not be permitted except for basement car parks. Charged systems will not be permitted.

Pumped stormwater including seepage water from basement carpark shall be disposed by providing appropriate infiltration system within the site or shall be connected to the nearest stormwater pit. Pumped water is not permitted to connect to kerb of the street.

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Liverpool Development Control Plan

Water Cycle Management

Easements to drain stormwater

- The acquisition of drainage easements over downstream properties will be required where direct access is not possible to Council's drainage system (i.e. street kerb and gutter, piped system or open channels and watercourses).
- All costs associated with the value of land and easement creation are to be borne by the developer.
- 3. Written consent for the piping and acquisition of an easement is to be obtained from adjoining owners and provided to Council at the time of lodging the Development Application. Inability to provide a gravity stormwater drainage system and easement to drain water in favour of the development site will prevent the granting of Development Consent. Creation of easement(s) shall be completed prior to the issue of the Construction Certificate.
- Where negotiations between a developer and a downstream property owner have failed to obtain an easement, an easement may be granted via the Land and Environment Court.
- 5. Exception to acquiring an easement may be given for sites that do not drain to the street, only where extensions to an existing residential building or replacement of an existing house or dual occupancy is proposed, and genuine attempts at acquiring a downstream easement have failed. Written documentation of these attempts, including reasonable financial consideration, must be included for any application for exemption. If an exception is granted an alternative drainage system may be considered by Council.

Stormwater Drainage Concept Plan (SDCP)

For developments that require construction of stormwater drainage, a SDCP shall be submitted with the Development Application demonstrating the feasibility of the proposed drainage system within the site and connection to Council's system. Early consultation between engineers and architects is required to reduce possible conflicts in the final plan.

Visual impact

All drainage structures and storage areas are to be designed to be visually unobtrusive and sympathetic with the environment. This requirement is necessary to help ensure that future occupants do not adjust or remove facilities for aesthetic reasons without understanding the functional impact of such actions.

Surface flow Paths

- Surface flow paths, including the provision of an emergency overflow to cater for blockage of the system or flows in excess of the 100-year ARI storm flow must be provided.
- The flow route must be capable of carrying the flows generated by a 100-year ARI storm with a freeboard of 300mm to the adjacent habitable floor levels of the development site and adjoining properties.
- Development must not cause any adverse impact on adjoining or any other properties. This includes maintaining surface flow paths and not increasing water levels in these flow paths. Diverting flows from one catchment to another will not be permitted.

Runoff from adjacent properties

Surface runoff from upstream properties shall not be allowed to enter OSD systems. On Site Detention systems must not be located in overland flow paths, which convey catchment flows through the site.

Floor and Ground Levels

All habitable floor levels are to be a minimum of 300mm and garage/non habitable floor levels to be a minimum of 150mm above the maximum design storage water surface level and flow path levels.

On-Site Stormwater Detention

- On-Site Detention (OSD) systems provide temporary storage of stormwater runoff from developments and restrict discharge from the site at a rate which council's existing drainage system is capable of accommodating.
- 2. OSD may only be used where:
 - The existing or proposed stormwater pipe system that is unable to cater for the increase in discharge due to development.
 - The development will involve an increase in impervious area on the site.
 - It is intended to connect stormwater directly to the street kerb and gutter only and the discharge exceeds 20 litres per second for the 10-year ARI.
- 3. OSD will not be required where:
 - The increased discharge for all storms up to and including a 100-year ARI can be accommodated by the existing stormwater pipe system.
 - A building addition or internal alteration is within the footprint (plan area) of the existing building.
 - The additional impervious surfaces (e.g. roof, driveway, paving) total is less than 30sqm in plan area. (NOTE: the designer is advised to confirm with council engineer first to ensure the cumulative total of previous and future additions still remain less than 30sqm, otherwise OSD will apply).
 - The sub-division of an existing development does not change the buildings or the impervious areas of the site.
 - Sites substantially inundated by flooding.
 - The development contributes funds to a major basin strategy that mitigates the impact of the increased impervious area and there are no other local drainage issues requiring OSD.
- 4. Calculations shall account for the total development site area.

Refer to Council's On Site Stormwater Detention Policy and Design Specification.

6.2 Gravity drainage to a creek system

Applies to

This sub-section applies to development, which drains to a natural creek or river. It does not apply to development, which drains to a constructed swale or other similar drainage work.

Controls

All buildings shall be setback a minimum of 40m from the top of the bank of a creek or river, subject limitations imposed by flooding or Foreshore Building Lines.

Nutrient loading/effluent

Depending on the proposed use there may be a need to provide a permanent water quality basin to minimise any contaminated runoff.

Frosion protection of creek banks

All outlet structures discharging to a creek system shall provide scour protection and energy dissipaters.

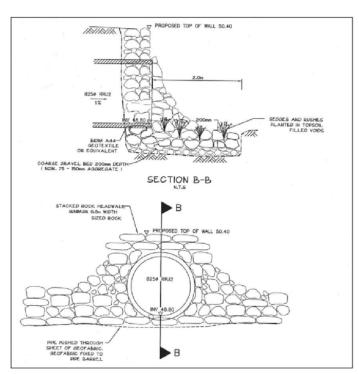


Figure 3 Discharging to a creek system

For more information on water cycle management please refer to Council's Stormwater Design Specification

6.3 Gross Pollutant Traps

Applies to

This sub-section applies to:

- a) Development on land within a Business or Industrial zone
- Development on private land that includes the construction of car parks or other significant impervious areas where there is a potential for the generation of gross pollutants
- c) Locations where gross pollutant traps are required elsewhere in this DCP

Background

Stormwater runoff has the potential to mobilise significant quantities of gross pollutants or sediment from a development and deposit this pollution in local waterways. This pollution can significantly impact on waterways in terms of aesthetics, damaging plants, destroying the environment / habitats and introducing chemical water quality pollutants.

Objectives

- To prevent the transportation of gross pollutants and sediment from a site by stormwater runoff during the operational stages of a development.
- b) To install gross pollutant traps or utilise equivalent water sensitive urban design treatment train prior to discharge of stormwater from a site.
- To require developments to capture or prevent the generation of gross pollutants and sediment on site and at their own cost.
- d) Ensure that any gross pollutant traps on Council land are installed in accordance with a master plan or water cycle management plan to the satisfaction of Council.

<u>Controls</u>

- A minimum of one gross pollutant trap shall be required between the last downstream stormwater pit or pollution source and prior to discharge from the site.
- 2. Gross pollutant traps shall not be located within the banks of watercourses or within riparian zones
- Where a valve is required to isolate a site during a pollution spill, consideration shall be given to the location of the valve in relation to gross pollutant traps.
- The design of the gross pollutant trap shall comply with Council's drainage design specifications.
- Details of the proposed gross pollutant trapping system, performance and compliance with Council's drainage design specifications shall be included in the Stormwater Drainage Concept Plan.

Note: The impact of the device and cleaning activities on adjacent areas shall be considered.

6.4 Stormwater Runoff Quality

Applies to

This sub-section applies to residential development on sites up to 2000sqm, except for development applications for single dwelling houses and dual occupancy housing.

Background

Waterbodies in urban or agricultural areas usually, suffer from decreased water quality. This adversely impacts on the biodiversity of the waterbody and the use of watercourses by humans.

<u>Objectives</u>

- To ensure that stormwater runoff is of suitable quality to protect the aquatic ecosystems of waterbodies within Liverpool and downstream receiving catchings.
- To protect the aquatic environment of the Georges River catchment and the Hawkesbury Nepean River catchment.
- To maintain and enhance freshwater and estuarine ecosystems, including biodiversity, relative abundance and ecological processes.

Controls

- The post development stormwater runoff quality shall be improved to achieve the following reduction targets when compared to pre development levels:
 - 45% reduction in the baseline annual pollutant load of total nitrogen (TN);
 - 65% reduction in the baseline annual pollutant load of total phosphorus (TP);
 - 85% reduction in the baseline annual pollutant load of total suspended solids (TSS); and
 - 90% reduction in the baseline annual pollutant load of litter and vegetation larger than 5mm, through provision of GPT.
- The post development water quality shall be reduced to the following targets when compared to pre-development water quality:
 - 45% reduction in the mean annual load of total nitrogen.
 - 45% reduction in the mean annual load of total phosphorus.
 - 80% reduction in the mean annual load of total suspended solids.
- 2-1_In the case of areas were council has adopted a master plan or in Part 2 specifying water quality targets, the requirements of those documents shall be utilised in preference to the targets listed above.
- 3-2. In the case of green field developments where Council has not adopted a master plan or is not included in Part 2 of the DCP specifying water quality targets the above targets shall be utilised by comparing post development water quality with that of a conventional stormwater drainage design without water quality treatment for an urbanised development.

6.5 Stormwater Quality Management

Applies to

This sub-section applies to the following development applications.

- a) Residential development greater than 2,000sqm;
- b) Commercial, retail, industrial, and / or mixed use development involving new or additional gross floor area of greater than 100sqm; and
- Any development that involves the construction or designation of 10 or more uncovered car parking spaces.

Background

The Liverpool Local Government Area (LGA) is traversed by two major river systems, the Georges River and the Nepean River, and many of their tributary creeks and waterways systems. Waterways are under pressure from past and ongoing developments, catchment disturbance and hydrological modification, land use transformation and large-scale vegetation changes. Stormwater runoff has the potential to mobilise significant quantities of gross pollutants and sediments as well as nutrients from a development site and dispose into the local waterways. These

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pollutants will have significant adverse impact on the aesthetics and ecological health of waterways and the riparian corridor.

In June 2016, Council adopted the Water Management Policy that aims to integrate and coordinate Council's water management initiatives to achieve its strategic target to improve ecological health of all waterways within the LGA. The Policy seeks to provide a proactive response to the development pressures and aims to protect the aquatic ecosystems, the water resources and minimise the impacts of urban development to the urban water cycle through the necessary improvements to the quality of stormwater discharged to the waterways.

The Policy requires the design and construction of water quality improvement devices considering a sequence of water quality treatment train to effectively improve water quality to desirable level while also offering substantial short and long-term ecological, environmental, and economic benefits. The water quality treatment train generally comprises of gross pollutant traps (GPT), bio retention basins, bio swales and raingardens.

The GPTs provide the primary treatment to stormwater runoff that use physical processes to capture and retain gross pollutants such as litter and coarse sediment from stormwater runoff. The fine sediments are removed and chemical pollutants are treated through the provisions of bio swales, raingardens and bio retention basins.

Objectives

The objectives of the stormwater quality management DCP provision is to provide necessary control to set standards for post development stormwater runoff in a way that:

- a) Ensures a holistic and coordinated catchment based approach across all areas of Council in managing water;
- Enables achievement of Council's water quality targets for its major creeks and rivers;
- Ensures that stormwater runoff is of suitable quality to protect the aquatic ecosystems of receiving waterbodies and downstream catchments;
- d) Harvest rainwater and urban stormwater run-off for use where appropriate;
- e) Maintains and enhances freshwater and estuarine ecosystems, including biodiversity, relative abundance and ecological processes;
- f) Control hydrological impacts of development on receiving surface and ground water systems by controlling the frequency, magnitude and duration of flows to preserve, as far as practicable, pre-development groundwater and surface water regimes and interactions; and
- g) Promotes community participation to encourage source control to reduce pollutants reaching its major creeks and rivers.

<u>Controls</u>

- The post development stormwater runoff quality shall be improved to achieve the following reduction targets when compared to pre development levels:
 - 45% reduction in the baseline annual pollutant load of total nitrogen (TN);
 - 65% reduction in the baseline annual pollutant load of total phosphorus (TP);
 - 85% reduction in the baseline annual pollutant load of total suspended solids (TSS); and
 - 90% reduction in the baseline annual pollutant load of litter and vegetation larger than 5mm, through provision of GPT.

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Developments that this subsection applies to, including residential development of land area greater than 2,000m², are to submit a stormwater quality management assessment demonstrating that necessary water quality improvement targets are Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1.27 cm + Tab after: 1.9 cm + Indent at: 1.9 cm

The stormwater quality management assessment is to be prepared by suitably qualified professionals with experience in water sensitive urban design (WSUD). Water quality modelling is to be undertaken with the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) model in accordance with the Liverpool City Council WSUD Technical Guideline.

The documentation required to be submitted include is required to meet the following

- a) Water quality treatment works shall be designed using MUSIC modelling software and the water quality treatment system performance shall be verified using Council's MUSIC link.
- b) Details of MUSIC modelling, with the MUSIC parameters and assumptions.
- c) Copy of the MUSIC model used for the assessmen
- d)b)Plans showing details of the water quality treatment devices including gross pollutant traps (GPT), bio-retention basins, bio swales and rain gardens
- e)c)Analysis showing the least present value cost option is considered through the iffecycle cost assessment of all possible alternative options. The lifecycle cost assessment shall consider capital cost and ongoing operation and maintenance cost of the treatment system for minimum of 20 years.

6.6 Sewage Treatment Plant

Objectives

a) To ensure that development near the sewage treatment plant does not encroach on the buffer zoning.

<u>Controls</u>

Development within 400m of the Scrivener Street Sewage Treatment Plant needs to be referred to Sydney Water for assessment.

Environmental Flows

Applies to

This sub-section applies to all development except for development applications for dwelling houses, semi detached dwellings, attached dwellings and dual occupancy

Background

Urbanisation of catchments can increase the frequency and size of smaller stormwater runoff events. This has a significant impact on channel morphology, bed and bank stability as well as significantly influencing aquatic ecosystems. Furthermore, excessive harvesting of stormwater may reduce the water available to support aquatic ecosystems.

Objectives

- a) To ensure that development does not adversely impact on flow patterns from that of a natural undeveloped catchment.
- b) Prevent bed and bank erosion and instability of waterways.

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Liverpool Development Control Plan

Water Cycle Management

 Provide sufficient environmental flows to support aquatic environments and ecological processes.

Controls

- The peak runoff for the 1-year ARI post development does not exceed that of an undeveloped catchment.
- The peak runoff for the 1-year ARI post development is not less than 50% from that of an undeveloped catchment.

6.8 Water Conservation

Applies to

This section applies to all development involving the use of water.

Background

Building design can contribute to environmental sustainability by integrating measures for improved water quality and efficiency of use. Water can be conserved in a number of ways, including; reducing water demand from the mains and re-using water, which would otherwise be lost as run off or waste water.

By integrating water use efficiency, water collection and water reuse measures into building and associated infrastructure design development can contribute to environmentally sustainable outcomes.

All mains water is treated to drinking water standard. However, only about 1% of domestic water consumption is actually used for drinking.

Uses such as toilet flushing, laundry and outdoor uses do not require water to be treated to such a high standard. Such uses can be satisfactorily supplied using rainwater collected from roofs and stored in tanks. Benefits include significant water cost savings and substantial reductions in stormwater discharges.

<u>Objectives</u>

- a) To reduce per-capita mains consumption of potable water.
- b) To harvest rainwater and urban stormwater runoff for use.
- c) To reduce wastewater discharge.
- d) To capture, treat and reuse wastewater where appropriate.
- e) To safeguard the environment by improving the quality of water run-off.
- f) To ensure infrastructure design is complementary to current and future water use.

<u>Controls</u>

Residential

New dwellings, including a residential component within a mixed-use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).

Non-Residential

- A comprehensive Water Management Plan must be submitted with all nonresidential development to address the following criteria.
- Installed water fixtures (shower heads, taps, toilets, urinals, etc) must be Wells 3 Star or better rated.
- 3. Installed appliances (dishwashers, clothes washers etc) are to be Wells 3 Star or better rated with respect to water use efficiency. Demonstrate, if necessary, how these requirements will be achieved for replacement appliances, appliances not installed at construction, or bought in by occupants following construction.

- 4. Install stormwater runoff control, capture and reuse, including water quality management in accordance with Council guidelines.
- Select water efficient plants and/or, indigenous vegetation for landscape in accordance with Council's recommendations.
- 6. Use non-potable water for watering gardens and landscape features.
- For development of more than \$1 million construction cost, consideration of separate pipe-work for the utilisation of recycled stormwater for non-potable purposes should be considered.
- Submit operating details for swimming pools and water features including filling, draining and maintenance activities. Covers must be included in the building design and operational aspects of swimming pool installations.
- 9. Any development that contains a rainwater tank must satisfy the following criteria:
 - Rainwater is to be sourced only from roof structures via a tank storage system, the tank capacity, or combined tank capacity, must be at least 5,000L.
 - Tanks may be connected to toilets and garden/outdoor taps (the common tanks in residential flat buildings are to be connected to common outdoor taps only).
 - Tanks may be connected to laundry taps with suitable filters, the system is to be fitted with an effective first flush device for removing roof surface contamination.
 - The system must contain a facility for periodic desludging.
 - Tanks must be connected to main water to top them up during times of low rainfall with supplemental inflow not taking places until the tank is 80% empty.
 - Alternatives to the above water savings methods can be presented to Council and they will be assessed on merit.

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Development near a Watercourse

Applies to

This section applies to:

- a) Development within 40m of a watercourse, creek or river except where separated from the watercourse, creek or river by land in an
 - RE1 Public Recreation zone
 - E2 Environmental Conservation zone,
 - E3 Environmental Management zone or
 - W1 Natural Waterways zone.
- b) Development that may impact upon, bed, banks or stream flow of a watercourse.
- c) Development, which involves removal of riparian vegetation.

Background

Waterfront areas are often compromised due to lack of awareness and planning resulting in degradation of their environmental value.

Waterfront areas, including riparian zones represent the interface between land and watercourses. These areas are continually under threat from development pressures. These pressures have the potential to trigger the following impacts:

- Increases in sedimentation;
- Modification of flow regimes;
- Destruction of riparian vegetation;
- Visual impacts;
- Bank instability;
- Loss of biodiversity through destruction of habitat.

Waterfront areas are significant in ensuring protection of the aquatic environment through their role in acting as a bio-filter to reduce polluted surface runoff, excessive sedimentation and erosion. Therefore it is important to ensure that adequate controls are in place to maintain and enhance the environmental significance of these areas.

<u>Objectives</u>

- a) To protect, restore and maintain ecological processes, natural systems and biodiversity in wetlands and waterfront areas.
- b) To maintain watercourse bed and bank stability
- c) To minimise sedimentation and pollution of watercourses and wetlands.
- d) Ensure conservation and long term maintenance of existing native vegetation in waterfront areas.
- e) To maintain lateral connectivity between waterways and riparian vegetation.
- f) To protect the visual amenity of the water and land interface.

Controls

 If any works are proposed near a water course, the Water Management Act 2000 may apply, and you may be required to seek controlled activity approval from the NSW Office of Water. Please consult with the NSW Office of Water regarding your proposal. Section 4 Bushland and Fauna Habitat Preservation of this DCP should also be addressed when pertinent.

Erosion and Sediment Control

Applies to

This section applies to all development, which may involve:

- a) Clearing, levelling, shaping, excavation of the existing soil surface and or vegetation on any site or the placement of any material stockpiles on that site;
- b) Placement of any fill upon a site; and
- c) Changes in the rate and or volume or course of runoff entering a waterbody, or overland flow.

Background

The excavation of land removes ground cover and often results in stockpiling of loose soil. This has the potential to create erosion of soils on site and sedimentation downstream from a development site. The sedimentation can result not just on adjoining land or streets but on creek and river systems quite some distance away. The impact on the ecosystem of creeks and rivers can be very significant.

Objectives

- To avoid soil erosion through the use of effective erosion and sediment control measures both during and following any works.
- b) To reduce pollution by avoiding land degradation and disturbance of vegetation on site, hence reducing pollution impact to downstream areas and receiving waters and their ecosystem.
- c) To minimise costs involved in unblocking drains and water bodies, cleaning of roads and compensating for the loss of topsoil through improved sedimentation and erosion control.
- d) To improve water quality by reducing sedimentation.

Controls

The development application shall be accompanied by either a Soil and Water Management Plan (SWMP) or an Erosion and Sediment Control Plan (ESCP) as shown in Table 1.

Table 1 Plans for stormwater soils management

Plan Required	Area of Disturbance
ESCP	Up to 2,500sqm
SWMP	Greater than 2,500sqm and/or where development consent is required.

- 2. These plans shall be prepared in accordance with Managing Urban Stormwater Soils and Construction, also known as the Blue Book (current edition) produced by the NSW Department of Housing. The plans should form part of the engineering design drawings and be documented in the construction plans.
- 3. The SWMP and ESCP are to include the following:
 - A set of plans drawn to scale which show the layout of appropriate sedimentation and erosion control in accordance with the requirements of this DCP;
 - Outline of appropriate sedimentation and erosion control measures;
 - Proposed control of erosion and sedimentation shall be prepared by referencing and incorporating the requirements of Council's Specification for Control of Erosion and Sedimentation.

- 4. The matters to be considered in the preparation of SWMP and ESCP are detailed in the "Blue Book". These include but are not limited to:
 - Slope and soil characteristics.
 - Conservation of topsoil and consideration of ecologically sustainable principles
 - Location and details of proposed control measures.
 - Control of stockpiles and re-use of material on site.
 - All weather access to the site.
 - Location of existing vegetation and vegetation to be removed.
 - Proposed method of protection of vegetation
 - Water bodies, dams and other drainage structures.
 - Soil and water implications
 - Re-stabilisation/revegetation details.
 - Construction site location/disturbed area boundaries
 - Clean up of downstream sedimentation resulting from breach of erosion and sedimentation controls.
 - Order of works based upon construction and stabilisation of all culverts and surface drainage works at the earliest practical stage.
 - Proposed time schedules for construction of structures and implementation of control measures and details of proposed maintenance, inspection and corrective action
 - Where practical, all runoff from areas up slope is to be diverted away from the disturbed areas. Diverted stormwater should be discharged onto stable areas and should not be diverted into neighbouring properties unless written permission is obtained from the land owner(s). Avoid directing stormwater towards the site's access and egress.

8.1 Sediment Basins

Applies to

This sub-section applies to development, which involves the provision of a sediment

Background

The conversion of a sediment basin into a permanent water feature would significantly disturb any flora or fauna in and around the basin. There would be a need to remove accumulated sediment. Typical issues with retaining sediment basins include:

- a) Remobilisation of nutrients from sediment trapped during subdivision causing problems such as algal growth.
- Inappropriate design features such as bank treatments causing public safety issues as well as promoting growth and propagation of weeds.
- Inappropriate treatment train design promoting the accumulation of gross pollutants, weed infestation and algae growth.

<u>Objectives</u>

- a) To ensure that temporary sediment basins are removed when no longer needed.
- To ensure that temporary sediment basins are constructed in a way that there is no long-term adverse environmental impact.

<u>Controls</u>

- 1. A Sediment Basin shall not be retained as a permanent facility unless required by:
 - Part 2 of the DCP
 - Total Catchment Management Study
 - Floodplain Management Plan
- A Sediment Basin shall not be located within core riparian areas, land in public ownership or land that is intended to be transferred to public ownership.
- 3. A Sediment Basin shall have no substantial impact on a natural water body or
- 4. A Sediment Basin shall be designed and managed to prevent the establishment of native fauna within the basin.
- Any approval for the installation of a temporary basin must include approval for removal of that basin and site remediation.
- 6. Any approval for the installation of a temporary sediment basin must include a plan outlining actions to be undertaken for removal of the basin and a timeline for its
- 7. Suitable fencing shall be installed and maintained to prevent persons from gaining access to the basin.

9. Flooding Risk

Applies to

This section applies to land identified as at or below the flood planning level

Background

1. In 1984, the State Government introduced its current flood prone land policy applicable to New South Wales. The first Floodplain Development Manual was published in 1986, providing guidelines for the implementation of the government's flood prone land policy and the merit approach, which underpins its application. Revised guidelines were released in 2005 and are now embodied in the Floodplain Development Manual, April 2005. The revised Floodplain Development Manual continues to support the NSW Government's Flood Prone Land Policy. The primary objective of the policy is:

"To reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, and to reduce private and public losses resulting from floods, utilising ecologically positive methods wherever possible."

- 2. To achieve this objective the Floodplain Development Manual acknowledges a broad risk management hierarchy of:
 - Avoidance of flood risk
 - Minimisation of flood risk using appropriate planning controls; and
 - Flood risk mitigation.
- 3. Flood risk mitigation is not always the preferred option, being costly and most likely to adversely affect the natural environment. Avoidance and minimisation of flood risk are the options most likely to be acceptable and are primarily reliant on land use planning and development control for implementation. These planning and development controls are reflected in this Section.
- 4. Local Government is the primary authority responsible for both flood risk management and land use planning in New South Wales. The NSW Government's flood policy provides for a flexible merit based approach to be followed by local government when dealing with planning, development and building matters on flood prone land. For Council to fully carry out its responsibilities for management of flood prone land, it is necessary to prepare local Floodplain Risk Management Plans.
- 5. The Floodplain Development Manual requires that Councils prepare Floodplain Risk Management Studies as a prelude to the formulation of a Floodplain Risk Management Plan that, among other things, would control development and other activity within the floodplain. This Section of the DCP is consistent with Council's and State Government's "Flood Prone Land Policy" and the Floodplain Development Manual.
- This Section of the DCP is an application of the State Policy, which reflects local circumstances, as identified for some floodplains, through the preparation of Floodplain Risk Management Plans.

Objectives 5 4 1

- To minimise the potential impact of development and other activity upon the aesthetic, recreational and ecological value of the waterway corridors.
- To ensure essential services and land uses are planned in recognition of all potential floods.
- To reduce the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.
- d) To ensure that the economic and social costs which may arise from damage to property due to flooding is minimised and is not greater than that which can be reasonably managed by the property owner and general community.
- e) To limit developments with high sensitivity to flood risk (e.g. critical public utilities) to land with minimal risk from flooding.
- f) To prevent intensification of inappropriate use of land within high flood risk areas or floodways.
- g) To permit development with a lower sensitivity to the flood hazard to be located within the floodplain, subject to appropriate design and siting controls.
- h) To ensure that development should not detrimentally increase the potential flood affectation on other development or properties either individually or in combination with the cumulative impact of development that is likely to occur in the same floodplain.
- To ensure that development does not prejudice the economic viability of any Voluntary Acquisition Scheme.

9.1 Determining Relevant Controls

Controls

The controls vary depending on:

- 1. Sensitivity of a land use to flooding
- 2. Severity of flood impact on site
- 3. Specific Floodplain in which a site is located

Follow these steps determine the relevant controls

- Step 1. Identify Flood Risk Category (degree of flooding risk). See Section 9.2.
- Step 2. Identify Land Use Risk Category. See Section 9.3.
- Step 3. Identify relevant Floodplain. See Section 9.4.
- Step 4. Identify relevant Floodplain Controls. See Section 9.5 and 9.6.

The following figure summarises this consideration process.

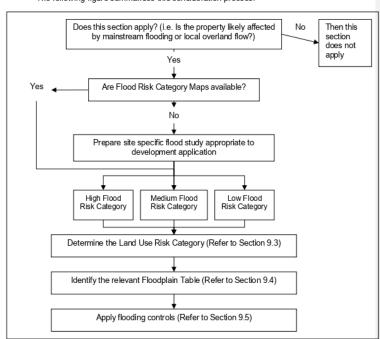


Figure 4 Flow chart for the determination of flood risk

Step 1 Identify the Flood Risk Category 9.2

<u>Controls</u>

Flood liable land is categorised according to the levels of potential flood risk as outlined

High Flood Risk Category means land below the 1% AEP flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties.

Note: The high flood risk Category is where high flood damages potential risk to life evacuation problems would be anticipated or development would significantly and adversely affect flood behaviour. Most development should be restricted in this Category. In this Category there would be a significant risk of flood damages without compliance with flood related building and planning controls.

Medium Flood Risk Category means land below the 1% AEP flood that is not subject to a high hydraulic hazard and where there are no significant evacuation difficulties

Note: In this Category there would still be a significant risk of flood damage, but these damages can be minimised by the application of appropriate development

Low Flood Risk Category means all other land within the floodplain (i.e. within the extent of the probable maximum flood) but not identified within either the High Flood Risk or the Medium Flood Risk Category.

Note: The Low Flood Risk Category is where the risk of damages is low for most land uses. The Low Flood Risk Category is that area above the 1% AEP flood and most land uses would be permitted within this Category.

No Flood Risk Mapping means that there has not yet been any risk Categories

determined for this area.

Note: Flood Risk Category Maps are not available for all Flood Prone Land. Applicants may be required to undertake a flood study to determine the flood extent and Flood Risk Categories in order to apply appropriate controls required by this Development Control Plan.

- Council has prepared flood risk mapping for the majority of the floodplains within the Liverpool LGA through a number of Floodplain Risk Management Studies and Plans adopted by Council and this information is available from Council.
- 3. It should be noted that the flood risk mapping prepared by Council has been developed at a broad scale for the purpose of undertaking Floodplain Risk Management Studies. This mapping is considered preliminary and can be subject to refinement as part of the assessment of individual proposals. Furthermore, works consistent with the flooding provisions of this DCP and acceptable to Council could be undertaken to alter the flood risk category of land.
- If the peak flow rate of an overland flow path, during the 1% AEP flood, exceeds 5 cubic metres per second then the overland flow path shall be treated as mainstream flooding and the development controls for mainstream flooding shall be applied.

Step 2 Identify Land Use Risk Category

Land use is categorised into 8 Land Use Risk Categories according to the sensitivity of each land use to flooding. The definitions of each land use are based on the *Liverpool LEP 2008*, are categorised as follows.

Critical uses and Facilities

Community facility which may provide an important contribution to the notification or evacuation of the community during flood events

Hospitals

Residential care facility

Sensitive Uses and Facilities

Educational establishments

Hazardous or offensive industry or storage establishment

Liquid fuel depot

Seniors housing

Utility installations or Public utility undertakings (including generating works) undertakings which are essential to evacuation during periods of flood or if affected would unreasonably affect the ability of the community to return to normal activities after flood events

Telecommunications facility

Liverpool Development Control Plan Part 1

Flooding Risk

Waste disposal land fill operation Group home

Subdivision

Subdivision of land, which involves the creation of new allotments, with potential for further development

Residential

Attached dwelling
Backpackers' accommodation
Bed and breakfast premises
Boarding houses
Canal estate development
Caravan Park
Child care centre
Dual occupancy
Dwelling
Dwelling house
Exhibition home

Exhibition village
Family day care centre
Health consulting rooms
Home-based child care
service
Home business
Home occupation

Information and education facility Moveable dwelling Multi dwelling housing Residential accommodation
Residential flat building
Rural workers' dwelling
Secondary dwelling
Semi-detached dwelling
Serviced apartments
Shop top housing
Utility installations or
Public utility undertakings
(other than critical
utilities)

Tourist and visitor

Commercial or Industrial

Agricultural produce industry Amusement Centre Animal boarding or training establishment Boat repair facility

Boat shed Bulky goods premises Business premises

Cemetery

Charter and tourism boating facility

Commercial port facility Crematorium

Depot Electricity generating works Entertainment facility Freight transport facility Function Centre Funeral home Heavy Industry Heliport

Hotel accommodation Industry Kiosk

Light Industry

Materials recycling or recovery centre

Medical centre

Mortuary

Neighbourhood shop Office premises

Passenger transport terminal Place of public worship Public administration building Recreation facility (indoor) Recreation facility (major) Registered club Restaurant Retail premises Roadside stall Rural industry

Sawmill or log processing

Service station Sex service premises Transport depot

Take away food or drink premises

Tank based aquaculture

Truck depot
Vehicle body repair
workshop
Vehicle repair station
Vehicle showroom

Veterinary hospital
Warehouse or distribution

Recreation or Non-urban Uses

Agriculture Aquaculture Dam

Funeral chapel

Environmental facility Extractive industry

Feedlot Helipads Horticulture Intensive livestock agriculture

Landscape and garden

supplies

Marina

Recreation facility (outdoor)

Stock and sale yard

Turf farming

Liverpool Development Control Plan Part 1

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Flooding Risk

Concessional Development

- 1. In the case of residential development:
 - An addition or alteration to an existing dwelling of not more than 30sqm or 10% (whichever is the lesser) of the habitable floor area which existed at 1 December 1987. (The date of adoption of the first Liverpool City Council Floodplain Management Plan); or
 - The construction of an outbuilding with a maximum floor area of 20sqm (or 50sqm for land zoned for non urban purposes); or
 - Rebuilding dwellings in a manner which substantially reduces the flood risk having regard to property damage and personal safety when compared to the existing building.
- 2. In the case of other development:
 - An addition to existing premises of not more than 10% of the floor area which existed at 1 December 1987. (The date of adoption of the first Liverpool City Council Floodplain Management Plan); or
 - Rebuilding of a development in a manner which substantially reduces the flood risk having regard to property damage and personal safety when compared to the existing development; or
 - A change of use, which does not increase flood risk having regard to property damage and personal safety; or
 - Subdivision that does not involve the creation of new allotments with potential for further development.

9.4 Step 3 Identify relevant Floodplain

Identify the relevant Floodplain on Figures 5 & 6.

9.5 Step 4 Identify relevant Floodplain Controls

- 1. Each floodplain area has two sets of controls. These are:
 - Mainstream Flooding Controls, identified in Tables 2 4 and Section 9.6.
 - Local Overland Flooding Controls, identified in Table 5.
- Development on flood prone land will be required to comply with either or both of these.
- 3. An explanation of these controls is in Table 6.

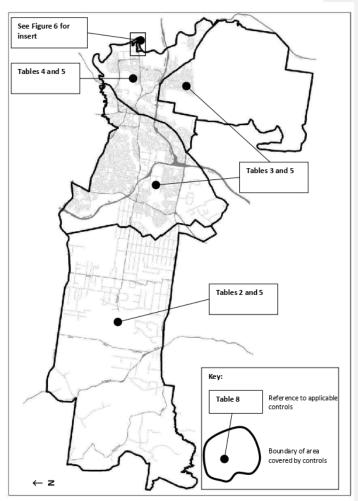


Figure 5 Map for identification of relevant floodplains

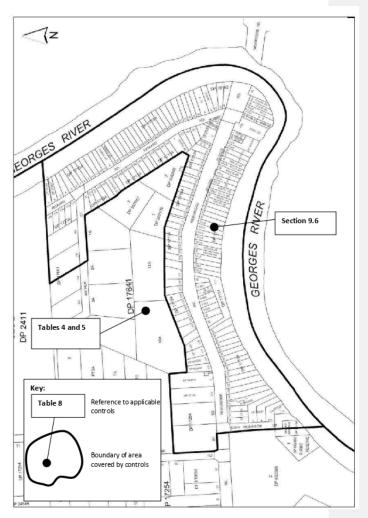


Figure 6 Moorebank Floodway

Table 2 Nepean River Floodplains (Includes South Ck, Kemps Ck, Bonds Ck and other tributaries

51 (he Nepean River)								
					Plannii	ng Controls			
Flood Risk Category	Land Use Risk Category	Floor Level	Building Components	Structural	Flood Effects	Car Parking & Driveway Access	Evacuation	Management & Design	Fencing
	Critical Uses & Facilities								
	Sensitive Uses & Facilities	12	4	4	2, 4, 5	2, 3, 6, 7, 8	2, 6, 8	4, 5	
	Subdivision				2, 4, 5			1, 6	
Low	Residential (++)	2, 6	3	3		2, 3, 6, 7, 8	2,6		
Flood Risk	Commercial & Industrial	2, 6	3	3	2, 4, 5	2, 3, 6, 7, 8	1,6	2, 3, 5	
	Tourist Related Development	1, 6, 15	3	3	2, 4, 5	2, 3, 6, 7,	2,6	2,3,5	
	Recreation & Non-Urban	1, 9, 15	3	3		1, 5, 7, 8	6,8	2, 3, 5	
	Concessional Development	14	3	3		1, 3, 5, 7, 8, 9	2,6	2,3,5	
	Critical Uses & Facilities								
	Sensitive Uses & Facilities								
	Subdivision				1, 4, 5			1	1, 2,
Medium	Residential	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	2,6		1, 2,
Flood Risk	Commercial & Industrial	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	1,6	2, 3, 5	1, 2,
NISK	Tourist Related Development	1, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	2,6	2,3,5	1, 2,
	Recreation & Non-Urban	1, 9, 15	3	1	2, 4, 5	1, 5, 7, 8	6,8	2,3,5	1, 2,
	Concessional Development	1, 14, 15	3	1	2, 4, 5	1, 3, 5, 7, 8, 9	2,8	2,3,5	1, 2,
	Critical Uses & Facilities								
	Sensitive Uses & Facilities								
	Subdivision								
High	Residential								
Flood	Commercial & Industrial								
NISK	Tourist Related Development								
	Recreation & Non-Urban	1, 9, 15	3	1	1, 4, 5	1, 5, 7, 8	6,8	2, 3, 5	1, 2,
	Concessional Development	1, 14, 15	3	1	1, 4, 5	1, 3, 5, 7, 8, 9	2,6	2, 3, 5	1, 2,

Not Relevant Unsuitable Land Use

Control reference number relevant to the particular planning consideration. (see Table 6)
 Attached dwellings, Dwelling houses, dual occupancies, multi unit dwelling housing, residential flat buildings (not including development for the purpose of group homes or seniors housing), Secondary dwellings and Semi-detached dwellings are exempt from these controls.

Table 3 Cabramatta Creek and all other Floodplains (Includes Hinchinbrook Creek, Maxwells

					Pla	anning Controls			
Flood Risk Category	Land Use Risk Category	Floor Level	Building	Structural	Flood Effects	Car Parking & Driveway Access	Evacuation	Management & Design	Fencing
	Critical Uses & Facilities								
	Sensitive Uses & Facilities	13	4	4	2, 4, 5	2, 3, 6, 7, 8	3, 6, 8	4,5	
	Subdivision				2, 4, 5			1,6	
Low	Residential (++)	2,6	3	3		2, 3, 7	3, 6		
Flood Risk	Commercial & Industrial	2, 11, 15	3	3	2, 4, 5	2, 3, 6, 7, 8	(3 or 4), 6	2, 3, 5	
Nijk	Tourist Related Development	2, 6, 15	3	3	2, 4, 5	2, 3, 6, 7, 8	3, 6	2, 3, 5	
	Recreation & Non-Urban	2,7	3	3	2, 4, 5	1, 5, 7, 8	6, 8	2, 3, 5	
	Concessional Development	14, 15	3	3	2, 4, 5	1, 7, 8, 9	3, 6	2, 3, 5	
	Critical Uses & Facilities								
	Sensitive Uses & Facilities								
	Subdivision				1, 4, 5			1,6	1, 2,
Medium	Residential	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	3, 6		1, 2,
Flood Risk	Commercial & Industrial	11, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	4, 6	2, 3, 5	1, 2,
	Tourist Related Development	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	3, 6	2,3,5	1, 2,
	Recreation & Non-Urban	2,7	3	1	2, 4, 5	1, 5, 7, 8	6, 8	2, 3, 5	1, 2,
	Concessional Development	14, 15	3	1	2, 4, 5	1, 7, 8, 9	3, 8	2,3,5	1, 2,
	Critical Uses & Facilities								
	Sensitive Uses & Facilities								
	Subdivision								
High	Residential								
Flood Risk	Commercial & Industrial								
	Tourist Related Development								
	Recreation & Non-Urban	2,7	3	1	1, 4, 5	1, 5, 7, 8	6, 8	2, 3, 5	1, 2,
	Concessional Development	14, 15	3	1	1, 4, 5	1, 7, 8, 9	3, 6	2,3,5	1, 2,

Not Relevant Unsuitable Land Use

Control reference number relevant to the particular planning consideration. (see Table 6)
Attached dwellings, Dwelling houses, dual occupancies, multi unit dwelling housing,
residential fat buildings (not including development for the purpose of group homes or seniors
housing), Secondary dwellings and Semi-detached dwellings are exempt from these controls.

Table 4 Georges River Floodplain (Includes Harris Ck and Williams Ck, lower parts of Anzac Ck,

Flood Risk Category		Planning Controls									
	Land Use Risk Category	Floor Level	Building	Structural	Flood Effects	Car Parking & Driveway Access	Evacuation	Management & Design	Zione II		
	Critical Uses & Facilities										
	Sensitive Uses & Facilities	13	4	4	2,4,5	2, 3, 6, 7, 8	6, 8, 9	2,4			
	Subdivision				2, 4, 5			1			
Low	Residential (++)	2,6	2	3	2, 4, 5	2, 3, 6, 7, 8	6,9				
Flood Risk	Commercial & Industrial	4, 8, 15	2	3	2, 4, 5	2, 3, 6, 7, 8	(4 or 9), 6	2, 3, 5			
KISK	Tourist Related Development	2, 6, 15	2	3	2, 4, 5	2,3,6, 7,8	6,9	2, 3, 5			
	Recreation & Non-Urban	2,7	2	3	2,4,5	1, 5, 7,	6,8	2,3,5			
	Concessional Development	14, 15	2	3	2,4,5	1, 7, 8, 9	6,9	2, 3, 5			
	Critical Uses & Facilities										
	Sensitive Uses & Facilities										
	Subdivision				1, 4, 5			1	1, 2,		
Medium	Residential	2, 6, 15	2	2	2, 4, 5	2, 3, 6, 7, 8	6, 9		1, 2,		
Flood Risk	Commercial & Industrial	8, 4, 15	2	2	2,4,5	2, 3, 6, 7, 8	4,6	2, 3, 5	1, 2,		
KISK	Tourist Related Development	2, 6, 15	2	2	2,4,5	2, 3, 6, 7, 8	6,9	2, 3, 5	1, 2,		
	Recreation & Non-Urban	2,7	2	2	2,4,5	1, 5, 7, 8	6,8	2,3,5	1, 2,		
	Concessional Development	14, 15	2	2	2, 4, 5	1, 7, 8, 9	8,9	2, 3, 5	1, 2,		
	Critical Uses & Facilities										
	Sensitive Uses & Facilities										
	Subdivision										
High	Residential										
Flood	Commercial & Industrial										
MISK	Tourist Related Development										
	Recreation & Non-Urban	2,7	2	2	1, 4, 5	1, 5, 7,	6,8	2, 3, 5	1, 2,		
	Concessional Development	14, 15	2	2	1, 4, 5	1,7,8,	6,9	2, 3, 5	1, 2,		

Not Relevant

Control reference number relevant to the particular planning consideration. (see Table 6)
 Attached dwellings, Dwelling houses, dual occupancies, multi unit dwelling housing, residential flat buildings (not including development for the purpose of group homes or seniors housing). Secondary dwellings and Semi-detached dwellings are exempt from these controls.

	Land Use Risk Category	Planning Controls								
Flood Risk Category		Floor Level	Building Components	Structural	Flood Effects	Car Parking & Driveway Access	Evacuation	Management & Design		
	Critical Uses & Facilities	13	4	5	3	4,7,8	7	3,5	2,	
	Sensitive Uses & Facilities	13	4	5	3	4,7,8	7	3,5	2,	
	Subdivision				3		5	1	2,	
	Residential	3,5	1	6	3	4,7,8	5		2,	
Local Overland Flood Risk	Commercial & Industrial	10	1	6	3	4,7,8	5	3,5	2,	
	Tourist Related Development	3,5	1	6	3	4,7,8	5	3,5	2,	
	Recreation & Non-Urban	3,5	1	6	3	4,7,8	5	3,5	2,	
	Concessional Development	14	1	6	3	4,7,8	5	3,5	2,	

Table 6 Explanation of Development Controls

Ref No	Controls
Floor level	
1	All floor levels to be as high as practical but not less than the 20% AEP flood level.
2	Non habitable floor levels to be as high as practical but no less than the 5% AEP flood level.
3	Non-habitable floor levels to be not less than the 1% AEP flood.
4	The level of Non-habitable and general Industrial floor areas to be as high as practical but not less than the 2% AEP flood. Where this is impractical for single lot developments within an existing developed area, the floor shall be as high as practical but no less than the 5% AEP flood.
5	Habitable floor levels to be equal to or greater than the 1% AEP flood level plus 300mm freeboard.
6	Habitable floor levels to be equal to or greater than the 1% AEP flood level plus 500mm freeboard.
7	Habitable floor levels to be no lower than the 1% AEP flood plus 500mm freeboard unless justified by site specific assessment.
8	Habitable and general commercial floor levels to be as high as practical but no lower than the 1% AEP flood plus 500mm freeboard unless justified by site specific assessment.
9	The level of habitable floor areas to be equal to or greater than the 1% AEP flood level plus 500mm freeboard. If this level is impractical a lower floor level may be considered provided the floor level is as high as possible but no less than the 5% AEP flood level.
10	All floor levels to be equal to or greater than the 1% AEP flood level plus 300mm freeboard. Freeboard may be reduced if justified by site specific assessment.
11	All floor levels to be no lower than the 1% AEP flood plus 500mm freeboard. Freeboard may be reduced if justified by site specific assessment.
12	All floor levels to be equal to or greater than the PMF level. If this level is impractical a lower floor level may be considered provided the floor level is as high as possible but no less than the 1% AEP flood level plus 500mm freeboard.

Ref No	Controls
13	Floor levels to be no lower than the PMF level unless justified by a site specific assessment.
14	Floor levels to be equal to or greater than the minimum requirements normally applicable to this type development. Where this is not practical due to compatibility with the height of adjacent buildings, compatibility with the floor level of existing buildings, or the need for access for persons with disabilitie a lower floor level may be considered. In these circumstances, the floor level is to be as high a practical, and, when undertaking alterations or additions no lower than the existing floor level.
15	A restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, whe the lowest habitable floor area is elevated more than 1.5m above finished ground level, confirming the the undercroft area is not to be enclosed.
Building (Components & Method
1	All structures to have flood compatible building components below the 1% AEP flood level plus 300m freeboard.
2	All structures to have flood compatible building components below the 1% AEP flood level plus 500m freeboard.
3	All structures to have flood compatible building components below the 1% AEP flood level plus 500m freeboard or a PMF if required to satisfy evacuation criteria (see below).
4	All structures to have flood compatible building components below the PMF level.
Structural	Soundness
1	Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyan up to and including a 1% AEP flood plus 500mm freeboard or a PMF if required to satisfy evacuation criteria (see below). An engineer's report may be required.
2	Engineer's report to certify that the structure can withstand the forces of floodwater, debris as buoyancy up to and including a 1% AEP flood plus 500mm freeboard.
3	Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyan up to and including a 1% AEP flood plus 500mm freeboard.
4	Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyan up to and including a PMF. An engineer's report may be required.
5	Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyan up to and including a PMF.
6	Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyan up to and including a 1% AEP flood plus 300mm freeboard.
ood Effects	
1	Engineers report required to certify that the development will not increase flood effects elsewher having regard to: (i) loss of flood storage; (ii) changes in flood levels, flows and velocities caused alterations to flood flows; and (iii) the cumulative impact of multiple similar developments in ti floodplain.
2	The flood impact of the development to be considered to ensure that the development will not increa flood effects elsewhere, having regard to: (i) loss of flood storage; (ii) changes in flood levels a velocities caused by alterations to the flood conveyance; and (iii) the cumulative impact of multipotential developments in the floodplain. An engineer's report may be required.
3	The flood impact of the development to be considered to ensure that the development will not increa flood affectation elsewhere having regard to changes in flood levels and velocities caused by alteration of conveyance of flood waters. An engineer's report may be required if Council considers a signification of conveyance of flood waters.

Ref No	Controls
	affectation is likely. The unmitigated obstruction, concentration or diversion of overland flow paths to adjacent property shall not be permitted.
4	A floodway or boundary of significant flow may have been identified in this catchment. This area is th major conveyance area for floodwaters through the floodplain and any structures placed within it ar likely to have a significant impact on flood behaviour. Within this area no structures other tha concessional development, open type structures or small non habitable structures (not more than 30sqm) to support agricultural uses will normally be permitted. Development outside the Boundary of Significant flow may still increase flood effects elsewhere and therefore be unacceptable
5	Any filling within the 1% AEP flood will normally be considered unacceptable unless compensator excavation is provided to ensure that there is no net loss of floodplain storage volume below the 19 AEP flood.
Car Parkin	g and Driveway Access
1	The minimum surface level of open car parking spaces, carports or garages, shall be as high arpractical.
2	The minimum surface level of a car parking space, which is not enclosed (e.g. open car parking space or carport) shall be as high as practical, but no lower than the 5% AEP flood level or the level of the crest of the road at the highest point were the site can be accessed. In the case of garages, the minimum surface level shall be as high as practical, but no lower than the 5% AEP flood.
3	Garages capable of accommodating more than 3 vehicles on land zoned for urban purposes, o basement car parking, must be protected from inundation by floods equal to or greater than the 1% AEF flood plus 0.1m freeboard.
4	Basement car parking shall be protected from inundation by the 1% AEP flood.
5	The driveway providing access between the road and car parking space shall be as high as practica and generally rising in the egress direction.
6	The level of the driveway providing access between the road and car parking space shall be no lowe than 0.3mbelow the 1% AEP flood or such that depth of inundation during a 1% AEP flood is not greate than either the depth at the road or the depth at the car parking space. A lesser standard may be accepted for single detached dwelling houses where it can be demonstrated that risk to human life would not be compromised.
7	Basement car parking or car parking areas accommodating more than 3 vehicles (other than on Rura zoned land) with a floor level below the 5% AEP flood or more than 0.8m below the 1% AEP flood level shall have adequate warning systems, signage and exits.
8	Barriers to be provided to prevent floating vehicles leaving a site during a 1% AEP flood.
9	Driveway and car parking space levels shall be no lower than the minimum requirements normally applicable to this type of development. Where this is not practical, a lower level may be considered. It these circumstances, the level is to be as high as practical and, when undertaking alterations of additions no lower than the existing level.
acuation	
1	Reliable access for pedestrians required during a 1% AEP flood.
2	Reliable access for pedestrians or vehicles is required from the building, commencing at a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF level, or a minimum of 20% of the habitable floor area is above the PMF.
3	Reliable access for pedestrians or vehicles is required from the building to an area of refuge above th PMF level, or a minimum of 20% of the habitable floor area is above the PMF
4	Reliable access for pedestrians or vehicles required during a 1% AEP flood to a publicly accessible location above the PMF.

Ref No	Controls
5	The evacuation requirements of the development during flooding shall be considered.
6	The development is to be consistent with any relevant flood evacuation strategy or similar plan.
7	The evacuation requirements of the development are to be considered up to the PMF level.
8	The evacuation requirements of the development are to be considered. An engineer's report will be required if circumstances are possible where the evacuation of persons might not be achieved within the effective warning time.
9	Adequate flood warning is available to allow safe and orderly evacuation without increased reliance upon the SES or other authorised emergency services personnel.
Managem	ent and Design
1	Applicant to demonstrate that potential development as a consequence of a subdivision proposal car be undertaken in accordance with this DCP.
2	Site Emergency Response Flood Plan required where floor levels are below the design floor level (except for single dwelling-houses).
3	Applicant to demonstrate that area is available to store goods above the 1% AEP flood level plus 500mmfreeboard.
4	Applicant to demonstrate that area is available to store goods above the PMF level.
5	No storage of materials below the design floor level which may cause pollution or be potentially hazardous during any flood.
6	Finished land levels in new release areas shall be not less than the 1% AEP flood unless justified by site specific assessment. A surveyor's certificate will be required upon completion certifying that the final levels are not less than the required level.
encing	
1	Fencing within a High Flood Risk area, Boundary of Significant Flow or floodway will not be permitted except for permeable open type fences.
2	Fencing is to be constructed in a manner that does not obstruct the flow of floodwaters so as to have an adverse impact on flooding.
3	Fencing shall be constructed to withstand the forces of floodwaters or collapse in a controlled manne so as not to obstruct the flow of water, become unsafe during times of flood or become moving debris
4	Fencing shall be constructed to withstand the forces of floodwaters.

9.6 Controls Applicable to the Moorebank Floodway

 Notwithstanding any other provision where a property is identified within the Moorebank Voluntary Acquisition Scheme area, Council will only consent to further development as noted in Table 7.

Table 7 Controls applicable to the Moorebank Floodway

	Control			
Development	Development is only for minor works such as small awnings over existing first floor balconies or in-ground swimming pools			
	The capital investment shall not materially increase the acquisition costs of the property.			

Council will not permit any type of development which would be inconsistent with the objective of discouraging further development in areas of high risk and with Council's commitment to the Moorebank Voluntary Acquisition Scheme.

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10. Contaminated Land Risk

Applies to

facilities

This section applies to:

- a) Land that is identified as being potentially or actually contaminated in accordance with the relevant guidelines.
- b) Land which has past or current land use of the following:

Agricultural/ horticultural activities	Defence work Drum reconditioning	Mining and extractive industries
Airports	Dry cleaning Electrical	Photography, rubber manufacture and solvents
Asbestos	Engine works such as	Power stations
production/disposal	mechanics and air conditioning repairers	Printing shops
Batteries manufacture and	Foundries	Railway yards
recycling	Gas works	Scrap yards
Chemicals such as use or	Iron and steel works	Sheep and cattle dips
manufacture of acid/alkali	Landfill	Smelting and refineries
products, adhesives/ resins, dyes, explosives,	sites	Tanning and associated trades
fertiliser, flocculants, foam production, fungicides, herbicides, paints.	Marinas	Water and sewage treatment plants
pesticides, pharmaceuticals, Service stations and fuel storage	Metal treatments	Wood preservation

Background

Land contamination is most often the result of past uses. It can arise from activities that took place on or adjacent to a site and be the result of improper chemical handling or disposal practices, or accidental spillages or leakages of chemicals during manufacturing or storage. Activities not directly related to the site may also cause contamination; for example, from diffuse sources such as polluted groundwater migrating under a site or dust settling out from industrial emissions.

The impacts of land contamination can include increased risk to human health, detrimental effects on the biophysical environment and adverse impacts on the safety of existing and new structures. A decision will need to be made as to whether the land should be remediated, or its use of the land restricted, in order to reduce the risk.

Objectives

- a) To identify the presence of contamination at an early stage of the development process and to manage the issues of land contamination to ensure protection of the environment and that of human health is maintained.
- Ensure that proposed developments or changes of land use will not increase the risk to human health or the environment;
- c) Avoid inappropriate restrictions on land use;
- d) Ensure that all stakeholders are aware of their responsibilities for the ongoing management of contaminated land.

Controls

Preliminary Contamination Investigation

If the initial evaluation by Council finds insufficient information available, or sufficient information is available, which indicates that contamination is an issue for the site, a Preliminary Contamination Investigation (Stage 1) shall be undertaken.

Detailed Contamination Investigation

If the Preliminary Site Contamination Investigation (Stage 1) indicates a potential for contamination and that the land may not be suitable for the proposed use, a Detailed Contamination Investigation (Stage 2) shall be undertaken.

Remedial Action Plan

- If the Detailed Contamination Investigation (Stage 2) indicates that the site is not suitable for the proposed use a Remedial Action Plan shall be prepared.
- 2. If the Remedial Action Plan proposes to undertake Category 1 Remediation:
 - Additional consent may be required. Council shall be consulted for a determination on the appropriate course of action that is whether an additional development application is required.
 - Approval of the application shall be subject to satisfactory remediation. A notice
 of completion of Category 1 Remediation works shall be provided to Council
 within thirty (30) days of completion of the works.
 - A validation and/or monitoring report shall be prepared and approved by Council prior to works commencing.
 - A Site Audit Statement may be requested by Council to be prepared and submitted to Council.
- If the Remedial Action Plan proposes to undertake Category 2 Remediation, Council shall be notified within 30 days upon commencement and completion of remedial works. Documentation associated with or in support of the Remedial Action Plan shall be submitted to Council.
- Any remedial works shall be undertaken in accordance with the Remedial Action Plan.

 Any investigations, Remedial Action Plans or reports shall be undertaken or prepared by an appropriately qualified professional with experience in preliminary and detailed investigations, the preparation of Remedial Action Plans as well as validation and/or monitoring reports for contaminated lands.

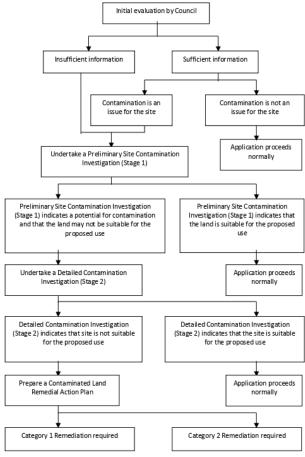


Figure 7 Model for Contaminated Lands Investigation and Management Strategies that should be undertaken. (Adapted from Managing Contaminated Lands, 1998)

11. Salinity Risk

Applies to

This section applies to all development, which:

- a) Is located in an area coloured yellow, orange or red on State Government issued salinity potential maps or
- b) Is in existing or proposed urban areas that may affect the processes of salinisation.
- c) Involves lands affected by groundwater salinity.

Background

Salinity is the accumulation of salt in the soil and is one of the major issues facing the NSW landscape. The problem affects both urban and rural landscapes. While salt occurs naturally in our landscape, activities such as land clearing and inefficient water use can exacerbate the problem. This impacts on soil, native vegetation, biodiversity, crops and water quality.

The four main types of salinity are:

- Dryland: This involves the build up of salts in the soil surface and groundwater in non-irrigated areas.
- Irrigation: This involves the rise in saline groundwater and the build up of salt in the soil surface in irrigated areas.
- Industrial: Effluent from rural villages, intensive agriculture and rural industry can contain high levels of salt.
- 4. Urban: This is mainly caused by rising groundwater bringing salts to the land surface. Towns are often located in areas prone to salinity (such as plains, valleys, or at the foot of a ridge). Urban development can lead to localised salinity because of clearing of native vegetation, over-watering of gardens, parks and sporting fields, water leaking from pipes, drains and tanks, seepage from sullage pits and blocking or changing natural drainage paths (such as by building roads).

Salinity can cause physical damage to buildings, roads and water pipes. Some building methods may also contribute to the development of salinity. Compacted surfaces can restrict groundwater flow and concentrate salt in one area. By cutting into slopes to build, groundwater or saline soil may be intercepted and exposed. Fill used to build up an area may be a source of salt, or it may be less permeable, preventing good drainage.

Salinity can render farming land unproductive and sports grounds and recreation areas unusable. Salinity can also damage wetlands and rivers and affect native vegetation, causing the disappearance of native flora and fauna and poor downstream water quality.

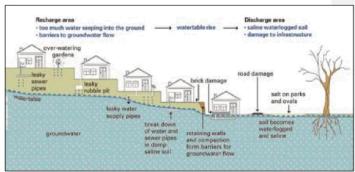


Figure 8 Illustration showing how development can impact on landscape functions as well as how development may be impacted upon salinity processes

Objectives

- To prevent further spread of urban salinity and remedy, where possible, existing areas of salinity.
- b) To minimise disturbance to natural hydrological systems as a result of development and appropriately manage land uses affecting land salinisation and/or those affected by salinity.
- c) To ensure that land is used and developed in a manner that does not significantly increase water infiltration to groundwater systems and does not significantly increase salt loads in waterways, wetlands drainage lines, or soils.
- d) To control the impact of a development on prevailing and potential soil or groundwater salinity in the urban environment as well as ensure that soil or groundwater salinity does not impact on the structural integrity of a development.
- e) To ensure that consideration is given to any physical limitations of land, including soil salinity and the impacts of that salinity, to minimise the potential for future adverse economic impacts arising from development.

<u>Controls</u>

 The following flowchart shall be used to determine an appropriate course of action for salinity investigation and management for single or multi-lot developments.

Note: "Where it is difficult to decide between colours it should be assumed that the salinity potential is denoted by the colour for the higher salinity potential.

Note: **Salinity risk activities are those activities which are considered to have a greater risk associated with them in area of salinity potential, based on level of ground disturbance, water-use, and the potential to alter hydrological conditions and/or salt concentrations. This may include, but is not limited to: quarrying, intensive agriculture, activities involving high levels of irrigation, large scale artificial waterbodies, infiltration into the soil or groundwater, waste water re-use or treatment systems or major landscape reshaping.

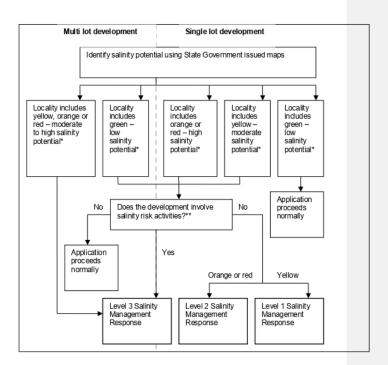


Figure 9 Model for how salinity assessment, investigation and management strategies should be undertaken (Adapted from WSROC 2003)

- If a Level 1 or 2 Salinity Management Response is required the applicant shall use the Salinity Management Response Checklists to determine appropriate measures to prevent salinity. These measures shall be detailed in the Statement of Environmental Effects or equivalent. These measures shall be approved by Council prior to the issuing of Development Consent.
- 3. Level 3 Salinity Management Response shall be
 - Approved by Council prior to the issuing of Development Consent.
 - Integrated into a Total Water-cycle Management Plan for the site for developments where such a plan is required.
- 4. The Salinity Management Response shall be based on site conditions and the proposed development. It shall include controls to protect buildings and also strategies to protect infrastructure, including roads and underground services and to manage the water cycle. A Response shall assume worst-case scenario for salinity on the site.
- Salinity investigations shall be undertaken by an appropriately qualified professional with experience in salinity investigations and management.

- 6. Management strategies for salinity shall be developed in accordance with the approved Guidelines. This includes general management strategies for all sites and salinity processes and strategies including, but not limited to, the following:
 - Building requirements
 - Vegetation and landscaping
 - Roads and pavements
 - Soil landscapes with a shale geology
 - Localised concentrations of salinity
 - Deeply weathered soils
 - Salinity in groundwater.
- To ensure appropriate measures or management strategies are employed Council may require monitoring reports to be submitted.
- For developments involving the construction or removal of dams, artificial wetlands or stormwater retention ponds a Level 3 Salinity Management Response is required.
- For developments involving the construction or removal of dams, artificial wetlands or stormwater retention ponds, water sensitive urban design (WSUD) principles shall be applied.
- 10. Development shall have minimal impact on the water table.
- 11. For areas with a moderate to high salinity potential development shall demonstrate no net increase in hydrologic load or water inputs and shall maintain the natural water balance.

12. Acid Sulfate Soils Risk

Applies to

This section applies to

- a) Any development that is located in an area identified as having an acid sulfate soil potential within the Liverpool LEP 2008.
- h) Any development involving drainage or excavation, which has the potential to result in the formation of acid sulfate soils.

Background

Acid sulfate soils are sediments deposited under estuarine conditions (that is close to sea level), and which contain the sulfidic mineral pyrite. Acid sulfate soils are found underlying many coastal floodplains, in coastal wetlands, and as bottom sediments in coastal estuaries.

As long as acid sulfate soils are not disturbed or drained, these materials are relatively hamless and are termed potential acid sulfate soils. However, if the sediments are exposed to air, the pyrite is oxidised and sulfuric acid is generated. When the rate of acid production exceeds the neutralising capacity of the soil, actual acid sulfate soils are formed. As a result, soil pH may become highly acidic.

Acid sulfate soils can have considerable effects on:

- Engineering and landscaping works including affecting the type of concrete or steel
 required for construction, the design of roads, buildings, embankment and drainage
 system, extractive materials specifications, maintenance programs for drains,
 water and sewage pipelines and other structures.
- Agricultural management practices including choice of crops, liming practices, fertiliser requirements and drainage practices.
- Aquaculture management practices including choice of site, pond design and management practices
- The management of contaminated soil particularly in relation to mobility of metals
- The conservation of biodiversity and protection of wetlands as well as shallow freshwater systems including degradation of water quality and habitat, killing or disease of fish and other aquatic organisms.

Acid sulfate soils underlie significant areas of coastal Australia including parts of the Liverpool LGA. The cost of testing, treating and monitoring of acid sulfate substantially increase the cost of development.

The impacts of actual acid sulfate soils are one of the most significant water-based environmental problems in coastal areas of NSW. Certain environmental effects of actual acid sulfate soils can last for hundreds or even thousands of years

Appropriate planning and management of urban and agricultural land to prevent damage associated with acid sulfate soils is now recognised as an extremely important issue. A well informed understanding of acid sulfate soils and their distribution is critical for sustainable land use.

<u>Objectives</u>

- To provide regulation on the procedures involved in the assessment and management of activities within areas affected by acid sulfate soils.
- To identify areas of acid sulfate soil risk to prevent any unnecessary impact to the environment.
- c) To ensure that preliminary acid sulfate soil assessment is undertaken prior to development consent being granted to determine the level of risk proposed by the activity/development.
- d) To ensure that acid sulfate soil management plans are prepared when an activity or development is associated with an acid sulfate soil risk.
- e) To provide effective management of areas where acid sulfate soils are identified.

Controls

The following flowchart shall be used for investigation and assessment of acid sulfate

soil potential as well as any management responses, which may be required Identify acid sulfate soils potential of locality on Acid Sulfate Soils Map in Liverpool Locality includes high probability of acid sulfate Locality includes low Locality includes no probability of acid sulfate n occurrence of soils occurring soils occurring acid sulphate soils Application proceeds Undertake Preliminary Assessment normally Acid sulfate soils not Acid sulfate soils likely to be disturbed likely to be disturbed Undertake a soil and water analysis Best practice measures employed to manage the quality of water leaving the site Assess potential risks from disturbance to acid sulfate soils Develop an acid sulfate soils management plan

Figure 10 Model for how acid sulfate soils assessment, investigation and management strategies should be undertaken (adapted from *Acid Sulfate Soil Manual 1998*).

- If acid sulfate soils are present and not likely to be disturbed, best practice
 measures employed to manage the quality of water leaving the site shall be
 detailed in the SEE or equivalent.
- If acid sulfate soils are present and likely to be disturbed a soil and water analysis and an assessment of the potential risk from disturbance of the acid sulfate soils

- shall be undertaken. The analysis and assessment shall be approved by Council prior to the issuing of development consent.
- If acid sulfate soils are present and likely to be disturbed an acid sulfate soils
 management plan shall be prepared in accordance with the guidelines. The acid
 sulfate soils management plan shall be approved by Council prior to the issuing
 of development consent.
- 4. Any acid sulfate soils analysis, assessments and management plans shall be undertaken or prepared by an appropriately qualified professional with experience in acid sulfate soils analysis and assessments as well as the preparation of acid sulphate soils management plans.
- Council may require monitoring reports on the implementation of an acid sulfate soils management plan to be submitted.

13. Weeds

Applies to

This section applies to land where noxious weeds are found

Background

Noxious weeds have the potential to have an adverse impact on the biodiversity and economic use of land. Some species compete with native tree and shrub species and have the potential to dominate entire landscapes altering their natural condition. Some species are particularly effective at penetrating areas of bushland, others choke waterways and riverbanks, some are toxic and others cause allergic reactions in humans.

Objectives

To remove noxious weeds in conjunction with the development of land.

Controls

- Where the site analysis identifies noxious weeds on the site, a Weed Management Strategy (WMS) shall be submitted with any development application. A WMS shall be prepared by a suitably qualified professional and shall include:
- 2. A complete list of all noxious and environmental weeds on the site;
- A site plan displaying actual weed infestation densities shown as percentages and grouped into cover classes as follows:
 - R = (Rare): less than 1% cover
 - O = (Occasional): between 1 and 5% cover
 - F = (Frequent) between 5 and 20% cover
 - A = (Abundant) between 20 and 40% cover
 - D = (Dominant) between 40 and 100% cover
- 4. A treatment program for each weed species identified.
- The treatment program for each weed species shall detail the following:
 - The method(s) of treatment of weeds e.g. mechanical removal or herbicide application.
 - The herbicide product name (if used), the proposed rates and method(s) of application.
 - The timing of all treatments and control method(s) to be applied
 - An ongoing maintenance program detailing methods of follow up treatments to ensure all weed infestations present are contained and/or controlled.
 - Details of any weed material disposal methods (i.e. if weed material is to be removed from the development site.)
- It is an offence to knowingly remove any weed material that is classified as a W1 noxious weed under section 28 of the Noxious Weeds Act 1993.
- 7. Plants that have been declared noxious are listed in Appendix 2.

14. Demolition of Existing Developments

Applies to

This section applies to development, which involves the demolition of an existing building.

Background

The demolition of buildings can have environmental impacts, particularly involving older buildings, which may contain toxic materials. There is also the potential to recycle materials and minimise waste going to land fill.

Objectives

- b) To minimise waste generation and disposal to landfill.
- To ensure efficient storage and collection of wastes and recyclables during demolition and construction stages.
- d) To minimise adverse impact on adjoining premises; and
- e) To minimise release of contaminated materials

Controls

Demolition

- All demolition work must comply with the Australian Standard AS2601 1991, The Demolition of Structures.
- Security fencing such as hoardings must be provided around the perimeter of the demolition site prior to work commencing to prevent access by unauthorised persons at all times during the demolition period. Approval of the fencing by Council must be received prior to erection.
- Demolition must not be conducted in high winds to ensure dust does not spread beyond the site boundaries. High winds are identified as either a strong breeze (39-49km/hr), or near gale (50-61km/hr) under the Beaufort Scale.
- All lead contaminated materials identified in the building must be handled and disposed of in accordance with the NSW Environment Protection Authority's requirements.
- 5. Dust Controls must be implemented on site prior to and during demolition.
- 6. Asbestos, if identified in the building, must be removed and disposed of in accordance with the requirements of Work Cover. Where the amount or type of asbestos materials to be removed requires a licensed asbestos contractor to undertake the removal and disposal, both Council and the Principle Certifying Authority must be advised in writing of the name, address and asbestos license details of the contractor undertaking that work and the name and address of the facility to which the materials will be taken.
- All trucks/trailers entering or leaving the site must have their loads adequately covered. A sign indicating this should be placed at the entry to and exit from the cite.
- Temporary toilet facilities must be provided on the site until all demolition work is completed.
- 9. Demolition activities on site must be limited to the following hours:
 - Monday to Friday 7:00am to 6:00pm
 - Saturday 8:00am to 1:00pm
 - No work on Sunday and Public Holidays

- Sound pressure levels emanating from the site must not exceed levels established by the NSW Environment Protection Authority.
- 11. A Waste Management Plan (WMP) is to be submitted with the Development Application. The WMP must include realistic estimates of the volume or area of all types of waste material to be generated from the demolition and excavation activities. Details of how each of those materials will be re-used, recycled or disposed of is to be provided, including the locations to which the materials will be taken.
- 12. The waste management plan together with proof of lawful disposal for all waste that is disposed of, or otherwise recycled from the site must be retained on site. Proof is to include a log book with associated receipt/invoices, waste classification, and site validation certificate. All entries must include:
 - Time and Date
 - Description and size of waste
 - Waste facility used
 - Vehicle registration and company name

Both the log book and the associated recepts must be made available for inspection by authorised Council Officer at any time during site works.

- 13. Where subdivision works are proposed, relevant sections of the WMP must be completed. If the destination for excavation material is not a licensed waste facility, it must have development consent to receive such material.
- 14. A Dilapidation Report for any demolition within the zone of influence of any other building.
- 15. Where demolition work includes the removal of air-conditioning or refrigeration units, all refrigerants that remain within those units must be extracted by a licensed air-conditioning technician. The recovered refrigerant must be forwarded for destruction to Refrigerant Reclaim Australia (RRA), or other facility approved to destroy refrigerants in an environmentally friendly manner.
- 16. All construction and demolition waste must be inspected, graded and sorted in accordance with current EPA standards. Once sorted, it must be either recycled or disposed of according to its classification.

15. On-site Sewage Management Systems (OSMS)

<u>Applies to</u>

This section applies to:

- Development of land that does not have access to a reticulated sewerage system.
- All existing and proposed On-site Sewage Management Systems and Greywater reuse systems.

Backgroung

The rural areas and rural villages of Liverpool are generally not connected to a reticulated sewerage system. Disposal of waste water must take place on site which places limitations on the scope of development that is possible on the site and the extent of the area that can be developed. Disposal of wastewater on site also has potential public health and environmental impacts which must be addressed and minimised.

Application for approval to operate an OSMS

Where a new OSMS is to be installed or an existing OSMS altered, an application under Section 68 of the *Local Government Act 1993* for approval to install or alter an OSMS must be submitted and the prescribed fee paid.

Prior to the operation of an OSMS an application under Section 68 of the Local Government Act 2003 for approval to operate must be submitted along with certification of the installation and commissioning of the system. Approval to operate the OSMS will be granted upon successful installation and certification of the system and this approval will be automatically renewed on an annual basis or at a frequency determined by Council.

Council officers may inspect the OSMS from time to time to ensure that the conditions of approval are being met and that the system is operated and maintained in accordance with the required performance standards set out in the Local Government (General) Regulation 2005.

Council may modify, revoke or withhold an approval or renewal of approval should the system not comply with the conditions of that approval or be found to be inadequately performing or operated in an inappropriate manner.

<u>Objectives</u>

To ensure that the disposal of wastewater and reuse of greywater:

- a) Is carried out in a manner which is economically and environmentally sustainable
- b) Protects the quality of public and environmental health.

Controls

Application Requirements

- Applications for development of land to which this part applies must be accompanied by an
 application under s68 of the Local Government Act 1993 for the installation, alteration and
 operation of an OSMS. Development consent will not be issued until Council is satisfied
 that the s68 application can be approved.
- All development proposals relying on an OSMS or impacting on an existing OSMS must be
 accompanied by a wastewater report demonstrating that the site can sustainably accept all
 wastewater generated on the site. This includes the modification of existing developments
 such as additions/modifications to a dwelling or commercial activity.

- 3. When a proposed development increases the potential wastewater flow on an existing property, the treatment capacity of the existing system must be reviewed. A new system must be installed where the existing system does not have adequate treatment capacity for all potential flows. A wastewater report will be required to detail the capacity of the existing or proposed system and propose a new or modified effluent irrigation area.
- 4. All wastewater reports must be prepared by a suitably qualified and experienced person and must contain the following as a minimum

The report must include a plan, to scale, showing the location of:

- · The sewage management facility proposed to be installed or constructed on the
- Any related effluent application areas,
- Any buildings or facilities existing on, and any environmentally sensitive areas of, any land located within 100 metres of the sewage management facility or related effluent application areas, and
- Any related drainage lines or pipework (whether natural or constructed).

Specifications

The report must include full specifications of the sewage management facility proposed to be installed or constructed on the premises concerned.

The report must include details of the climate, geology, hydrogeology, topography, soil composition and vegetation of any related effluent disposal areas together with an assessment of the site in the light of those details.

The report must include a statement of:

- The number of persons residing, or probable number of persons to reside, on the premises, and
- Such other factors as are relevant to the capacity of the proposed sewage management facility.

Operation and maintenance

The report must include details of:

- The operation and maintenance requirements for the proposed sewage management facility.
- The proposed operation, maintenance and servicing arrangements intended to meet those requirements, and
- The action to be taken in the event of a breakdown in, or other interference with, its operation.

Standards and guidelines

The report must demonstrate that a system can be installed in accordance with the requirements of the documents listed in control 5 of this section.

The report must consider all potential wastewater flows on the property including all proposed and existing flows.

Specifications

- 5. Design OSMSs in accordance with:
 - a) Local Government (General) Regulation 2005;
 - Australian/New Zealand Standard 1547:2012, On-site Domestic Wastewater Management, or any updated standard which supersedes AS1547:2012.
 - Sydney Catchment Authority 2012, Designing and Installing On-site Wastewater Systems.
 - d) NSW Health 2001, Septic Tank and Collection Well Accreditation Guideline
 - e) Department of Local Government 1998, On-site Sewage Management for Single Households.
 - f) Any other relevant guideline documents adopted by Council after the issue of this DCP.

Types of systems not supported

 Development or subdivision proposals relying on pump-out systems will not be approved by Council.

Pump-out systems are not considered to be economically or environmentally sustainable systems due to the high costs associated with the removal of effluent which can result in unauthorised discharge into the environment.

Connection to reticulated sewer

- Proposals relying on on-site sewage management will not be approved where a reticulated sewerage service is available within 75m of any property boundary.
- 8. Decommission OSMSs when a reticulated sewerage service becomes available within 75m of any property boundary, and connect the development to the service.

NOTE: This requirement may also be a condition of development consent and/or be included on the 88b certificate.

Location requirements

- 9. Locate OSMS tanks a minimum of 1.5m from any building and outside of any overland flow paths or depressions in the land.
- Setback effluent disposal areas associated with OSMSs with setbacks in accordance with Table 8.

Table 8 Minimum Setbacks for Effluent Disposal Areas

System		Setbacks	
All land	100m	to permanent surface waters (river, stream, lake etc.)	
application systems	250m	to domestic groundwater well	
•	40m	to other waters (farm dams, intermittent waterways and drainage channels)	
Surface spray	6m	if area up-gradient of driveways and property boundaries	
irrigation	3m	if area down-gradient of driveways and property boundaries	
	15m	to dwellings	
3m 6m		to paths and walkways	
		to swimming pools	
	6m	if area up-gradient of swimming pools, driveways, property boundaries and buildings	

Surface drip and trickle irrigation	3m	if area down-gradient of swimming pools, driveways, property boundaries and buildings
Sub-surface irrigation	6m	if area up-gradient of swimming pools, driveways, property boundaries and buildings $$
	3 m	if area down -gradient of swimming pools, driveways, property boundaries and buildings
Absorption	12m	if area up-gradient of property boundaries
system	6m	if area down-gradient of property boundaries
	6m	if area up-gradient of swimming pools, driveways, and buildings
3m if area down-gradient of swimming pools, drivew		if area down-gradient of swimming pools, driveways, and buildings

- 11. New or replacement systems for horticulture (as defined in Liverpool LEP 2008) must comply with the following:
 - a) A minimum buffer distance of 20m if disposal area is up-gradient and 10m if disposal
 - area is down-gradient of any market garden/igloo.

 The related Effluent Disposal Area is required to be fenced to prevent access of vehicles, animals and any heavy vehicles.
 - Fruit and/or Vegetables are not to be grown on top or within the designated related Effluent Disposal Area(s) and associated buffer zones.
- 12. Exclude any proposed or existing areas designated for effluent disposal from calculations for private open space
- 13. Locate the lid to OSMS tanks or holding tanks and all associated electrical components such as motors, blowers and non-submergible pumps etc. above the 1% AEP flood
- 14. Irrigate only effluent treated to a secondary standard by an Aerated Wastewater Treatment System (AWTS) on land below the 1% flood contour.
- 15. Do not locate any portion of the Effluent Disposal Area on land within the 5% AEP contour.

Systems no longer in use

16. Remove or reuse any redundant septic tank, collection well or aerated wastewater treatment system in accordance with NSW Health Advisory Note 3 - May 2006 -Destruction Removal or Reuse of Septic Tanks, Collection Wells, Aerated Wastewater Treatment Systems and other Sewage Management Facility Vessels.

Note: Demolition of tanks (Methods 1 & 5 of the advisory note) is not permissible.

Design wastewater flow rates - domestic

- 17. Calculate the design wastewater flow for domestic systems based on the following:
 - a) Two people per bedroom for the first three bedrooms and;
 - b) One person for each additional bedroom.

NOTE: Rooms which are easily converted into a bedroom without the need for structural modification are to be included in this calculation e.g. studies, sewing rooms and other rooms of a similar size and location to a typical bedroom.

The daily wastewater flow volume must be calculated at the following rate:

- c) 150L per person when serviced by a reticulated water supply.
- d) 120L per person when serviced by on-site rainwater tanks

Example: The design wastewater flow rate for a five bedroom equivalent dwelling (four bedrooms and one study) serviced by a reticulated water supply must be 1200L per day based on the following;

Two people per bedroom for the first three bedrooms = 6 people

- . One person for each additional bedroom, including the study = 2 people
- 150L per person for a total of 8 people = 1200L per day.
- 18. Consider each dwelling separately for the purpose of the calculation listed in control 17 of this section when the design wastewater flow is calculated for multiple dwellings on any premises

 $\textbf{Example:} \ \ \text{The design wastewater flow rate for a five bedroom equivalent dwelling (four bedrooms and one study) and a 2 bedroom granny flat serviced by a reticulated water supply must be 1800L per day based on the following;}$

Primary dwelling;

- Two people per bedroom for the first three bedrooms = 6 people
- One person for each additional bedroom, including the study = 2 people
- 150L per person for a total of 8 people = 1200L per day.

Granny Flat;

- Two people per bedroom = 4 people
- 150L per person for a total of 4 people = 600L per day

Minimum irrigation area requirements for residential subdivision Where residential subdivision relying on an OSMS is proposed:

- Provide an area sufficient to accommodate an effluent disposal area of at least 1,200sqm on each lot. This must be demonstrated in the wastewater report.
- 20. Locate proposed effluent disposal areas to meet the minimum setback distances listed in table 8 considering a potential building envelope representing a dwelling of typical size for the local area on each lot.

Example: Figure 11 shows an example subdivision plan demonstrating the required effluent disposal areas on each lot.

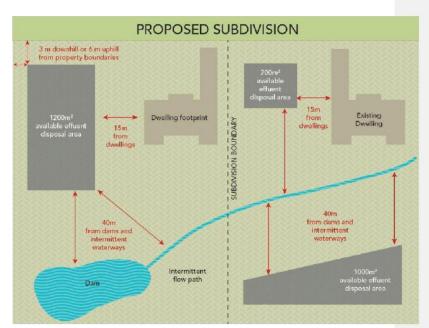


Figure 11: Example of a proposed subdivision with a total of 1200sqm of available effluent disposal area demonstrated on each lot.

16. Aboriginal Archaeology

<u>Applies to</u>

This section applies to land:

- 1. In which Aboriginal sites, places or relics have been previously identified.
- 2. Within an identified cultural landscape.
- 3. That has not been cleared.

Background

The Liverpool LGA was occupied by Aboriginal people prior to European settlement. Relics of this still remain.

Objectives

To identify and where possible preserve relics of the occupation of the land by Aboriginal communities.

Controls

Initial Investigation

An initial investigation must be carried out to determine if the proposed development or activity occurs on land potentially containing an item of aboriginal archaeology. If any of the above features apply then the relevant Aboriginal community must be consulted, as part of the initial investigation to ensure that the potential for the land to contain Aboriginal sites, places or relics has not been overlooked by previous studies.

Detailed Investigation

- If any of the features apply, then an Aboriginal Heritage Impact Assessment (AHIA)
 must be prepared in accordance with the NSW Department of Environment and
 Climate Change Draft Guidelines for Aboriginal Heritage Impact Assessment and
 submitted with the initial investigation report.
- An AHIA will also be required if the relevant local Aboriginal community provides sufficient information to the Council that leads it to conclude that the site may have Aboriginal heritage significance.
- Once the AHIA is submitted, the Council will send copies to representatives of the relevant local Aboriginal communities and the NSW Department of Environment and Climate Change for comment.

17. Heritage and Archaeological Sites

Applies to

This section applies to development affecting a heritage item, land in a heritage conservation area or an archaeological site as identified in the Liverpool Local Environmental Plan 2008, as well as land in the vicinity of a heritage item.

<u>Background</u>

The City of Liverpool local government area has a long and diverse history. The Liverpool area was originally the home of the Cabrogal group of the Darug people. The European settlement of the area began in the early 19th century and was formalised with the founding of the Town of Liverpool by Governor Macquarie in 1810. The buildings, sites and elements of our landscape illustrate the history of our local government area. Places identified as heritage items and heritage conservation areas contribute to forming our living historic environment which enriches the character of the local government area. Heritage places give identity to our neighbourhoods and help make the City of Liverpool an attractive and interesting place to live and work.

Development that affects places of heritage significance needs to be carefully designed to minimise negative impacts on heritage significance. Negative impacts may occur due to actions such as the removal of original fabric, loss of important design features, loss of important views, the removal of important vegetation, unsympathetic bulk and scale of new development and inappropriate selection of materials

Liverpool Local Environmental Plan 2008 identifies a range of heritage items and heritage conservation areas and provides objectives and provisions for the conservation of Liverpool's heritage. This portion of the DCP provides additional objectives, controls and guidance for regulating development affecting these heritage items and heritage conservation areas.

Conservation Philosophy

The aim of heritage conservation is to ensure that the cultural significance of heritage items and heritage conservation areas is maintained over time. While changes may be necessary to adapt heritage buildings to new uses or modern living standards, it is important to ensure that these changes do not compromise the heritage significance of the item.

The underlying philosophy of the controls for regulating development affecting heritage items and heritage conservation areas is derived from The Burra Charter: The Australia International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Significance, 1999 (Burra Charter). The Burra Charter is widely accepted as an industry standard for heritage conservation in Australia.

The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

Objectives

- a) to conserve the heritage significance of heritage items and heritage conservation areas of Liverpool including associated fabric, setting, curtilage and views;
- b) to conserve archaeological sites:
- c) to facilitate the implementation of the objectives and provisions relating to heritage conservation contained in the Liverpool LEP 2008;
- d) to promote and encourage heritage conservation and the consideration of the heritage context in development;
- e) to encourage the retention and appropriate development of significant items;

- f) to encourage a high standard of contemporary design in the heritage context;
- g) to encourage the preservation of culturally significant vegetation;
- to enhance the amenity and heritage values of the Liverpool local government
- to enable appropriate and expert consideration of proposed development to be
- to encourage and promote public awareness, appreciation and knowledge of heritage conservation.

Development Application Requirements

In addition to the general requirement for development applications the following additional details are required for applications relating to heritage items, places within a heritage conservation area or in the vicinity of a heritage item:

- a Statement of Heritage Impact prepared in accordance with guidelines set out in the NSW Heritage Branch publication titled Statements of Heritage
- Impact and available at their website, www.heritage.nsw.gov.au; measured drawings of the existing building including elevations, and clearly indicating existing walls and building elements to be retained and those proposed for removal or alteration;
- details of the materials, finishes and colour schemes
- a streetscape elevation showing the proposed development within the context of the existing streetscape
- Additional submission requirements which may include:

 Structural Report major alterations may also require a report from a structural engineer verifying that the proposed works will not have a detrimental impact on the structural stability of the building, on significant building elements, or on neighbouring properties:
 - Archaeological Assessment Report where there is a likelihood of disturbance of significant archaeology, an Archaeological Assessment will be required;
 - Interpretation Strategy major alterations to a heritage item may also require the production of an interpretation strategy, detailing how the significant aspects and uses of the building may be
 - publicly interpreted;

 Demolition Report whilst the demolition of heritage items and places within heritage conservation areas is not supported, if there is a proposal to demolish a heritage place this may require the production of a Demolition Report which details the heritage significance of the building and area and the contribution of the building or building element to that significance; the structural stability of the building in the form of a structural engineer's report; and/or a pest inspection report.

In the case of an item listed on the State Heritage Register, an Integrated Development Application or Section 60 Approval from the NSW Heritage Branch may need to be submitted. Exemptions from this requirement are detailed on the NSW Heritage Branch website at www.heritage.nsw.gov.au.

You are advised to contact Liverpool City Council prior to submitting a development application for development affecting a heritage item, heritage conservation area or in the vicinity of a heritage item to clarify what the submission requirements will be for your particular development proposal.

Guidelines for preparing Heritage Impact Statements

A Statement of Heritage Impact is a document which assesses the impact of any proposed development on the heritage significance of a building, site, streetscape, or area. The Statement of Heritage Impact should clearly identify each of the proposed works and should incorporate all development application drawings.

The statement should include options that have been considered for the proposal and document reasons for choosing the preferred option. These should include proposals to minimise the impact of the development on the heritage significance of the building, site, streetscape or area. The statement should also consider compliance with any recommended management policies contained in Council's Heritage Inventory or any Conservation Management Plan available for the place.

The NSW Heritage Branch have produced guidelines for the preparation of Statements of Heritage Impact which are available on their website at www.heritage.nsw.gov.au

A Statement of Heritage Impact must be submitted with any applications for development to:

- Heritage items:
- Properties in the vicinity of heritage items where the works may impact upon the item
- Properties within heritage conservation areas, including applications for demolition; and
- Fire upgrading of heritage items and buildings in heritage conservation areas

Where a building has a current Conservation Management Plan, the Statement of Heritage Impact Statement will need to demonstrate compliance with the plan.

Demolition and Demolition Reports

The demolition of heritage items and places within heritage conservation areas is not supported. The onus is on the applicant to demonstrate why the building cannot be retained, taking into consideration:

- The heritage significance of the item or contribution of the building or building elements to the heritage significance of the heritage conservation area; and
- A Demolition Report

A Demolition Report is a document which should include consideration of:

- The heritage significance of the building and area and the contribution of the building or building element to that significance;
- The structural stability of the building in the form of a structural engineer's report; and/or
- A pest inspection report

If the application proposes demolition of a structure of heritage significance, the applicant must:

- Submit a Demolition Report demonstrating that the structure is not reasonably capable of retention;
- Submit a factual statement as to why the structure needs to be demolished, including a statement from an appropriately qualified structural engineer;
- If demolition is recommended primarily on economic grounds, submit a statement from a quantity surveyor comparing the cost of demolition and cost of retention.

The above requirements may be waived in the event of an emergency or danger to the public.

Submitting the necessary reports or justifications in no way implies that the consent authority will agree to the proposed demolition. Liverpool City Council may obtain independent structural engineering advice. Where possible and reasonable, built heritage should be retained.

Where demolition is allowed, a photographic record of the building must be submitted to Council prior to the commencement of the demolition works.

Heritage Inventory

Liverpool City Council maintains the Liverpool State Heritage Inventory database which lists all heritage items and heritage conservation areas within the local government area. Each listing contains an inventory sheet that includes a physical description of the heritage item or heritage conservation area and a statement of significance. The inventory will be considered by the consent authority as part of its assessment of development applications.

Limited information on the inventory sheet does not mean that the item is not significant. Where insufficient detail is available, information provided with the development application may be used to update the database.

Liverpool State Heritage Inventory sheets are available by contacting Council or online through the NSW Heritage Office at: www.heritage.nsw.gov.au

Controls

Development of heritage items

- Where a proposal involves a heritage item, it will be necessary to lodge a Statement of Heritage Impact;
- 2. All development of heritage items must be designed by a Registered Architect;
- All development of heritage items must be designed to respect the heritage significance of these places in terms of:
 - Setting;
 - Scale;
 - Form;
 - Materials and colours;
 - Fenestration;
 - Fencing;
 - Landscaping
- Original fabric and landscape elements that contribute to the significance of a heritage item should be retained;
- Outbuildings should be located to the rear of heritage items and outside important view corridors to or from the place;
- Additions should maintain the integrity of the heritage item by retaining the significant fabric and form of the place and should be smaller in height and scale than the existing building to maintain views and vistas to the heritage item;
- Modern technologies (e.g. solar electricity collectors, TV aerials or satellite dishes) are to be located on roof slopes facing the rear yard of heritage items and should not be visible from the public domain nor intrude into significant view corridors to or from the place;
- Garages and carports should be located as far behind the front building alignment as possible and should not be incorporated into the front façade of a heritage item.

Development in heritage conservation areas

- 9. Where a proposal involves development within a heritage conservation area, it will be necessary to lodge a Statement of Heritage Impact;
- 10. All development within heritage conservation areas must be designed to respect the heritage significance of the area in terms of:
 - Character;
 - Setting and views;
 - Scale;
 - Form;
 - Setbacks;
 - Materials and colours;
 - Fenestration;
 - Fencing;
 - Carparking;

 - Landscaping
- 11. 11. Modern technologies (e.g. solar electricity collectors, TV aerials or satellite dishes) are to be located on roof slopes outside primary view corridors to or from the place and should not be visible from the public domain nor intrude into significant view corridors to or from the place.

Development in the vicinity of a heritage item

- 12. Development in the vicinity of a heritage item shall be designed to respect and complement the heritage item in terms of:
 - Scale:
 - Materials, colours and finishes;
 - Building and street alignment;
 - Landscaping and fencing
- 13. Development in the vicinity of heritage items is to minimise the impact on the setting of the heritage item by:
 - Retaining and respecting significant views to and from the heritage item;
 - Retaining original or significant landscaping (especially plantings associated with the heritage item);
 - Providing an adequate area around the place to allow interpretation of the heritage item.

Development of Archaeological Sites

- 14. The Council may grant consent to carry out development involving the excavation or filling of land or the erection (involving disturbance of land) or demolition of buildings on land which is an archaeological site that has non-Aboriginal significance or a potential archaeological site that is reasonably likely to have non-Aboriginal significance only if:
 - It has been considered an archaeological report; and
 - It is satisfied that any necessary excavation permit required by the Heritage Act 1977 has been granted.

Subdivision

15. Subdivision of an allotment that includes a heritage item should not be allowed unless it can be demonstrated that an adequate curtilage of the heritage item is retained and important views corridors conserved.

Signage

- 16. The significant architectural detailing of a heritage item, or places within a heritage conservation area, is not to be obscured by commercial signage;
- 17. The façade of a heritage item should not be painted in a corporate colour scheme, especially where the colour is inappropriate in the heritage context or when the façade is traditionally unpainted;

- Backlit signs and neon signs should only be allowed for under-awning signs on commercial buildings that are heritage items or within heritage conservation areas;
- Advertising structures should not obstruct or dominate important views to or from a heritage item or within a heritage conservation area.

Adaptive Reuse

- Adaptive reuse of a heritage item or places within a heritage conservation area should involve minimal change to the significant fabric of the place, particularly features that contribute to the streetscape;
- 21. Adaptive reuse of a heritage item or places within a heritage conservation area should consider significant associations and meanings of the place.

18. Repealed

19. Used Clothing Bins

Applies to

This section applies to charity bins located on either private or Council land.

Background

Used clothing bins are considered beneficial for the local community as they provide a means for residents to dispose of unneeded clothing items whilst providing an avenue for charities to obtain clothing donations from the public to provide goods, services and financial relief for disadvantaged people. Furthermore, clothing bins have the capacity to divert a substantial amount of recyclable material from landfill, thus ensuring the continued protection of the environment. The use of clothing bins is important as it supports both charitable causes and local residents in need.

Objectives

- To recognise used clothing bins form a legitimate and appropriate means of social support while encouraging the recycling of unneeded clothing.
- To allow for the operation of used clothing bins in a manner which limits adverse impacts upon visual amenity, health amenity, existing landscaping and the safety of pedestrians
- c) To control the number and location of used clothing bins within the Liverpool LGA.
- d) To regulate the size, appearance and maintenance of used clothing bins.
- e) To provide Council with legal protection from issues that may arise with regard to the placement and operation of used clothing bins.

General controls for all Used Clothing Bins

- 1. Used clothing bins are permitted in all business zones, the private recreation zone and on compatible sites such as educational establishments and places of public worship.
- 2. A used clothing bin is permitted on RE1 zoned land, only if the land adjoins a business zone and Council permission is obtained.
- 3. A maximum of 8 square metres must be identified in each development application for retail/shopping centre, schools and places of public worship for the future placement of used clothing bins.
- 4. A maximum of 2 used clothing bins are permitted on each shopping centre site. The bins at each shopping centre location/or other site are to be operated by the one charity organisation. Council reserves the right to use its discretion in determining whether additional bins are appropriate, and whether the site is considered suitable.
- 5. A used clothing bin must clearly display the name and telephone number of the operator and not exceed the following dimensions:
 - Width: 1.2 metres
 - Depth: 1.3 metres
 - Height: 1.9 metres
- 6. The used clothing bin is to be placed on a concrete slab to allow all weather use.
- The organisation owning the clothing bin will maintain the bin and its immediate surroundings in a neat and tidy condition at all times and operate it in such a manner so as to minimise any form of nuisance. The bin itself should be kept free of graffiti.
- 8. Illegally dumped materials within a 5 metre radius of a used clothing bin must be removed by the organisation owning the bin within 24 hours of being informed by

- A used clothing bin must be emptied at least twice every week or within 24 hours of being notified by Council of the necessity to do so.
- 10. Used clothing bin should be readily accessible and are not to be located in a designated car parking space and manoeuvring areas, nor in such a way that contravenes any condition of development consent applicable to the site.
- 11. Used clothing bin proposed to be placed on privately owned land must be supported by a letter giving the consent of the owner of that land.
- 12. A used clothing bin must not be located in a position where it could cause an obstruction to pedestrian and cycle paths, affect vehicular sightlines, on a road verge or in a manner which contributes to a potentially dangerous situation.
- 13. At no time will a used clothing bin be permitted on Council's footpaths, cyclepaths or
- 14. Council reserves the right to direct the replacement of a used clothing bin that has become damaged or dilapidated.
- 15. A used clothing bin will not be permitted in a particular location if, in the opinion of Council, the bin will result in an unacceptably adverse visual impact upon the surrounding area.
- 16. Each used clothing bin is to be left in the approved location and if moved by accident, or by any other persons, it is to be relocated to the correct position by the owner of the bin within 48 hours of being notified by Council.
- 17. The owner of a charity bin shall be responsible for compliance with any conditions imposed by the NSW Department of Gaming and Racing and the Charitable Fundraising Act 1991.
- 18. Breaches of conditions of any development consent granted can lead to the service of Order by the Council or a prosecution or any other action under the provisions of the Environmental Planning and Assessment Act 1979.

Additional controls for Used Clothing Bins on Council owned land

- 19. An application for the placement of a used clothing bin must be in writing and must address the following criteria:
 - The name of the company which will be operating the bin, and the name and contact details of a designated contact person within that company who has control of locating and servicing their bins.
 - b. Proof of membership with the National Association of Charitable Recycling Organisations. An application for the placement of a charity bin will only be approved if the owner of the bin is registered with the National Association of Charitable Recycling Organisation (NACRO). Approved bins are to at all times carry a label, as issued by NACRO, identifying that the owner is a member of that organisation.
 - A copy of the current insurance policy which indemnifies Council against any claims that could arise from the operation of the bin.
 - d. A detailed map which shows:
 - 1. The location of the proposed bin.
 - The location of any other bins located within 500 metres of the proposed
 - The location of any other bins controlled by the applicant/operator that are located within the Liverpool LGA,
 - 4. Details of the bins dimensions, signage, materials and method of installation,
 - 5. Details of the maintenance arrangements for the bin itself (including removal of graffiti) and the area around the bin (including the removal of excess clothing and general waste),

- 6. Details of the frequency and method with which the bin will be emptied.
- 20. The organisation owning the used clothing bin shall carry public liability insurance providing cover against third party injury or damage. The owner of the bin must submit written evidence of public liability insurance naming Liverpool City Council as an additional insured party and providing a limit of indemnity not less than \$20 million. Details of the insurance cover are to be lodged with Council at the time of making the application for approval.
- 21. The siting of used clothing bins on Council land is permitted only with the written consent of Council.
- The cost of any necessary improvements to Council owned land is to be borne by the bin owner.
- 23. Approval to place a used clothing bin on Council land is conditional on:
 - There being no detrimental impact to the amenity of the area where the charity bin is proposed to be located,
 - Any other condition considered appropriate by Council.
- 24. The applicant will comply with the criteria endorsed by NACRO in relation to the use and operation of the used clothing bin.
- 25. The owner of any charity bin placed on Council property without Council's permission or not carrying a NACRO membership label will be given a written direction to remove the bin
- 26. Council will review the location of the bin after an initial period of twelve (12) months and may require removal/relocation if the bin and surrounds is not managed appropriately.
- Council will retain the authority to require that any bin, approved or otherwise, shall be removed at any time after reasonable notification.

20. Car Parking and Access

Applies to

This section applies to development, which generates the need to provide car parking and loading facilities, generates vehicle and pedestrian movement and potentially generates the need for public transport.

Most development generates vehicle and pedestrian movements. There is a need to achieve a balance between the need to minimise adverse impacts on the immediate neighbourhood, the street network and adjoining developments. Some developments, due to their scale may require changes to the transport networks.

Good design integrates vehicle access and car parking into the development concept so that it is convenient for the users and safe for pedestrians and vehicles. Access and car parking needs to be carefully considered so that it is balanced with landscape elements and does not dominate the appearance or character of a development.

Objectives

- To ensure that adequate parking space and service facilities are conveniently located on site to satisfy the reasonable demand created by the development.
- b) To ensure that access is designed to accommodate the size and volume of vehicles likely to visit the site.
- c) To ensure that loading facilities are provided for vehicles likely to service the site.
- d) To ensure where appropriate that car parking and the manoeuvring of commercial vehicles are separated in the interest of safety and amenity.
- To ensure that adequate landscaping/tree planting is provided to improve amenity and reduce visual impact of car parking and loading areas.
- f) To ensure that car parking and driveways do not interfere unreasonably with the amenity of the neighbourhood.
- g) To ensure the provision of the appropriate car parking depending on location.
- h) To ensure that where a development generates the need to augment the local transport network that the development contributes to that work.
- To provide highly accessible end-of-trip facilities for bicycle riders, and to provide a network of cycleways which encourages active travel.
- To provide safe facilities by ensuring adequate manoeuvring space, and separation where appropriate, between bicycles and motor vehicles in parking areas.
- k) To ensure pedestrian and vehicle safety.

Controls

The controls for Car Parking and Access are contained within clause 20.1 through 20.7. Bicycle parking, facilities, and infrastructure requirements are contained within this section for all development.

20.1 Overall Design Considerations

The layout of a car parking area shall consider the entire facility, including car parking modules, landscaping, circulation aisles and roadways, access driveways and, if necessary, frontage road access as an integrated coordinated design. The management of traffic within a car parking facility should take into account:

- 1. The need for traffic to move to and from the frontage road with minimum disruption to passing traffic and maximum pedestrian safety.
- 2. Provision of adequate capacity in circulation roadways and aisles to handle peak hour movements without congestion
- 3. Avoid as far as practicable conflicts between intersecting streams of circulating traffic.
- 4. Minimum length travel paths between entry/exit points and car parking spaces.
- 5. Safe treatment of points of conflict with pedestrians and other road users.

20.2 Vehicular Access Arrangement and Manoeuvring Areas

Background

The location, type and design of vehicular access points to a development can have significant impacts on the streetscape, the site layout and the building façade design.

The design and location of vehicular access to developments should minimise traffic impacts, including pedestrians and vehicles conflicts, on footpaths, particularly along pedestrian priority places, and visual intrusion and disruption of streetscape continuity.

Objectives

- a) To ensure all driveways and access points are designed to Australian Standards
- b) To minimise any negative impacts of vehicular access points on the public footpath
- c) To ensure efficient traffic flow.
- d) To minimise impact of driveway crossovers on pedestrian safety and streetscape
- e) To minimise stormwater runoff from uncovered driveways and parking areas.

Controls

- If driveways are proposed from a classified road approval is required from the Roads and Maritime Services (RMS)
- 2. Vehicular egress and entrances must be integrated into the building design so they are visually recessive. This can be achieved by locating the opening a small distance behind the front façade.
- Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicular access points so that they are capable of shared access at a later date.
- Access ways to underground parking should be sited to minimise noise impacts on adjacent habitable rooms, particularly bedrooms.
- 5. Vehicular access may not be required or may be denied to some heritage buildings.
- Vehicle access ramps parallel to the street frontage will not be permitted;
- Doors to vehicular access points are to be roller shutters or tilting doors set back from the building façade; and
- Vehicular entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.

20.3 On-Site Car Parking Provision and Service Facilities by Land Use

Background

On-site parking includes underground (basement), surface (at grade) and above ground parking, including parking stations.

Objectives 5 4 1

- To facilitate an appropriate level of on-site parking provision to cater for a mix of development types.
- b) To minimise the visual impact of on-site parking.
- To provide for adequate space for parking and manoeuvring of vehicles including service vehicles and bicycles.
- d) To enable the conversion of above ground parking to other future uses.
- To recognise the complementary use and benefit of public transportation and nonmotorised modes of transport such as bicycles and walking.

Controls

- Where a proposed use is, in the opinion of Council, unusual and not appropriately dealt with by the parking rates, the RMS guidelines to Parking rates may be used to guide the required parking rate.
- Basements cannot extend out of the ground more than 700mm at the street front of a site and 1200mm at the rear unless site conditions are such that minor variations are require.
- Provide natural ventilation to underground parking areas, where possible. Ventilation grills must be:
 - integrated into the overall façade and landscape design of the development;
 - only located on the secondary streets and service lanes; and
 - oriented away from windows of habitable rooms and private open space areas.
- 4. Tables 11, 12 and 13 outline the number of car parking spaces and any other facilities required for the accommodation of vehicles on site for each land use type. In proposals where calculations of car parking requirements result in fractions of spaces being required, the fraction will be rounded up to the nearest whole space. Where developments comprise separately defined facilities, for example a hotel with a restaurant, the relevant requirements of each facility must be satisfied.
- For Development Applications that propose composite developments such as shopping malls, retail plazas (and the like) the common or shared areas (e.g. toilets, corridors) are excluded from the LFA.

Car Parking Provision in Liverpool City Centre

Off-street car parking shall be provided in Liverpool City Centre in accordance with Clause 7.3 of Liverpool Local Environmental Plan (LLEP) 2008, Car parking in Liverpool city centre (where the land is zoned B3 — Commercial Core or B4 — Mixed Use) and Section 4.4.2 of Part 4 LDCP 2008.

Off-Street - Car Parking Provision other than Liverpool City Centre

Off street car parking provision and service and loading provision shall be provided in accordance with Table 11.

Boarding houses Bulky Goods Premises (in the B5 zone) Caravan Parks and Camping Areas Child care centres Residential & industrial zones	1 space per, 2 bedrooms or 1 space per 3 beds, whichever is the greater Developments of LFA < 600sqm: 1 space per 30sqm LFA, Developments of LFA 600 to 3,000sqm: 1 space per 90sqm LFA, Developments of LFA > 3,000sqm: 1 space per 150sqm LFA 1 space per unit/site plus 1 space per employee	Servicing facilities for 1 small rigid vehicle Developments of LFA < 600sqm require occasional access for an articulated vehicle and service facilities for a heavy rigid vehicle Developments of LFA > 3,000sqm require service facilities for an occasional articulated vehicle Waste collection vehicle service access
Caravan Parks and Camping Areas Child care centres Residential & industrial zones	per 30sqm LFA, Developments of LFA 600 to 3,000sqm: 1 space per 90sqm LFA, Developments of LFA > 3,000sqm: 1 space per 150sqm LFA 1 space per unit/site plus	600sqm require occasional access for an articulated vehicle and service facilities for a heavy rigid vehicle Developments of LFA > 3,000sqm require service facilities for an occasional articulated vehicle Waste collection vehicle
Camping Areas Child care centres Residential & industrial zones	space per 90sqm LFA, Developments of LFA > 3,000sqm: 1 space per 150sqm LFA 1 space per unit/site plus	for a heavy rigid vehicle Developments of LFA > 3,000sqm require service facilities for an occasional articulated vehicle Waste collection vehicle
Camping Areas Child care centres Residential & industrial zones	space per 150sqm LFA 1 space per unit/site plus	3,000sqm require service facilities for an occasional articulated vehicle Waste collection vehicle
Camping Areas Child care centres Residential & industrial zones		
Child care centres Residential & industrial zones	1 space per employee	
Residential & industrial zones		Loading space for a coach
zones		
Business zones	1 space per staff member and 1 space per 10 children	Service facilities for a van
Business zones	(Stack parking of employees cars, maximum 2 deep, will be considered if there is good design for flow-through of short term car parking)	
Business zones	Pick up and set down of children must address their safety	
	1 space per 35sqm of LFA	Service facilities for a van
Drive-in food Outlets	Type 1 - 1 space per 8sqm of LFA	Waste collection vehicle service access
For type definitions refer to Appendix 1 in Part 1	Type 2 - 1 space per 8sqm of LFA plus 1 space per 5 seats	Service access Service facilities for a heavy rigid vehicle
	Type 3 - 1 space per 6 seats plus queuing area for 10 cars	rigia verilicie
Drive-in Liquor Stores	Parking while browsing is provided for without interfering with through traffic Internal roadway:	Waste collection vehicle service access
	Two parallel lanes, minimum 3m wide, with queuing min. length 30m.	Heavy rigid vehicle service facilities
	Entry & exit driveways min 4m wide & minimum 1m apart	
Dwelling houses	2 spaces	
Educational establishments		
Rural, Residential & Industrial zones	1 space per 1 staff member, plus 1 space per 30 students	Loading facilities for a coac
	Car parking is to be convenient to the distribution of destinations on campus	
	A traffic and car parking report will be required, as these uses are land	
ool Development Control Plan 200	intensive, including student car traffic generation	

Land Use	Minimum Number of Car Parking Spaces	Service and Loading
Business zones	1 space per 35sqm of LFA	
	A traffic and car parking report will be required, as these uses are land intensive, including student car traffic generation	
Entertainment facility	1 space per 10sqm LFA of audience area or per 6 seats whichever is the greater OR subject to traffic report (at the applicant's expense) if required by Council, due to the scope of a particular development	Service access for a small rigid vehicle
Exhibition home Exhibition villages	5 spaces per dwelling used for exhibition purposes	
	Temporary car parking can use the front setback area	
Group homes -	1 Space per employee, plus	
(transitional & permanent	1 space per 4 bedrooms	
Health consulting rooms & veterinary hospitals	3 spaces per consulting room or health care professional, whichever is greater, plus	Service access for an occasional small rigid vehicle
	space per person employed on the premises, plus any residential requirement	
Home business Home occupation Home industry	1 space per employee not resident on the site plus the residential requirements	Service access for an occasional small rigid vehicle
Hospitals	A traffic and car parking report will be required to define the need and demonstrate its fulfilment	Service facilities for a heavy rigid vehicle Facilities are designed for
	Car parking is to be convenient to the distribution of destinations on site	waste collection
Hotel accommodation	1 space per room/unit plus	Waste collection vehicle
(Reductions available if peaks of facilities do not	1 space per 2 employees engaged in accommodation	service access
coincide)	For developments exceeding 200 bedrooms, provision must be made for short-term lay by for a tourist coach, couriers and taxis	Loading facilities detailed in Sub Section 4
Industry	1 space per 35sqm of office LFA	Developments of LFA >
	1 space per 75sqm factory/warehouse LFA or 1 space per 2 employees, whichever is the greater	1,000sqm require occasional access for an articulated vehicle
	Warehouse developments of GFA > 1000sqm: 1 space per 250sqm in GFA	Service Facilities detailed in Section 4
Landscape and garden supplies	Minimum 15 spaces plus 1 space per 200sqm of nursery site area	Service access for a heavy rigid vehicle

Land Use	Minimum Number of Car Parking Spaces	Service and Loading
Markets	2.5 spaces per stall	Occasional access for an articulated vehicle (to transport temporary structures)
		Loading facilities to be convenient to stalls
Materials recycling or recovery centre	Traffic Report Required	
Medical centres	1 space per 25sqm of LFA for typical situation	Developments > 2,000sqm LFA require waste collection
	Traffic report required where specialised services are provided	vehicle service access
Multi dwelling housing and residential flat buildings		
Residential & Business zones	1 space per small dwelling (< 65sqm) or 1 bedroom	Service access for removalists and garbage
	1.5 spaces per medium dwelling (65 - 110sqm) or 2 bedrooms	servicing
	2 spaces per large dwelling (> 110sqm) or 3 or more bedrooms	
	1 visitor car space for every 4 dwellings or part thereof	
Office premises		
Business zones	1 space per 35sqm of LFA	Developments of LFA > 2,000sqm require waste collection vehicle service facilities
Place of Public Worship		
Rural, Residential & Recreation zones	1 space per 5sqm LFA or 1 space per 6 seats, whichever is the greater OR subject to traffic report (at the applicant's expense) if required by Council, due to the scope of a particular development	Service access for a small rigid vehicle
Business zones	1 space per 35sqm of LFA	Service access for a small rigid vehicle
Industrial zones	1 space per 70sqm of LFA	Service access for a small rigid vehicle
Recreation facilities		
Industrial & Recreation zones	Gymnasia, Fitness Centres and Indoor Cricket 1 space per 22sqm of LFA	Service access for a small rigid vehicle
	Tennis or Squash Court & Bowling Alleys - 3 spaces per court/alley	
	Bowling Green 30 spaces for first green and 15 spaces for each additional green	
	Other sports subject to traffic report	

Minimum Number of Car Parking Spaces	Service and Loading
1 space per 20sqm of LFA	Service access for a small rigid vehicle
For major or large recreation facilities a traffic report may be required.	
1 space per 5sqm of LFA of uses under license OR a traffic report	Service access for a small rigid vehicle
	Waste collection vehicle service access
1 space per 7sqm of LFA of uses under license OR 1 space per 3 seats, whichever is the greater	Waste collection vehicle service access
1 space per 20sqm of LFA	Waste collection vehicle service access
1 space per 7sqm of LFA of uses under license OR 1 space per 3 seats, whichever is the greater	Waste collection vehicle service access
Developments of LFA < 12,000sqm: 1 space per 20sqm LFA,	Developments of LFA < 4,400sqm require service access for an articulated
Developments of LFA 12,000 to 30,000sqm: 1 space per 25sqm of LFA,	vehicle
Developments of LFA > 30,000sqm: 1 space per 30sqm LFA	Service Facilities as per Section 4
Traffic Report Required	
4 spaces per stall	Occasional access for an articulated vehicle (to transport temporary structures)
	Loading facilities to be convenient to stalls
2 spaces per fuel outlet plus	Service access for an articulated vehicle
3 spaces per service bay plus1 spaces per employee	Service facilities for a heavy rigid vehicle
1 space per 20sqm of LFA of any convenience store	rigia verilicie
1 space per bedroom/suite plus 1 space per 2 employees	Service access and facilities for an occasional heavy rigid vehicle (e.g. Furniture van)
1 space per 70sqm of LFA or 1.5 car spaces per employee, whichever is the greater	
	Spaces 1 space per 20sqm of LFA For major or large recreation facilities a traffic report may be required. 1 space per 5sqm of LFA of uses under license OR a traffic report 1 space per 7sqm of LFA of uses under license OR 1 space per 3 seats, whichever is the greater 1 space per 20sqm of LFA of uses under license OR 1 space per 3 seats, whichever is the greater 1 space per 20sqm of LFA of uses under license OR 1 space per 3 seats, whichever is the greater Developments of LFA < 12,000sqm: 1 space per 20sqm LFA, Developments of LFA 12,000 to 30,000sqm: 1 space per 20sqm LFA, Developments of LFA > 30,000sqm: 1 space per 30sqm LFA Traffic Report Required 4 spaces per stall 2 spaces per fuel outlet plus 3 spaces per service bay plus1 spaces per employee 1 space per 20sqm of LFA of any convenience store 1 space per bedroom/suite plus 1 space per 2 employees

Land Use	Minimum Number of Car Parking Spaces	Service and Loading
Vehicle Repair Station		
Business zones	1 space per 70sqm of LFA	Service access for a small rigid vehicle
Industrial zones	1 space per 70sqm of LFA	Service access for a small rigid vehicle
Vehicle showroom	1 space per 130sqm	
Veterinary hospital	1 space per 35sqm of LFA	
Business zones	1 space per 20sqm LFA	Service access for a small rigid vehicle
Warehouses	1 space per 35sqm of office LFA 1 space per 75sqm factory/warehouse LFA or 1 space per 2 employees, whichever is the greater	Developments of LFA > 1,000sqm require occasional access for an articulated vehicle
	Where it can be shown that employee numbers will be significantly less than the required car parking provision, some of the car spaces may be set aside as unformed car parking	Section 4
	Warehouse developments of GFA > 1000sqm: 1 space per 250sqm in GFA	

Disabled Off-Street Car Parking

Disabled car parking shall be provided in accordance with Table 12 for car parking areas over 20 spaces:

Table 12 Disabled Car Parking Provision

No of spaces	Land Use
1 per 100 spaces	Retail, Commercial, Industry or Transport
2 per 100 spaces	Community, Recreation, Accommodation or Education
3 per 100 spaces	Entertainment or Health

Bicycle Parking and Cycling Facilities

- 1. Bicycle parking and cycling facilities shall be provided in accordance with Table 13
- Bicycle parking and cycling facilities shall be clearly signposted and located in an area that is convenient to access from within the building(s) and from the street/public path.
- 3. In multi-storey developments, bicycle parking and cycling facilities for residents and staff shall be located on the ground floor, or first basement level close to entry/exit points, to ensure they are secure and easily accessible by staff and tenants. The design of

 - ensure they are secure and easily accessible by staff and tenants. The design of buildings must ensure:

 areas between bicycle parking and the street have a courtesy ramp, if stairs are the primary means of access,

 paths between the entry point and bike parking and cycling facilities shall be wide enough to accommodate a person walking a bike (particularly around corporate).
 - paths adjacent to a driveway are visually or physically separated and marked,

- bike cages or lockers within basement car parks are not located in, or create, concealed spaces.
- Any bicycle parking for visitors or customers shall be located adjacent to the main entry
 point. In developments with multiple entry/exit points, the share of bicycle parking can
 be divided between each entry point, as per expected demand and design of the
 development.
- End-of-trip facilities (showers and change rooms) are to be provided at the rate of 1 per 10 employee bicycle spaces. Where less than 4 facilities are proposed, they should be unisex. End-of-trip facilities are optional for residential uses or for visitors to other developments.
- Where shower facilities and change rooms are provided, they should be located adjacent to the employee bicycle parking. This may be near the main entrance/lobby of the building, or in some instances the service entry.
- 7. At least one personal locker is to be provided for each Class 1 or 2 bicycle parking space.

Note: Bicycle parking facilities have the same classification as Cycling Aspects of Austroads Guidelines and are classified as:

- Class 1. High security facilities are suitable for all-day or night parking. This includes fully enclosed individual lockers. Refer to AS 2890.2
- Class 2. Medium security facilities are appropriate for all-day parking in many areas. These facilities include a lockable shelter/enclosure fitted with Class 3 facilities. Refer to AS 2890.2
- Class 3. Low security facilities are appropriate for short-medium stay parking in highly
 visible areas. This includes bicycle rails/racks where the wheels and frame can be locked
 to the rack (traditional 'toaster' racks where the front wheel only is secured is not an
 appropriate facility).

Table 13 Bicycle Parking Pro Land Use	Employee/Resident Parking Spaces (Class 1 or 2 facility)	Visitor/Customer Parking Spaces (Class 3 facilities)	
Residential			
Residential Flat Buildings, Multi- Dwelling Housing	1 per 2 units, or 1 for every 4 bedrooms (whichever is greater).*	1 per 10 units.	
Boarding Houses, Hostels & Group homes	1 per 10 beds.	1 per 10 units/rooms.	
Seniors Housing	1 per 10 staff & 1 per 20 units	2 per centre	
Caravan Parks, Tourist & Visitor Accommodation	1 per 10 staff.	1 per 20 bedrooms/sites.	
Commercial			
Bulky Goods Premises, Garden Centres, Hardware and Building Supplies premises, Industrial Retail Outlets, and Rural Supplies.	1 per 1000sqm GFA or 1 per 10 staff (whichever is greater)	1 per 1000sqm GFA	
Cellar Door premises, Kiosks, Roadside Stalls and Timber Yards.	Not Applicable	Not Applicable	
Office Premises	1 per 200sqm of GFA.	1 per 750sqm GFA	
Other Retail and Business Premises (>500sqm GFA)	1 per 10 staff or 1 per 200sqm GFA (whichever is greater)	2 plus 1 per 100sqm GFA	
Shopping Centres	1 per 300sqm LFA	1 per 500sqm LFA	
Industry, Depots, Warehouses & Distribution Centres	1 per 10 staff (or 1 per 10 car spaces if staff numbers are undetermined)	Nil	
Rural Industry (Fixed Location)	Not Applicable	Not Applicable	
Community/Other			
Medical Centres and Health Consulting Rooms	1 per 10 staff	2 per centre, plus 1 for every 5 th consulting room	
Educational Facilities	1 per 10 staff	1 per 10 students	
Child Care Centres	1 per 10 staff	2 per centre	
Community Centre/Museums	1 per 10 staff	2, plus 1 per 1500sqm GFA	
Places of Public Worship	1 per 10 staff	1 per 20 seats	
Libraries	1 per 10 staff	4 plus 1 per 200sqm GFA	
Registered Club & Function Centres	1 per 10 staff	1 per 140sqm GFA	
Recreational Facilities			
Major Facilities	1 per 1500 spectator places	1 per 250 spectator places	
Swimming Pools	1 per 10 staff	1 per 15sqm of pool	
Other Indoor Facilities	1 per 10 staff	2 plus 1 per 100sqm GFA	

^{*}The storage of bicycles for a unit in a residential flat building or multi-dwelling housing may be combined with a unit's allocated basement storage area. The bicycle parking space may also be combined with a storage room within the dwelling. The area for bicycle parking must be larger than a Class 1 locker. If the storage room is in a basement it must satisfy control 3 above.

Bike Paths and Facilities
The Liverpool Bike Plan provides for new on-road and off-road bicycle routes to be provided across Liverpool. In an effort to avoid instances of providing 'tack-on' widenings or reconstruction of new footpaths, new developments must consider any proposed routes in the Bike Plan.

- Any development which would otherwise be required to rehabilitate, or provide a new footpath, shall provide a shared-path (or other facility as specified) if it forms part of a route in the bike plan
- route in the bike plan.

 2. In addition to control 1 above, any developments involving more than 10 dwellings may be required to join any shared paths (or other facilities) required as part of the development with that of other nearby facilities if the paths would not meet.

 3. Shared paths shall be at-least 2.5m wide, and designed in accordance with any
- Shared paths shall be at-least 2.5m wide, and designed in accordance with any applicable Council paving policy, the Cycling Aspects of Austroads Guidelines and NSW Bicycle Guidelines (RTA).
- 4. In an effort to reduce streetscape clutter, regulatory shared-path signage should not be installed until a reasonable portion of the route has been constructed (e.g. a length of approximately 50m or more, such as an uninterrupted length between two streets).

20.4 Car Parking Design

Car Space Dimensions

Table 14 Dimensions of Off-Street Car parking for bays at 90°

Land use types	Width	Length 1	Length 2	Aisle Width
Tenant, employee and commuter car parking, universities (generally all day car parking)	2.4m	5.4m	4.8m	6.2m
Long-term city and town centre car parking, sport facilities, entertainment centres, hotels, motels, airport visitors (generally medium term car parking)	2.5m	5.4m	4.8m	5.8m
Short-term city and town centre car parking, shopping centres, department stores, supermarkets, hospitals and medical centres (generally short term car parking and where children and goods can be expected to be loaded into vehicles)	2.6m	5.4m	4.8m	5.8m
Car parking for people with disabilities (see next section)	3.2m	5.4m	4.8m	5.8m

- 1. Length 1 Where car parking is to a wall to high kerb not allowing any overhang.
- Length 2 Where car parking is controlled by wheel-stops or a kerb no higher than 100mm, which allows 600mm overhang.
- 3. Refer to AS 2890.1: 2004 for more details.
- Adjacent Obstruction If the side boundary of a space is a wall or fence, or if there are
 obstructions such as columns placed so as to restrict door opening, 300mm shall be
 added to width required for the space.
- 5. Blind Aisles The end spaces shall be made 1m wider than the remaining spaces. In car parks open to the public, the maximum length of a blind aisle shall be equal to the width of six, 90-degree spaces unless provision is made for cars to turn around at the end and drive out forwards.

Landscaping within car parking areas

An outdoor car park with 20 or more car parking spaces must include at least 1 tree per 10 car parking spaces to the following specifications:

- A tree must be a single trunk species to allow a minimum visibility clearance of 1.5m measured above natural ground level; and
- 2. A tree must be planted in an island bed that is a minimum 2m in width and 4m in length.

Layout for car parking spaces

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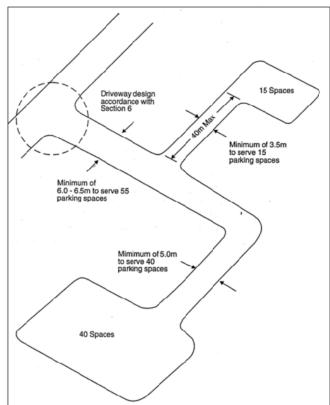


Figure 13 Car parking layout

20.5 Internal Driveways

Gradient

- Driveways are to be in accordance with the relevant Australian Standard. The maximum change in gradient is to be as shown in the "Maximum Gradients of Internal Driveway" diagram (See Figure 3).
- 2. Measured parallel to the angle of car parking 1 in 20 (5%); and
- 3. Measured at 90° to the angle of car parking -1 in 16 (6.25%).

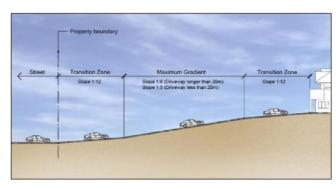


Figure 14 Driveway gradients

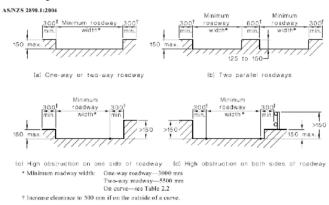
Widths

- For internal driveways between the access driveway and the car parking area the minimum carriageway width depends on the number of car parking spaces and service bays served.
- 2. Consideration should be given to increase these widths where high levels of heavy vehicles usage are anticipated.
- 3. By definition circulation driveways should not have car parking on them.
- 4. The minimum internal driveway widths are to be provided in accordance with Table 4.

Table 15 Internal driveway widths

	Number of Car Parking Spaces / Service Bays				
	1 - 15 spaces and length not exceeding 40m	15 - 40 spaces	Over 40 spaces		
Width	3.5m	5m	6 - 6.5m		

The following illustrates this table.



DIMENSIONS IN MILLIMETRES

MINIMUM ROADWAY WIDTHS ON CURVED ROADWAYS AND RAMPS

metres

Turn radius	Single lane		Two-way, no separator	
R _o (Note 1)	Public facilities	Domestic property	All cases (Note 3)	
7.6 to 11.9	3.9	3.6	_	
12.0 to 19.9	3.4	3.1	6.7 (Note 4)	
20.0 to 50.0	3.2	3.0	6.3	
>50.0	3.0	3.0	5.5	

Figure 15 Internal driveway widths

Design

- 1. Locate and design car-parking areas so they can be observed by adjoining uses.
- Minimise the number of pedestrian and vehicular entry and exit points, and ensure they are in close proximity to each other and to nearby active uses.
- 3. Staff car parking areas should be separated and secured.
- Provide surveillance measures such as security cameras or devices and security guards where possible.
- Underground car parking areas should provide security grilles in the roofs or upper walls to allow some street surveillance.
- Lighting must comply with relevant Australian Standards, with brighter lighting located at entrances and pedestrian path or accessways. Lighting should be placed to sufficiently illuminate car parking bays as well as the driveways. Light fittings should be vandal resistant and easily maintained to ensure continued compliance with the Australian Standard.
- Clear directional signs must be provided to stairs, lifts, and exits to shops or businesses, as well as signs to advise users of security measures in place.
- Pedestrian pathways should be integrated into the design and allow for maximum safety, especially for people with a disability and people using prams. Pathways should be clearly marked and well lit.
- 9. Internal driveway should be designed for a low speed environment.

Loading Facilities

- Adequate facilities for servicing developments shall be provided on-site to ensure loading/unloading activities do not occur on street and compromise the safety, amenity and capacity of the public road system.
- Provision for loading facilities shall be provided for development in accordance with AS 2890 2 – 2002
- Service facilities shall be conveniently located close to service entrances (or other building entrances) to discourage loading/unloading in other than the designated areas.
- Areas where heavy vehicles are manoeuvring shall be separated from areas of car parking or pedestrian movement with safety being the over-riding consideration.

20.7 Driveway Crossings

Location of Driveway Crossings

- 1. Driveway Crossings shall be located a minimum distance from the following items:
 - 0.5m from all drainage structures on the kerb and gutter;
 - 1.0m from side property boundaries;
 - 6m from a kerb tangent point of a street corner.
- Driveway Crossings should avoid the need to remove existing street trees and any replacement tree (species determined by Council) is to be at the development's cost.
- Driveway Crossings should avoid changes to existing public utility infrastructure including drainage and any relocation of such shall be the development's expense.
- Where a development site has frontage to a Classified Road, the Driveway Crossings should be located on an alternative street.
- Where a Driveway Crossing is proposed directly from a Classified Road, a deceleration lane may be required.
- 6. Locate the entrance at the first Driveway Crossing from the adjacent kerbside lane.
- 7. Avoid a driveway layout, which may result in on-street queuing.
- All vehicles must enter and leave the property in a forward direction (except in the case
 of dwelling houses and Attached dwellings and Semi detached dwellings).
- Locate each Driveway Crossing so that it is clear of all obstructions, e.g. poles, trees, which may prevent drivers from having a timely view of pedestrians.

Design of Driveway Crossings

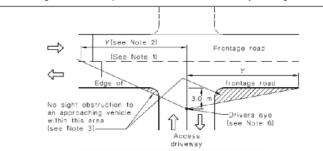
- Design each Driveway Crossing so that it is relatively level within 6m of the site boundary or any pedestrian way, the recommended maximum gradient is 5%.
- 2. Signpost each Driveway Crossing with appropriate entry, exit and keep left signs.
- Decorative Driveway Crossings over the footpath area will only be permitted if it is compatible with the amenity of the locality.
- In business zones any Driveway Crossing shall be compatible with the existing and future paving pattern.

Second Driveways (for Residential Dwellings)

- A second Driveway Crossing for dwelling houses, attached dwellings and semi-detached dwellings are to be consistent with the relevant Australian Standards and all other provisions in the DCP, specifically:
 - Minimum distances from public domain infrastructure, including drainage structures, street signage, bus stops, kiosks, lighting, power poles and the like;
 - Minimum distances from property boundaries and kerb tangent points;
 - Minimum and maximum driveway widths;
 - Cut and fill of the land (including any associated retaining wall);
 - Minimum landscaping requirements for the site, as indicated in the relevant DCP provision; and
 - Removal of existing vegetation, including street trees.
- 2. Second driveways will only be considered in instances where:
 - The lot width, measured at the lot boundary which faces the road, is greater than 15 metres;

- The combined driveway width between the lot boundary and the face of the dwelling is not more than 50% of the total lot frontage, or 12m, whichever is the lesser.
- There is at least a 6m space between driveway crossings, to allow for an onstreet parking space;
- The existing driveway cannot be augmented;
- The second driveway will not involve the net loss of any street tree;
- The second driveway will not reasonably invoke obstruction of a footpath (or area outside the property boundary) due to vehicle overhang;
- The second driveway will not decrease pedestrian and other road user safety due to poor visibility to/from the driveway;
- There is a demonstrated lack of available on-street parking for registered vehicles; and
- The existing driveway, and any garages or carports, approved by Council, have not been converted for other uses which reduces the availability of on-site parking
- An application for an additional driveway must include a dimensioned plan of the site, which shows:
 - Location of dwelling;
 - Location of the existing and proposed driveway, including any garage, or carport;
 - Width of the property frontage;
 - Distance between existing and proposed layback;
 - Dimensions of the proposed and existing driveways;
 - The area of impervious surfaces and pervious surfaces within the front setback;
 - The area of landscaped area on the site as a whole; and
 - Indication of any vegetation to be removed

The following illustrates the requirements for the location of Driveway Crossings.



Frontage road speed (Note 4)	Distance (Y) along frontage road (Note 5)		
km/h	m		
	5 s gap	8 s gap	
40	55	89	
50	69	111	
60	83	133	
70	97	156	
80	111	178	
90	125	200	
100	139	222	
110	153	244	

NOTES:

- 1 Centre-line or centre of roadway (undivided road), or right hand edge of right hand through lane (divided road).
- A check to the left is not required at a divided road where the median is wide enough to shelter a vehicle leaving
- Parking on this side of the frontage road may need to be restricted on either side of the driveway so that the sight distance required by the above table to an approaching vehicle is not obstructed.
- This is the posted or general speed limit unless the 85th percentile speed is significantly higher.
- These distances are equivalent to minimum gap sight distance (MGSD) for an exiting vehicle. The minimum requirement is a 5 second gap. A right turn exit into a six lane road may require up to an 8 second gap, unless the median is wide enough to shelter a vehicle leaving the driveway.
- When checking sight distance the height of the object (approaching vehicle) is to be taken as $1.15 \, \mathrm{m}$ above the road surface. The driver's eye height is to be taken as any height in the range $1.15 \, \mathrm{m}$ to $2.5 \, \mathrm{m}$, to exter for both car and commercial vehicle drivers.

Figure 16 Locations of Driveway Crossings

Width of Driveway Crossings

1. Driveway crossing widths shall be in accordance with tables 5 and 6.

Table 16 Car Parking Spaces served by the Driveway Type

Street Frontage	Number of Car Parking Spaces served by the Driveway Type						
	Less than 25	25-100	101-300	301-600	More than 600	Heavy Vehicles	
Major	1-2	2-3	3-4	4	5	7	
Minor	1	1-2	2-3	3-4	4	6	

- Major Street Frontage includes Classified Roads and Sub Arterial Roads under Council's Road Hierarchy.
- Maximum for residential: 6m.

Table 17 Driveway crossing widths

Type	Entry Width	Exit Width	Minimum separation of driveways	Splay at kerb line	Kerb return turnout radius			
	w	W		s	R			
1	3 - m	Combined	NA	0.5m	-			
2	6 – 9m	Combined	NA	1m	-			
3	6m	4 – 6 m	1 - 3m	1m	2 – 9m			
4	6 – 8m	6 – 8 m	1 - 3m	1m	2 – 9m			
5	Direct feed from a controlled intersection via a public street							
6	8 – 10m	8 –10m	3m	1m	2 – 9m			
7	10 -12m	10 -12m	3m	1m	2 – 9m			

Cost of Driveway Crossing Works

The cost of any adjustment to a public road, including kerb and gutter, road shoulder and deceleration lane shall be borne by the development.

20.8 Pavement requirements

Access driveways, internal driveways and car parking spaces are to be paved to a standard to carry the anticipated loadings, unless otherwise specified elsewhere in the DCP. Porous paving materials will be considered, provided that sufficient detail is provided to show that such paving is sustainable. Driveway material must not be allowed to spill or be carried onto road pavement.

20.9 Transport Impact

Transport Management Plan

For major developments a Transport Management Plan shall be submitted with the development application. The Transport Management Plan shall address the following:

- 1. The existing traffic environment.
- 2. Traffic generation anticipated from the proposed development.
- 3. The cumulative impact of traffic in the locality.
- 4. The need for traffic improvements in the locality
- 5. The need for public transport works on site and in the locality
- 6. Proposed traffic egress/ingress to Classified/Sub Arterial Roads.
- Sight distance and other safety issues.

Construction Transport Plan

A Construction Transport Plan may also be required where it is likely that the construction phase of a development will have a significant impact on traffic movement in the locality. A Construction Transport Plan shall address the following:

- 1. The existing traffic environment.
- 2. Traffic generation anticipated from the construction of the proposed development.
- 3. The impact on traffic in the locality.
- 4. Proposed heavy vehicle routes
- 5. The need for transport management and hours of operation and access in the locality.
- 6. Sight distance and other safety issues.

Cost of Transport Impact Works

The cost of any works directly attributable to the development, including dedication and or construction of road works, traffic management facilities or any public transport facilities either on site or off site shall be borne by the development.

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21. Subdivision of Land and Buildings

Applies to

This section applies to development, which involves subdivision of land or buildings.

Background

The subdivision of land has a major impact on the use of land in terms of density and type of development, impacts on adjoining development, impact on the natural environment, demands on public infrastructure, usability of land, access to roads and future development potential. The subdivision of buildings also has impacts on the future management of buildings and on the adjoining areas.

Objectives 5 4 1

- a) To provide a functional, attractive and safe environment for residents that are consistent with community standards and needs
- b) To minimise adverse effects on the natural environment.
- To provide for the needs of future users of the land in respect to building requirements vehicular and pedestrian access, provision of services and an amenity appropriate to the zoning of the land.
- d) Provide for the economic utilisation of the land resource of the area
- e) To achieve a balance between the development / subdivision of residential, commercial and industrial land and the amenity of existing occupants
- f) To provide for an equitable and efficient distribution of public amenities and services.
- g) To minimise Council's future maintenance costs for roads, services and open spaces.

Controls

21.1 Specifications

Subdivision works shall be carried out in accordance the Council Subdivision Specification.

Splay corners

Minimum 6 x 6m splays for all subdivisions involving creation of a road junction.

21.2 Rural Zones - RU1 and RU4

Refer to Liverpool LEP 2008 written statement and the maps for the minimum allotment sizes in the RU1 and RU4 zones. Note that this varies depending on the location.

Minimum Lot Width

The minimum lot width in the RU1 and RU4 zone is 24m.

All new streets shall be a minimum 20m wide, unless specified elsewhere in a Locality Part of the DCP.

All Weather Roads

Development involving the creation of new streets in RU1 and RU4 zones will be required to provide an all-weather road system to provide a functional and safe vehicular access to each allotment or development.

Sealing of Roads

- Bitumen sealing of the road system will be required on all new roads and existing roads, which will be an extension of existing sealed roads unless specified otherwise by
- Council will not approve the development/subdivision of lands proposing non-dedicated road access (e.g. private road systems). However consideration will be given to the creation of a right-of-way to serve allotments having the minimum dedicated road frontage but not having road access.
- 3. Such right-of-way is to link directly to an existing or proposed dedicated road and constructed in accordance with Councils standards
- 4. Minor subdivisions in isolated rural areas require a reasonable standard of all-weather access road suitable for all year round access for essential services, i.e. school bus, ambulance etc.
- Each proposal will be considered on its merits in accordance with the following guidelines:
 - The status of the road.
 - Existing road surface condition.
 - Cost of upgrading.
 - Flooding frequency and hazards of creek or river crossings.
 - Potential population catchment.
 - Bush Fire Hazard.

Electricity

- 1. The extension of electricity mains to each all otment within the subdivision is required.
- Subdivisions in areas remote from electricity mains may be relieved of this requirement, if special circumstances prevail and details of such circumstances are submitted to Council, together with the written agreement from Integral Energy.

Sewerage

- 1. Effluent disposal will normally be by way of appropriate on-site disposal.
- Where the development is in near proximity to an existing sewered area or where, in the opinion of the NSW Department of Health or Council, the land is unsuitable for site disposal of effluent, connection to sewerage will be required.
- 3. A geotechnical report to support sewerage treatment proposals is to accompany an application for onsite sewage management this type of the development

Street signage

- 1. Street name and information signs shall be provided to facilitate accessibility and
- Approval for the naming of all new streets shall be obtained from Council prior to the erection of any new street signage

21.3 Rural Zone - RU2 and Residential Zone - R5

Minimum lot sizes

Refer to Liverpool LEP 2008 written statement and the maps for the minimum allotment sizes in the RU2 and R5 zones. Note that this varies depending on the location.

Minimum Lot Width

The minimum lot width in the RU2 and R5 zone is 24m.

Street widths

All new streets shall be a minimum 20m wide, unless specified elsewhere in a Locality Part of the DCP.

Kerb & Gutter

- 1. Development involving the creation of new streets in RU2 and R5 zones shall require kerb and guttering and underground stormwater drainage where specified in Council's
- Concrete lined table drains shall be required where scour velocities are exceeded and/or the soils are susceptible to erosion from stormwater.

Sewerage

- 1. Effluent disposal will normally be by way of appropriate on-site disposal.
- 2. Where the development is in near proximity to an existing sewered area or where, in the opinion of the NSW Department of Health or Council, the land is unsuitable for site disposal of effluent, connection to sewerage will be required
- A geotechnical report to support sewerage treatment proposals is to accompany an application for onsite sewage management this type of the development.

Natural Features

- 1. The configuration of the subdivision is to have consideration for natural features such as rivers, creeks, topography of the land, tree groupings and prominent natural features.
- 2. The design should also consider buffers for conflicting land uses, watercourses, etc.

Street signage

- 1. Street name and information signs shall be provided to facilitate accessibility and
- Approval for the naming of all new streets shall be obtained from Council prior to the erection of any new street signage.

Street lights

Street lighting is to be provided in accordance with AS1158.

21.4 Residential Zones (Except R5)

Minimum lot sizes

Refer to Liverpool LEP 2008 written statement and the maps for the minimum allotment sizes in the Residential Zones. Note that this varies depending on the location.

- 1. Subdivision of land shall meet the minimum lot width requirements as set out in Table
- 2. Subdivision of land involving the creation of lots less than 300 sqm or less than 10m lot width shall include the dwelling house as part of the development application.
- The subdivision plan will not be released until the dwelling which was approved in conjunction with the subdivision is completed to above ground floor level.

Table 18 Minimum Lot Widths

Zones Minimum Lot Size (as per LLEP 2008 minimum lot size map)		Minimum lot Width	
R4	Any lot size shown on the Lot Size Map greater than 300sqm	24m	
R1, R2	600-1000sqm	20m	
R2	450sqm	15m	
R1, R3	450sqm	12m	
R1, R2	400sqm	11m	
R1, R2	300sqm	9m	
R1, R2	300sqm (Area 3)	9m	
R1, R2, R3	300sqm (Area 2)	8m	
R1, R4	300sqm (Area 1)	7m	

Note: Minor variations may be considered if the average width of the lot is greater than the Minimum Lot Width as stated in Table 18.

All new streets shall be a minimum 18m wide, unless specified elsewhere in Part 2 of this DCP.

Road works

- Development involving the creation of new streets in Residential Zones will be required
 to provide fully serviced subdivisions including the provision of a sealed road system
 with drainage, and kerb and gutter, to adequately and safely provide both vehicular and
 pedestrian access to each allotment.
- Development in established residential areas shall meet the full cost of kerb and guttering across all existing street frontages of any development/subdivision except where direct vehicular access is restricted.
- Streets adjoining a public reserve shall provide kerb and gutter to adequately and safely provide both vehicular and pedestrian access. Footpaths may also be required.

Legal easements of width as determined by the Council Codes and Specifications are to be provided over stormwater drains and watercourses.

Water and Sewerage

New development will be required to extend augment and meet the full cost of water and sewerage reticulations, as arranged with *Sydney Water* within developments / subdivisions plus the cost of connecting to existing services.

Electricity

- Electricity services are to be extended to the development / subdivision and in accordance with the requirements of Integral Energy and at full cost to the development.
- 2. Underground electricity services will be required except where it can be shown that it is

Street lighting

Street lighting shall be designed by the applicant to AS1158 and the development will be required to meet the full cost of street lighting installation.

Telephone

The development will be required to provide for telephone facilities within the design. Where underground electricity is used, underground telephone facilities are also to be provided by the development.

Stormwater Runoff

Urban stormwater runoff will need to be assessed in terms of satisfactory performance both within the development and external to the development to a legal point of discharge.

Street Tree Planting

- Street trees shall be required to be planted in conjunction with the creation of a new street or the extension of an existing street.
- 2. One street tree shall be planted for each allotment created.
- 3. The street trees shall be planted prior to the release of the subdivision certificate.
- The trees shall be provided with protection to ensure their survival during the construction of buildings in the street. Refer to Figure 17 for details.

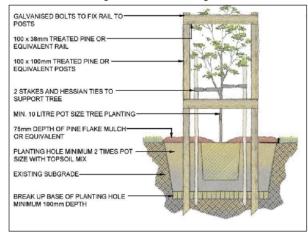


Figure 17 Tree Guard and Planting Details

Street signage

- Street name and information signs shall be provided to facilitate accessibility and mobility.
- Approval for the naming of all new streets shall be obtained from Council prior to the erection of any new street signage.

21.5 Industrial and Business Zones

Road widths

All new streets shall be a minimum 20m wide, unless specified elsewhere in Part 2.

Minimum Lot Width

B1 and B2 zones

The minimum lot width in the B1 and B2 zones is 20m.

B6 Zone (Enterprise Corridor)

- Development shall not be permitted for a new building (other than a maximum 10% addition to an existing structure) in the B6 zone unless the site has a frontage width to the Classified road of at least:
 - 30 m, where the site also has frontage to a local street that intersects with and would permit access to and from the classified road; or
 - 90m otherwise.
- Development for a new building (other than a maximum 10% addition to an existing structure) in the B6 zone must not leave adjacent land such that it cannot achieve either:
 - A site frontage with of at least 30m (where the site also has frontage to a local street that intersects with and would permit access to and from the Classified Road): or
 - 90m otherwise.

IN 1, IN 2 and IN 3 Zones (Industrial)

The minimum frontage for new lots shall be in accordance with Table 19.

Table 19 Frontage Width

Street	Width of Frontage
Classified Roads, Bernera Road, Kurrajong Road and	65m
Moorebank Avenue	
Other streets	30m
Cowpasture Road (Site adjacent to future link road across Hinchinbrook Creek to former Hoxton Park Airport)	120m

Road works

- Development involving the creation of new streets in Industrial and Business Zones will be required to provide fully serviced subdivisions including the provision of a sealed road system with drainage, and kerb and gutter, to adequately and safely provide both vehicular and pedestrian access to each allotment.
- Development in established areas shall meet the full cost of kerb and guttering across all existing street frontages of any development/subdivision except where direct vehicular access is restricted.
- Streets adjoining a public reserve shall provide kerb and gutter to adequately and safely provide both vehicular and pedestrian access. Footpaths may also be required.

Street Lighting

Provide Street lighting to AS1158.

Pavement for Heavy Traffic

Engineering Road Design and Pavement Design will need to provide for heavy traffic conditions as specified by Council.

Water and Sewerage

New development will be required to extend augment and meet the full cost of water and sewerage reticulations, as arranged with Sydney Water within developments / subdivisions plus the cost of connecting to existing services.

Electricity services are to be extended to the developments/subdivision and in accordance with the requirements of Integral Energy at full cost to the development. Integral Energy will make determination of the maximum loading of the electricity service, and whether the service is provided above ground or underground.

Developments will be required to provide for telephone facilities. Where underground electricity is used, underground telephone facilities are also to be provided by the development.

Street Tree Planting

- Street trees shall be required to be planted in conjunction with the creation of a new street or the extension of an existing street.
- 2. One street tree shall be planted for every 20m of street frontage.
- 3. The street trees shall be planted prior to the release of the subdivision certificate.
- The trees shall be provided with protection to ensure their survival during the construction of buildings in the street. Refer to Figure 17 for details.

Street signage

- 1. Street name and information signs shall be provided to facilitate accessibility and mobility.
- Approval for the naming of all new streets shall be obtained from Council prior to the erection of any new street signage.

21.6 Hatchet shaped Allotments

1. The minimum width of the accessway to a hatchet shaped allotment shall be as shown in Table 20.

Table 20 Hatchet allotment access handle

No of Allotments	Rural and Residential zones	Industrial and Business zones
One allotment	5m	7m
Two allotments	5m	7m

- 2. There shall be a maximum of 2 allotments from any access way in the Residential, Business and Industrial zones
- 3. Where 2 allotments are proposed to be created having an adjacent access ways to a public street, the access ways shall have reciprocal rights of way created over each of the access ways in order to minimise separate driveway access points.

Where traffic generation from use of a hatchet shaped allotment is likely to be significant an additional width for the access way may be required.

21.7 Strata subdivision

Applications for strata subdivision of buildings, space or land will need to ensure that the strata plan is consistent with the development consent particularly the allocation of private and common property. In particular visitor or customer car parking identified in a development consent shall remain as common property.

There must be a minimum requirement of three buildings, spaces, or land parcels for strata subdivision.

22. Energy Conservation

Applies to

This section applies to development involving the use of energy.

Background

The ability of development to optimise thermal performance, thermal comfort and day lighting will contribute to the energy efficiency of the buildings, provide increased amenity to occupants and reduce greenhouse emissions and, with them, the cost of supplying energy.

Objectives

- a) To reduce the necessity for mechanical heating and cooling.
- b) To minimise greenhouse gas emissions
- c) To provide thermal comfort by minimising temperature variations within buildings.

Controls

Residential

New dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). A complying BASIX report is to be submitted with all development applications containing residential activities.

Non-Residential

- All Class 5 to 9 non-residential developments are to comply with the Building Code of Australia energy efficiency provisions.
- Improve the control of mechanical space heating and cooling by designing heating/ cooling systems to target only those spaces which require heating or cooling, not the whole building.
- 3. Encourage passive solar designed dwellings.
- 4. Improve the efficiency of hot water systems by:
 - Insulating hot water systems.
 - Installing water saving devices, such as flow regulators, 3 stars rated shower heads, dual flush toilets and tap aerators.
- Reduce artificial lighting and design lighting systems to target only those spaces which required lighting at any particular 'off-peak' time, not the whole building.
- Maximise natural light to reduce reliance on artificial lighting and utilise energy efficient lamps, reflectors and fittings to reduce requirements for artificial lighting.
- 7. For all commercial office development over \$5 million, provide an Energy Efficiency Report from a suitably qualified consultant to accompany any development application for a new commercial office development. The report is to demonstrate that the building can achieve no less than 4 stars under the Australian Building Greenhouse Rating Scheme.

23. Reflectivity

Background

Reflective materials used on the exterior of buildings can result in undesirable glare for pedestrians and potentially hazardous glare for motorists. Where installed on tall buildings, reflective materials may be also a hazard for aircraft. Reflective materials can also impose additional heat load on other buildings. The excessive use of highly reflective glass is discouraged. Buildings with a glazed roof, facade or awning should be designed to minimise hazardous or uncomfortable glare arising from reflected sunlight.

Objectives

 To restrict the reflection of sunlight from buildings to surrounding areas and buildings.

- New buildings and facades must not result in glare that causes discomfort or threatens safety of pedestrians or drivers.
- 2. Visible light reflectivity from building materials used on the facades of new buildings must not exceed 20%.
- Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians, motorists or aircraft may be required.

24. Landfill

Applies to

This section applies to development, which involves cutting and or filling of land. It does not involve land cut and filling in conjunction with a development application for a building(s).

Background

The cutting and filling of land has the potential to have significant environmental and visual impacts on the environment.

Objectives

- a) To minimise any land cut and filling.
- b) To minimise any adverse impact of land cut or filling on adjoining or nearby lands.

- All fill applied should be Virgin Excavated Natural Material (VENM), as defined by the NSW Department of Environment and Climate Change. Any fill involving material other than VENM is subject to referral to the State Government as potential Integrated Development or contaminated land assessment.
- 2. All filling in the vicinity of native vegetation must be local material (in order to minimise the spread of weeds).
- Any excavation within the zone of influence of any other building will require a Dilapidation Report.
- 4. Refer to the section on Salinity if cutting greater 500mm is to be undertaken.
- 5. No retaining wall structures will be permitted within any easements such as drainage easements. Retaining walls located on the boundary of two allotments or boundary to a public street or public reserve shall be of masonry construction. Other types of retaining wall structure may be permitted if the structure is located wholly within the property.

25. Waste Disposal and Re-use Facilities

Applies to

This section applies to all applications that propose:

- 1. Subdivision and excavation of land.
- 2. Demolition of an existing building.
- 3. Construction of any development including alterations and additions.
- 4. Any development that requires a waste bay or the like.

Background

The construction and demolition of buildings and excavations generates the need for waste disposal and opportunities to minimise waste disposal and maximise recovery of resources from those activities. For new buildings, the occupation of those buildings generates an ongoing need for waste disposal and recycling. There are potential environmental and human health impacts associated with waste generation, storage and disposal. Under current waste legislation there is a need to minimise disposal of waste to landfill and recover resources to minimise depletion of natural resources.

Objectives

- To minimise waste produced during demolition and construction of new development and maximise resource recovery.
- To ensure waste management for the end use of the development is designed to provide satisfactory amenity for occupants and provide appropriately designed collection systems.
- c) To minimise ongoing waste to landfill and maximise recycling of ongoing waste.

Controls

Non-residential development

Note: Council does not provide waste services to non-residential premises. Owners and operators of non-residential premises must engage a private commercial waste contractor to remove and legally dispose of the waste their premises generates.

- Development applications for all non-residential development must be accompanied by a waste management plan that addresses:
 - best practice recycling and reuse of construction and demolition materials,
 - use of sustainable building materials that can be reused or recycled at the end of their life,
 - handling methods and location of waste storage areas, such that handling and storage has no negative impact on the streetscape, building presentation or amenity of occupants and pedestrians, and
 - procedures for the on-going sustainable management of green and putrescible waste, garbage, glass, containers and paper, including estimated volumes, required bin capacity and on-site storage requirements.
- The waste management plan is to be prepared by a specialist waste consultant and is subject to approval by Council

Residential development

1. Provision must be made for the following waste generation shown in Table 21.

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	T	able	21	Waste	Genera	tion
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Type of Waste	Dwellings (including housing, attached and semi dwellings and dual occupancy)	Medium and High Density Residential Development
General Waste	140 litres/week/dwelling	110 litres/week/dwelling
Recycling	120 litres/week/dwelling	110 litres/week/dwelling
Green Waste	120 litres/week/dwelling	Shared 240 litre bins can be provided by Council. Numbers of bins will be assessed on a case by case basis and require provision of adequate storage.

- In dwellings not exceeding six (6) dwellings, individual waste storage facilities may be permitted. In a development of more than six dwellings or where the topography, or distance to the street makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is:
 - Not visible from the street
 - Easily accessible to dwelling occupants
 - Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to an approved collection point),
 - Has water and drainage facilities for cleaning and maintenance; and
 - Does not immediately adjoin private open space, windows or clothes drying areas
- Wherever a rear lane is present, the rear lane is to be used for the removal of waste provided that it complies as follows:
 - Provides an area of kerbside where the placement of waste bins will not obstruct the passage of vehicles; and
 - Has sufficient dimensions for the Council's contractor's collection vehicles to be able to empty waste bins safely and without damage to property.
- 4. Subject to Council collection policy, common waste storage areas are to be sized to accommodate the number and size of waste bins that are required, plus enough space for the bins to be accessed, manoeuvred in and out for emptying and rotated as necessary. Minimum dimensions of the bins can be found in the Council fact sheet, 'Waste Management Services for Residential Flat Buildings and Multi Dwelling Housing
- 5. The size and number of the waste bins shall be determined having regard to the number of dwellings to be serviced, the space available for the presentation of the bins for emptying and the need for either on-site access by the waste contactor's collection vehicle or the requirement for bins to be wheeled to the street for collection by the contractor. If transferred to the street for collection, the body corporate or a caretaker must be responsible for the movement of bins to their collection point and return to their place of storage within the time set in Council's Domestic Waste Policy. If bins are proceed collected from within a development, they are to be presented for emptying to the approved collection point by agents of the body corporate and then returned back into the storage area by those agents afterwards.

Waste Management Plan

 A Waste Management Plan (WMP) shall be submitted with a Development Application for any relevant activities generating waste. The WMP is provided in three sections:

- Demolition;
- Construction; and
- On-going waste management
- 2. The WMP shall show:
 - Estimated volumes of waste generated according to type; and
 - Details of whether each type of waste material that will be produced on site are to be reused, recycled or disposed of and the recycling or waste facilities to which those materials will be taken.
- 3. The WMP must then be implemented on site throughout the development process, demolition, construction and use of the development. During demolition and construction the WMP together with proof of lawful disposal for all waste that is disposed of or otherwise recycled from the site must be retained onsite in a Waste Data File. Proof is to include a log book with associated receipt/invoices, waste classification and site validation certificate.

All entries in the Waste Data File must include:

- Time and Date
- Description and size of waste
- Waste facility used
- Vehicle registrations and Company name
- 4. The Waste Data File must be made available for inspection by any authorised Council Officer at any time during site works and at the conclusion of site works should be retained by the person responsible and made available for inspection by authorised Council Officers.
- A copy of the final Waste Data File shall be submitted by the PCA to Council with a copy of the occupation certificate.

Waste Management Facilities

- Waste management facilities shall be provided for in all new buildings (except dwelling houses, Attached dwellings, Semi-Detached Dwellings and Dual Occupancy). These shall be designed to ensure that the storage and collection of waste and recyclables is user friendly for both the occupant and the waste collection contractor.
- Where a communal Waste Management Facility for Multi dwelling housing and Residential flat buildings is required, on site storage details are to be submitted on the plans and set out as below:
 - Location of space within the dwelling for the separation and temporary storage of waste, recyclables and compost with sufficient capacity for a minimum of one days waste or recycling
 - Location and design of the Waste Storage and Recycling Area (Bin bay) on the premises. This must be readily accessible for both residents and waste and recycling contractors.
 - Where applicable design details of any Volume Reduction Equipment. The use of volume reduction equipment (to compact waste materials) may be appropriate where space is a problem. In normal circumstances there will not be a reduction in area requirements where such equipment is proposed, to accommodate future variations to development management and waste disposal options. Volume reduction equipment should not be used on recyclables; removing contaminants from compacted recyclables is almost impossible and compacted contaminated loads will be rejected by end markets.

- For buildings more than three (3) storeys, or where elevator access is required for dwellings on the upper levels a waste service room, or compartment must be provided on each floor of the building for the intermediate storage of garbage and/or recycling. Sufficient space must be allocated for access by residents, storage of bins, and easy manoeuvring of bins.
- The area must be suitably located on premises in terms of accessibility for both the
 occupants and the waste and recycling contractor. The system for waste
 management must be compatible with available collection services collection
 occurs at the front of the land.
- Measures for protecting bins and any associated waste equipment from theft or damage are to be indicated within the WMP.
- 3. Provision of ongoing waste management facilities shall include:
 - In the case of multi dwelling housing of 8 or fewer dwellings individual 240L waste bins are to be provided and stored within the courtyard of each dwelling. If such storage is not possible an easily accessible garbage bin bay is to be provided.
 - In the case of multi dwelling housing of 9 or more dwellings and residential flat buildings one or more garbage and recycling enclosures (bin bays) are to be provided within the site.
 - Bin bays are to be well ventilated and screened to a minimum height of 1.5m by a structure and landscaping. Construction materials are to be compatible with the proposed development and adjoining development.
 - Bin bays or waste service rooms are to be sufficiently open and well lit to allow safe use after dark
 - A hose cock for hosing the garbage bin bay and a sewered drainage point are to be provided in or adjacent to the bin storage area. The drainage point should have a fine grade drain cover sufficient to prevent coarse pollutants from entering the sewer if the hose cock is located inside the bin storage bay it is not to protrude into the space indicated for the placement of bins. Responsibility for cleaning of all waste storage areas should be determined when designing the system and clearly stated in the waste management plan. Frequency of cleaning to eliminate odour and pests should also be indicated on the WMP.
 - Sufficient space must be allocated within the bin bays to allow for access to all required bins by residents and waste collectors, as well as manoeuvring of bins within the bay and for the removal and return of bins by the waste collector.
 - The agreed numbers of bins that will require storage are given as a consent condition.
 - In the case of secure developments where garbage and recycling bins are stored within the secure area, the WMP needs to indicate:
 - Arrangements for supervised access by Council Contractors to collect waste must be shown to the satisfaction of Council; or
 - Arrangements for delivery of bins to kerbside and removal when emptied to within the development must be shown.
 - Council waste and recycling contractors are not to be provided with keys, pass keys, or other mechanical or electronic means of entry to secure developments.

Access to waste and recycling storage

1. Bin bays are to be adjacent to a street frontage, or if not possible then at a designated point adjacent to the common access driveway provided sufficient level areas (<5% grade) is available for bin collection to be carried out, away from vehicle ramps and steps. The bin bay is to be located so that distance from bin bay to the nearest waste</p>

collection point accessible by the collection vehicle is no further than 15m. The bin bay shall be positioned so as to minimise noise impacts on residents from the usage of bins and waste or recycling collection.

- The access routes should be highlighted on the plan. Access must be made available
 by wheelchair for occupants. Bin bays should allow for bins to be wheeled by to the
 street kerb over flat or ramped surfaces with a maximum grade of 7% and not over steps,
 gutters, or landscape edging. The need for manual handling by collection staff should
 be kept to a minimum.
- 3. Residents should not be required to carry waste or recyclables more than 30m to a waste storage area such as a bin bay, or in the case of a residential flat building greater than three storeys, a waste service room for interim storage of waste and/or recyclables. Recycling bins are not to be stored in isolation, but in close proximity to garbage bins or chutes.
- 4. Waste service rooms or compartments where provided, shall be enclosed and of design compatible with the proposed development. Adequate ventilation shall be provided for the room or compartment. Suitable arrangements for transfer of any interim storage to the main bin bay are to be indicated in the WMP.
- 5. Waste and recycling collection vehicles should be able to service the development efficiently and effectively and with no need to reverse. Current collection vehicles are fitted with a left side lifter for handling MGBs, with a minimum height clearance of 3.6 m when lifting and 4.7m width when lifting.
- Council and waste collection contractor vehicles will not enter private property including driveways to collect waste or recycling.

Other Waste Considerations

- 1. In the case of multi dwelling housing or residential flat buildings of more than 25 dwellings, a designated space reflecting the number of dwellings shall be provided for temporary storage of disposed bulky items awaiting Council clean up or contracted removal. The minimum allocated space must be 6sqm, with a minimum height of 2m. The space shall be signed as to its purpose.
- 2. No waste incineration devices are permitted
- 3. Council will consider applications for buildings more than three (3) storeys or where elevator access is required for dwellings on the upper levels that utilise garbage chutes as a means of transferring waste from each level to a centralised garbage room, with the following criteria:
 - Garbage chute access can only be located within a waste service room or compartment.
 - Recycling chutes are not permitted. Recycling bins for interim storage are to be proved in each waste service room.
 - Garbage chutes are not to be situated adjacent to habitable rooms
 - Applications must state the material the chute is to be made from, how the chute is to be cleaned, how often the chute will be cleaned, how any blockages will be removed and any fire protection measures to be used.
 - The waste collection system that the chute feeds into must be stated (compactor, carousel, open bin) and suitable for the number of dwellings in the development.
- 4. Signage should be in English, and consideration given to other languages reflective of the most recent demographics of Liverpool LGA. Illustrative graphics will form a minimum 50% of the area of the signage. Council can provide appropriate bin bay usage signs if required. Signage is to be prominently posted in each bin bay, or waste service room indicating that:

- Garbage is to be placed wholly within the garbage bins provided.
- Only recyclable materials accepted by Council shall be placed within the recycling bins.
- The area is to be kept tidy.
- A telephone number for arranging the disposal of bulky items.
- Should garbage chutes be incorporated, signage on how to use the chutes is to be located prominently next to the chute itself.

26. Outdoor Advertising and Signage

Applies to

This section applies to applications for Outdoor Advertising and Signage.

Background

The provision of signage is an integral part of any business to identify its presence to the potential customers. Depending on the size, number and location, signage may have a substantial visual impact on a locality.

Objectives 5 4 1

- a) To ensure that outdoor advertising signage is complementary to and compatible with both the development on which it is displayed and the character of the surrounding locality.
- b) To encourage the rationalisation of existing and proposed advertising signs so as to minimize the extent of visual clutter caused by the proliferation of signs.
- c) To provide guidelines for the display of outdoor advertising to ensure that they communicate effectively and contribute positively to the urban and rural environment.
- d) To ensure that outdoor advertisements are designed and located so that they do not adversely affect the safety of motorists and pedestrians.

Controls

26.1 Need for Consent

A combined DA/CC could be submitted to save time in processing the applications.

26.2 Outdoor Advertising without Consent

Some outdoor advertisements have a minimal effect on the appearance of the building, structure or place where they are displayed and, as such, have a low level of environmental impact. However, if a structure is used to display such advertisements, a construction certificate may be required.

Advertisements without Consent include:

All Zones

- Advertisement other than on a heritage item or in a heritage conservation area which is not visible from outside the land on which it is displayed
- 2. Temporary signs other than those on awnings provided they comply with the Design Criteria in Section 8.7.
- 3. A public notice displayed by a public body giving information or direction about the services provided.
- 4. Signs behind the glass line of a shop window provided they are not flashing or moving and do not occupy more than 25% of the shop window for heritage items or 50% in all other situations
- 5. Street sign.
- 6. Advertisements on a public seat or bus shelter.
- 7. Advertisements on motor vehicles used principally for the conveyance of goods or

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 Business identification sign not including a moving sign or flashing sign and other than on a heritage item or in a heritage conservation area provided they comply with Subsection 9.7 Design Criteria.

Rural Zones

- One pole or pylon sign of not more than 2sqm in area and not exceeding 2m in height above ground level per lot.
- One additional sign of not exceeding 0.75sqm in area on the face of a building where the business is carried out in an architecturally compatible manner.

Residential Zones

One sign of not more than 0.75sqm in area attached to a solid masonry fence or one pole or pylon sign of not more than 0.75sqm in area and not exceeding 2m in height from ground level for each business operation or activity.

One under-awning sign, one fascia sign and one top hamper sign on each shop or business premises

Industrial Zones

- 1. One pole or pylon sign (including directory board for multiple occupancies) not exceeding 5sqm in area and 5m in height from ground level for each development. Such a sign is to be located within an area of 5 x 3m on either side of the ingress or combined ingress/egress, subject to compliance with sight distance requirement.
- 2. For multiple occupancy development, one additional company identification sign, not exceeding 2 x 0.6m at the entrance to each occupied unit.
- 3. For single user development, one additional company identification sign is permitted at the rate of not exceeding 1sqm of advertising area per 3m of street frontage or a maximum of 50 sqm whichever is the less.

- 1. Real estate signs other than flashing signs or moving signs or those on awnings provided they comply with the design criteria specified in Schedule 1 and the following:
- 2. In residential or rural premises:
 - Does not exceed 2.5sqm in area;
 - Has returns not exceeding 180mm.
- 3. In business and industrial premises does not exceed 4.5sqm in area;
- 4. In land development on subdivision does not exceed 6sqm for each 25 lots or part thereof

26.3 Outdoor Advertising

- 1. All proposals for Outdoor advertising shall comply with the following:
 - Conforms to the desired future character of the area or zone as described in the objectives for the zone.
 - Complements the dominant character of an urban or rural landscape.
 - Complements the character of a building, site or area, e.g. an historic building, public garden, view of urban or rural landscapes.
 - Conveys the advertiser's message or image while conforming to the surrounding character.
 - Rationalises or reduces the number of existing signs.
 - Does not adversely affect traffic and/or pedestrian safety.
 - Complements any established theme or pattern of signage.
 - Refers to an approved or lawful use of the site or building.





Figure18 Signage Requirements

Limiting sign numbers

- 1. The following design factors are relevant:
 - Number of existing signs on the building (and adjacent buildings);
 - Placement visibility;
 - Dimensions (including depth);
 - Scale (dimensional or proportional relationship to spaces, other physical urban elements including buildings, trees, other signs or people);
 - Shape;
 - Materials, construction details means of attachment;
 - Colour;
 - Purpose of sign (identification, directional or general advertising);
 - Reflectivity;
 - Means of illumination;
 - Movement;
 - Provision of services;
 - Durability;
 - Maintenance provisions.

26.4 Signage Controls in Zones

Rural Zones

Objectives

- a) To preserve the rural amenity of the locality.
- b) To minimise the visual impacts of signs in rural areas.
- c) To coordinate tourism signs.
- d) To avoid undue distraction to motorists and to maintain traffic safety on rural roads.

Controls

- One pole or pylon sign is permissible per lot. Sign is not to exceed 2sqm in area and 2m in height above ground level.
- One additional sign is permitted on the face of a building where the business is carried out in an architecturally compatible manner. The size of the sign is not to exceed 0.75sqm in area.
- Illuminated signs are only permitted to operate during those times when the business is open for trading.
- 4. Moveable signs are not permitted.
- Signs for tourist facilities are to be considered on individual merits.
- 6. Signs are not permitted at locations where they are hazardous to traffic.
- 7. Third party advertising is not permitted.
- 8. Advertising structures shall comply with Sub-section 9.7 Design Criteria





Figure 19 Tourist directional signs

Figure 20 Proliferation of signs

Residential Zones

Objectives |

- a) To preserve the residential amenity of the locality.
- b) To minimise the visual impact of signs.
- c) To permit adequate identification of permissible uses (e.g. convenience store, home occupations, home industries, professional services, place of public worship, child care centre) without interfering with the amenity of the area.

Identification sign

Controls

Liverpool Development Control Plan 2008 Part 1 Outdoor Advertising & Signage

- 1. Signs are to be placed wholly within the allotment boundary.
- 2. Signs are not permitted on walls facing adjoining residences.
- 3. The number and size is restricted to 1 sign of not more than 0.75sqm per business operation or activity.
- 4. Signs shall not be affixed to or displayed on the fence other than solid masonry fence.
- 5. Maximum height of a free standing sign is 2m from ground level.
- 6. Illuminated signs, except for doctors or veterinarians, are not permitted.
- 7. Third party advertising other than on public seat and bus shelter is not permitted.
- 8. Advertising structures shall comply with Sub-section 8.7 Design Criteria.

Business Zones

Objectives

- a) To permit adequate identification and business advertising.
- b) To recognise that advertising signs can help to express the character of commercial and entertainment environments, creating a lively daytime and evening atmosphere.
- c) To ensure that signs are in keeping with the scale and character of the building they are on and do not detract from the architecture.
- d) To ensure that the number, size and positioning of signs do not crowd the advertiser's message and defeat the purpose of advertisement
- e) To reduce the visual complexity of a streetscape by providing fewer, more effective signs.
- f) To ensure compatibility with the desired urban character of the adjacent land uses.
- g) To ensure that advertising signs do not adversely affect the safety of motorists and other



Figure 21 Signs should complement the architecture

Controls 2 4 1

- One under-awning sign is permitted on each shop or commercial premises. For shop or premises with wide frontage, under-awning signs are permissible at the rate of not more than one sign per 8m of shop front.
- 2. Under-awning signs are to be at least 6m apart to provide adequate visibility.
- 3. Signs including real estate signs and temporary signs are not allowed to stand on awnings.

- 4. One projecting wall sign is permitted for each shop or commercial premises.
- Total area of all signs is not to exceed 1sqm of advertising area per 1m of shop frontage.
 This includes signs painted on blinds or window blinds.
- 6. Signs in excess of a total of 50sqm in area are to be considered on its merits.



Figure 22 Corporate identity

- Special consideration will be given to commercial uses along Classified Roads where signs are required to be bigger in order to be seen by people travelling in vehicles.
- Applications for high wall signs are to be considered on individual merits. They are not allowed in local centres unless it can be demonstrated that it is compatible with the scale of development and amenity of the surrounding land uses.
- 9. Roof signs are not permitted.
- 10. Moving signs will be considered on individual merits having regard to the objective of creating a lively day time and evening atmosphere, the safety of motorists and pedestrians and the amenity of adjacent developments.
- 11. For development with wide street frontage and adequate setback, pole signs are permissible at the rate of not more than one pole sign per development. Application for additional pole signs will be considered on individual merit.
- 12. Advertising structures shall comply with Sub-section 8.7 Design Criteria



Figure 23 Illuminated pole sign in neighbourhood areas



Figure 24 Protecting residential amenit

Outdoor cafes

- Only the name and/or logo of the business and/or core product and/or service associated with the outdoor cafes may be placed on any item of furniture, as a minor element of the furniture design to the Council's satisfaction.
- No other advertising is permitted on any outdoor furniture or elsewhere in the outdoor cafe or adjacent area, unless Council grants development consent.

Industrial Zones

Objectives

- To permit the display of information concerning the identification of premises, and the name of the occupier and activity conducted on the land or in the building.
- To encourage a coordinated approach to advertising where there is multiple occupancy of site.
- c) To enhance the architectural and landscape presentation of industry so that advertising signs appear proportional to the scale of the building or space within which they are located.
- d) To minimize the negative visual impact of cluttered and untidy advertising signs, in particular at gateway sites and entry points to industrial precincts, so as to promote the townscape qualities of Liverpool.

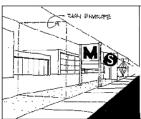


Figure 25 Sign envelope

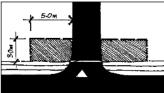


Figure 26 Advertising zone at the ingress to development

Controls

- Pole or pylon sign for building or site (including directory board for multiple occupancies) is limited to a single structure at the entry to the site from a public road, along the road frontage.
- Pole or pylon sign not exceeding 5sqm in area and 5m in height from ground level are
 to be located within an area of 5 x 3m on either side of the ingress or combined
 ingress/egress, subject to compliance with sight distance requirements.

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- For multiple occupancy development, one company identification sign not exceeding 2 x 0.6m is permitted at the entrance to each occupied unit. Such signs are to be of a uniform shape, size and general presentation.
- 4. For single user development, additional company identification sign is permissible at the rate of not exceeding 1sqm of advertising area per 3m of street frontage or a maximum of 50sqm whichever is the less. (Corner lots will be assessed on the length of the main presentation frontage of the building only.)
- 5. Roof signs are not permitted.
- 6. Third party advertising is not permitted.
- 7. Sign exceeding 50 sqm in area will be dealt with on individual merits.

Part 1 DCP (with post exhibition amendments)

- 8. Advertising facing back/side boundaries and abutting a Classified Road will be assessed on individual merits.
- 9. Advertising structures shall comply with Sub-section 8.7 Design Criteria.

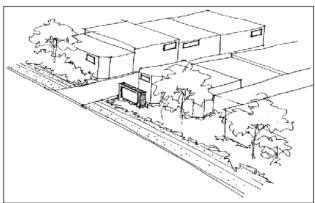


Figure 27 Signage locations for Industrial units



Figure 28 Areas of Environmental Significance (including Environmentally Significant Land, Heritage Conservation Areas and Heritage Item)

Multiple occupancy development

Objective 5 ct

To ensure that outdoor advertising is designed and located in a manner, which preserves and enhances an area of environmental significance.

- Signs on individual buildings or within an area of environmental significance are to be discreet and complement the building or the area. The architectural characteristics of a building always dominate. (For example, signs are not to be placed on cast-iron, first floor verandahs and balustrades or in front of cast-iron verandah frieze work.).
- Advertising is placed in locations on the heritage item, which traditionally have been used as advertising areas. If such areas do not exist, advertising is generally inappropriate.
- 3. No signs are permitted to break an historic parapet or roofline of a building or buildings.
- The form and content of all signs must enhance the heritage significance of the heritage item or area. Particular attention is to be given to location, choice of colours, size of lettering and means of illumination.
- 5. Permanent signs on shop windows are not to occupy more than 25% of the window area.
- The size of signs may vary according to the design and history of the building or its environment.
- 7. Complies with Sub-section 8.7 Design Criteria.



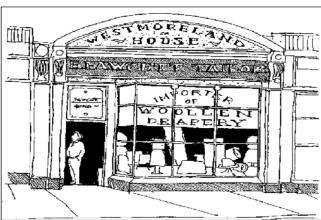


Figure 30 Traditional sign

Special Uses Zones

Objectives

- a) To permit adequate identification and/or business advertising.
- b) To ensure that signs are in keeping with the scale and character of the buildings and are compatible with the amenity of the area.
- c) To ensure that advertising does not adversely affect the safety of road users.

Controls

- Owing to the variety of special uses, it is not possible to design control guidelines that
 are relevant and common to all situations. Every application for outdoor advertisement is to be considered on individual merit.
- 2. For applications within the 'Special Use Classified Road' zone, advertising signs are to be a minimum of 1 km apart. Their location and dimension are not to adversely affect the amenity of the locality and the safety of motorists and other road users.
- For applications within the 'Special Use Airport' zone, concurrence is to be obtained from the operator of the airport.
- 4. Advertising structures shall comply with Sub-section 8.7 Design Criteria.

Recreation Zones

- a) To recognise the opportunity for outdoor advertisement for the promotion of commodities and services associated with recreational activities
- b) To ensure that outdoor advertisement is compatible with the character of the development on which it is displayed and the character of the surrounding land uses
- c) To permit the display of information associated with the recreational activities carried out on the land or in the building on which the sign is displayed.



Figure 31 Sign at entry point to recreational facility

Controls

EGROW 02

Attachment 1

- Pole or pylon signs are permitted at the rate not exceeding one pole sign per vehicular entry point to the recreational facility.
- 2. Each pole sign is not to exceed 10sqm in area and not more than 7m in height from
- Signs in sports grounds are permissible on the perimeter fencing of the play area and on scoreboards and shall face the play area. The maximum height above ground level of any sign, except signs on scoreboards, is 1.2m.
- 4. Advertising structures shall comply with the Sub-section 8.7 Design Criteria.



igure 32 Advertising opportunity at playing field

26.5 Signage in Particular Developments

Service Stations

As service stations are land extensive and are permissible within a wide range of zones, it is considered necessary to have controls for advertising on such development

- a) To ensure that advertisement is compatible with the amenity of the surrounding locality.
- b) To ensure that advertisement is designed and located so that it does not adversely affect the safety of motorists and other road users.

- 1. One pole or pylon sign of not exceeding 7m in height from ground level.
- Pole or pylon sign of not exceeding 2.5m in height from ground level for the display of prices of fuels is permitted at the rate of not more than one sign per ingress point to the
- Fascia signs on the canopy of forecourt and top hamper signs for the sales office and associated convenience store, workshop or food outlet are permissible.

- 4. The total advertisement area in excess of 50sqm is to be considered on individual merits.
- 5. Roof signs and fin signs are prohibited.
- The location and design of signs (including their illumination) are not to adversely affect the amenity of adjacent development and the character of the locality and not to obstruct any traffic lights and traffic signs.
- 7. Advertising structures shall comply with the Sub-section 8.7 Design Criteria.



Figure 33 Advertising sign at service station

Exhibition Home and Exhibition Village

Although exhibition home and exhibition village are temporary in nature, they are usually located within residential zones. Their use is also associated with strong promotion through outdoor advertising.



Figure 34 Pole sign for exhibition home

Objectives

- a) To recognise the need for outdoor advertising, business identification and promotion.
- b) To ensure that outdoor advertising is compatible with the amenity of the surrounding locality.

- One pole or pylon sign with an area of not exceeding 2.5sqm and a height of not more than 3m from ground level is permitted for an exhibition home. For each exhibition home within an exhibition village, one pole or pylon sign with an area of not exceeding 2.5sqm and a height of not more than 5m from ground level is permissible.
- For exhibition village advertising signs are to be of a uniform shape, size and general presentation

- Additional signs for ancillary uses such as sales office, home financing and materials display are to be considered on individual merits.
- 4. All advertisements must be placed wholly within the allotment boundary.
- 5. Third party advertising is prohibited.
- 6. Illuminated signs are prohibited.
- The location and design of advertisements are not to adversely affect the amenity of the locality in general and adjacent occupied dwellings in particular.
- 8. Advertising structures shall comply with Sub-section 8.7 Design Criteria

26.6 Other Types of Signage

Illuminated Street Name Signs

- a) To facilitate the use of Illuminated Street Name Signs (ISNS) in providing directional information and the identification of street names, in conjunction with the display of an appropriate advertising/ sponsor message.
- To ensure that ISNS do not have an adverse impact on the amenity of residential areas by restricting their use to Classified Roads.
- To ensure that ISNS are designed and located so that they do not have an adverse impact on pedestrian and motorist amenity and safety, by providing controls which clearly identify the required location of ISNS within the road reservation.
- To ensure that ISNS are complementary to and compatible with the existing streetscape and the character of the surrounding area, and do not obstruct the view of RTA traffic signs and traffic controls for road users.
- To ensure that the external shape, style, colour, text and graphics of ISNS are consistent with Liverpool City Council colours and existing Council signs and street furniture

- 1. To maintain the amenity of residential and rural areas ISNS shall be restricted to Classified Road reservations
- 2. One ISNS will be permitted per intersection only. Provided that where signs are located 20m or more apart, two signs per intersection may be permitted.
- 3. ISNS shall be located at a sufficient distance so as to not obstruct the view of traffic control signals and RTA directional signage for road users
- 4. ISNS shall be restricted to corner locations within road reservations only. The sign pole shall be located at a minimum distance of 1.5m from each kerb line forming the edge of the carriageway at the intersection.
- The ISNS shall comprise an advertising sponsor panel, in conjunction with separate finger panels displaying at least two street names and locality or other community facility directional information approved by Council. The advertising/ sponsor panel shall display the use of appropriate messaging conforming to standards of decency and morality acceptable to Council; Advertising of local products and services is preferred and in all cases Council approval is to be obtained for the content of the sign.
- The maximum height of the ISNS shall not exceed 5.2m above the ground, measured The maximum neight of the ISNS shall not exceed 3.2m above the ground, measured as a vertical distance from the existing ground level to the uppermost portion of the sign. The clearance to the underside of the advertising/sponsor panel shall be a minimum of 2.6m. To ensure pedestrian amenity, the clearance to the underside of the street name/finger panel shall not be less than 2.1m.

- The total area of the advertising/sponsor panel shall not exceed 2.2sqm in dimensions (excluding the street name portion of the sign), including any city identification.
- The external shape, colour, text and graphics of an ISNS shall be generally consistent with the shapes, colours and design used in existing Council signs (such as park and community signs) and Council street furniture, and standard RTA text and graphics in
- Written approval of the Roads and Traffic Authority (RTA) shall be provided to Council with each ISNS application proposing installation on a road reservation under the control of that Authority
- Each application for approval of an ISNS shall be accompanied by an engineer's certificate verifying structural integrity and frangibility conforming to the requirements of the RTA.
- 11. As a condition of any consent being given to install an ISNS, Council will require the applicant to meet its requirements covering operational aspects of the system, including such matters as: agreement commencement and term, community messages, compliance with Australian Standards, maintenance and repairs, payment of electricity charges, public risk, annual licence fee, use of sponsor panel vacant space, pavement restoration, relocation, temporary removal and default by company.

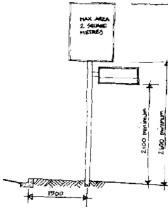


Figure 35 Illuminated Street name Signs

Inflatable sign as a promotion tool is becoming more common. In view of the visual attraction it captures and the impact it may have upon the locality special controls are considered



Figure 36 Inflatable sign

Objectives

- a) To ensure that inflatable signs are compatible with the character of the surrounding land uses and do not adversely affect the amenity of the locality.
- b) To ensure that inflatable signs are designed and located so that they do not adversely affect the safety of motorists and pedestrians.

Controls

- 1. Inflatable signs are not normally permissible in residential zones and areas of environmental significance.
- 2. The size, shape and colour of signs do not adversely affect the amenity of the locality and adjoining areas.
- 3. The operation of inflating mechanical services is not to cause noise nuisance to neighbouring properties
- 4. Illumination of signs is not to cause nuisance to neighbouring properties by spillage of light and glare.
- The size, shape, colour, location and illumination of signs are not to interfere with traffic signals and cause undue distraction to motorists.
- 6. Any other requirements as may be stipulated by Council and/or other agencies.

26.7 Design Criteria

Specific Requirements Relating to Advertising Structures

Compliance with these requirements does not imply that an application will be approved.

Advertising Panel

(Any advertising structure, other than those described in other parts of this section, which is illuminated, including hoarding or bulletin board)

- 1. Not to extend laterally beyond or vertically above the top of the wall to which it is attached.
- 2. Not to cover any windows or architectural features.

Underside Awning Sign

(Sign attached to the underside of an awning, other than the fascia or return end)

- 1. Maximum size not to exceed 2.5m in length and 0.5m in height.
- Erected horizontally to the ground and a minimum clearance of 2.6m from the ground level to the underside of the sign.
- 3. A minimum of 0.6m clearance inside the kerb.
- 4. Not to project beyond the awning.
- 5. Securely fixed by metal supports.

Upper side Awning Sign

(Sign attached to the upper side of an awning, other than the fascia or return end)

Normally not permitted, if approved, the design criteria are:

- 1. Size to be considered on individual merits.
- 2. Not to project beyond the awning.
- 3. Securely fixed by metal supports.

Fascia Sign

(Sign attached to the fascia or return of an awning)

- 1. Not to project above or below the fascia or return end of the awning to which it is
- 2. Not to extend more than 0.3m from the face of the fascia or return end of the awning.

Fin Sign

(Sign erected on or above the canopy of a building e.g. canopy of a service station)

Normally not permitted, if approved, the design criteria are:

- 1. Not to extend more than 2.6m above the canopy on or above which it is erected.
- 2. Securely fixed by metal supports.

Flashing Sign

(Illuminated as to any part of the advertising area at frequent intervals by an internal or external source of artificial light and whether or not included in any other class of advertising

A minimum of 6.1m above ground level.

Floodlit Sign

Illuminated as to any part of the advertising area by an external light source and whether or not included in any other class of advertising sign.

Lighting medium must be at least 2.6m above the ground if the sign projects over a public

Moving Sign

Sign attached to a building and capable of movement by any source of power whether or not included in any other class of advertising sign.

A minimum of 4.6m from ground level.

Pole or Pylon Sign

Sign erected on a pole or pylon independent of any building or other structure.

Unless otherwise stated in this DCP, not to project more than 7m from ground level. A minimum of clearance of 2.6m from ground level to the underside of the sign.

Roof/Sky Sign

Sign erected on or above the roof or parapet of a building. (It is also called a sky sign)

Normally not permitted. If approved, subject to specification by Council.

Top Hamper Sign

(Sign attached to the transom of a doorway or display window of a building)

- 1. Not to extend more than 0.2m beyond any building alignment;
- 2. Not to extend below the head of the doorway or window above which it is attached.

Liverpool Development Control Plan 2008 Part 1

Outdoor Advertising & Signage

Flush Wall Sign

(Sign attached to the wall of a building (other than the transom of a doorway or display window) and not projecting more than 300mm from the wall) Painted wall sign:

Sign painted onto a wall of a building.

- 1. Not to project above or beyond the wall to which it is attached;
- 2. Where it is illuminated, it must be at least 2.6m above the ground level.

Projecting Wall Sign

(Sign attached to the wall of a building (other than the transom of a doorway or display window) and projecting more than 300mm)

- 1. Not to project above the top of the wall to which it is attached;
- 2. Not to project more than 1.2m from the wall to which it is attached;
- 3. A minimum clearance of 2.6m from the ground level to the underside of the sign;
- 4. A minimum of 0.6m clearance inside the kerb.

Other types of Signs

Illuminated Street Name Sign

Freestanding pole sign comprising an internally illuminated sponsor panel and up to two internally illuminated street name cabinets erected within a road reservation.

Parapet Sign

Sign attached to or painted on the parapet of a building, but not extending above the parapet.

Spandrel Sign

Sign attached to the wall below the sill of windows.

Sign erected on public road which include guide sign, warning sign, temporary warning sign, regulatory sign, car parking sign, hazardous markers and service symbols as defined under AS 1742.

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Window Sign

Sign attached to, or displayed on, the shop window.



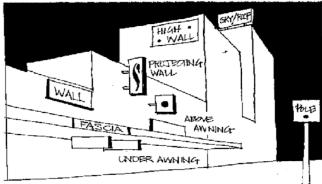


Figure 37 Types of signs

26.8 The Facade - Grid Analysis Technique

While the technique relates specifically to traditional building facades (such as those commonly found in strip-shopping centres), the principles apply to all building forms.

Signs do not have to be on a building's front facade. For example, they can be placed on sidewalls provided they do not interfere with the adjoining development. In these circumstances the principles of the technique still apply.

The technique

Step 1

To identify sign opportunities the facade could be subdivided using the main design lines to form a series of panels. Many traditional building designs can be easily broken into a grid based on the alignments of the parapet (skyline), cornice, verandah, window and door. An example of this procedure is shown in Figure 38.

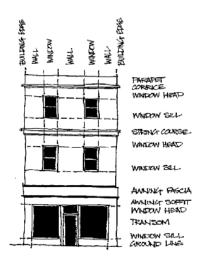
Step 2

To identify possible sign panels the rectangles of the grid may be used separately or be joined together to form horizontal or vertical panels. Figure 39 shows examples of such panels.

The scale of advertising signs should be compatible with the buildings they are on, as well as with nearby buildings, street widths and other existing signs. In most cases, appropriate dimensions are achieved by restricting signs to grid locations or panels. This ensures that the original architectural character (set by the lines of awnings, windows and door openings, parapet lines and setbacks) remains dominant.

On buildings with decorative facades, signs should not be placed on the decorative forms or mouldings. Instead, they should appear on the undecorated wall surfaces, unless architecturally designed panels are provided.

Figure 39 also shows that a building may be given a horizontal or vertical appearance simply by the way in which the sign panels are arranged across or down a building.



Part 1 DCP (with post exhibition amendments)

Figure 38 Horizontal or vertical panels

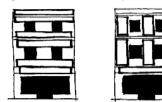


Figure 39 Establishing the façade grid

Step 3

Applying the technique to a series of buildings shows the possible panels for the streetscape and provides the basis for developing patterns and themes. Figure 40 shows how the technique produces a uniform and clean series of sign possibilities instead of a haphazard array.

Figure 40 also shows that sign panels do not have to be rectilinear in design or contained in a perimeter margin unless these impose an architectural formality or introduce continuity with the surrounding area, which is presently lacking in the building.

Figure 41 shows how a variation of the technique can be used to help correct discontinuities in streetscape. The lines of adjacent buildings may be projected across the facade of the building, thereby defining horizontal panels in which signs may be located. This will achieve visual continuity with neighbouring buildings.

Step 4

Not every panel identified using this technique should be used to display a sign. Consideration should be given to placing signs in locations compatible with those on adjoining buildings to develop a pattern or theme in streetscape.



Figure 40 Developing patterns and themes

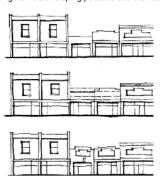


Figure 41 Improving discontinuities in streetscape

27. Social Impact Assessment

Applies to

This section applies to applications for the types of development listed in Table 1, and any other types of development if notified in writing by Council. This section does not apply to development that is otherwise permitted without consent.

Background

Social impacts include the intended and unintended effects of a change or activity on the well-being of a community, families and individuals. Demand for a greater focus on social impacts has been driven by:

- a changing demographic profile and pressures arising from the growth and positioning of Liverpool as the regional city for South Western Sydney;
- increasing awareness of planning authorities to apply social criteria in making decisions about development and land use;
- increasing emphasis by Council and the community in considering social

Council has a statutory obligation under Section 79C of the Environmental Planning and Assessment Act 1979 to consider the social impacts of development applications. The Liverpool Local Environmental Plan 2008 aims to "foster economic, environmental and social well-being so that Liverpool continues to develop as a sustainable and prosperous place to live, work and visit".

Social impact assessment is a process that aims to identify and manage the potential positive and negative consequences of development to optimise social outcomes, consistent with Council's objectives for the community. Council is committed to the process of social impact assessment as a means of considering social issues more comprehensively and consistently in its planning and decision making. Council requires a social impact assessment to be submitted with development applications for specific types of development. In addition, Council may, at its discretion, require a social impact assessment for other types of development.

<u>Objectives</u>

- To ensure distributional equity of positive and negative social impacts of development, to help build healthier communities where people want to live and work:
- To apply a precautionary approach to, and encourage effective community engagement and participation in, planning and development decisions that may have significant impact;
- c) To ensure social impact assessments are undertaken in a consistent and transparent manner, by an appropriately trained person, and contain the information required to enable objective evaluation of potential impacts by Council.

Controls

- A social impact assessment shall be submitted with a development application for all types of development listed in Table 21. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment, as specified in Table 21.
- Council may, at its discretion, alter the requirements for social impact assessment at any stage of the development assessment process, if it deems a proposal to foreseeably generate or contribute to social impacts that are substantially less or more significant than envisaged in Table 21. This discretion rests with the

Executive Management Team, with consideration of recommendations made by

- A social impact assessment shall be submitted for any types of development not listed in Table 21 if, at any stage of the development assessment process, Council deems the proposal to foreseeably generate or contribute to significant social impacts. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment.
- 4. Any social impact assessment shall be prepared in accordance with Council's Social Impact Assessment Policy.

Applicants are advised to consult with Council before lodging a development assessment, to discuss Council's specific requirements relating to social impact assessment. Council will notify applicants in writing of any changes to requirements for social impact assessment.

Type of development	Social Impact Comment	Comprehensive Social Impac Assessment			
Residential development	Applications for development of, or major changes to:	Application for development of, or major changes to:			
	 Residential flat buildings greater than 20 units 	 Residential flat buildings greater than 250 units 			
	 Multi-dwelling housing greater than 20 dwellings 	 Development that results in a reduction of affordable 			
	 Residential subdivision greater than 20 dwellings 	housing			
	 Affordable housing, within the meaning of SEPP (Affordable Rental Housing) 2009 – excluding secondary dwellings 				
	 Housing for seniors or people with a disability, within the meaning of SEPP (Housing for Seniors or People with a Disability) 2004 				
	 Student housing 				
	 Caravan parks 				

Commercial development

Applications for development of, or major changes to:

- Entertainment facilities
- Amusement centres
- Function centres (greater than 100 persons capacity)
- Retail centres and other commercial development, including tattoo parlours

Applications for development of, or major changes $\ensuremath{\text{to}}$

- Packaged liquor outlets
- Hotels (bars, pubs, taverns), nightclubs and registered clubs
- Applications for liquor licences and gaming machines*
- Extension of trading hours for licensed premises
- Gaming outlets
- Restricted premises (e.g. sex shops)
- Sex services premises (e.g. brothels)
- Gun shops

Other types of development

Applications for development of, or major changes to:

- Childcare centres (more than 20 places)
- Places of public worship (greater than 200 persons capacity)
- Educational establishments
- Health consulting rooms
- Council-owned community facilities, including community centres, libraries, childcare centres and recreation facilities
- Community land, as classified by the Local Government Act 1993

Applications for development of, or major changes to:

- Drug rehabilitation services including methadone clinics and safe injecting rooms
- Hospitals, medical centres and community health service facilities
- Freight transport facilities
- Major public transport facilities

28. Shopping Trolleys

Applies to

This section applies to any development that will provide shopping trolleys for customers.

Background

Abandoned shopping trolleys are a major problem throughout the Liverpool LGA as they tend to end up in streets, parks and waterbodies.

Objectives

To minimise the abandonment of shopping trolleys.

Controls

- A management plan is required for all businesses that offer the use of trolleys to their customers. At a minimum the management plan must contain the following elements:
 - A list of contacts for the store/premises (including phone numbers).
 - A statement verifying that trolley management will be undertaken in accordance with the relevant consent (the consent is to be attached as an addendum once issued).
 - Methods for identifying shopping trolleys that belong to a specific business (e.g. serial numbers, company logo, tracking device etc.).
 - A schedule for the daily collection of abandoned shopping trolleys, including details of trolley collection routes.
 - Details of a trolley containment system which restricts the removal of trolleys from the premises.
 - Measures to ensure that any trolleys reported as posing a risk or nuisance, are collected immediately upon notification (this may require an "after hours" collection service).
 - A register of all trolleys that have been reported or collected (including instances where the trolley was not found at the reported location).
 - Methods for warning customers about the consequences of abandoning or removing trolleys from the premises.
 - A site plan of the premises showing the location of trolley bays and exit points.

Note:

Council must be notified of any updates to the plan of management.

- A trolley containment system must be provided for businesses with 20 or more trolleys. Such examples include:
 - Coin/token operated system with refund
 - Trolleys with wheel locks activated by a radio signal or magnetic strip
 - Radio signal transmitters on trolleys

29. Safety and Security

29.1 Safety and Security

Background

The design of buildings and public spaces has an impact on perceptions of safety and security, as well as actual opportunities for crime. A safe and secure environment encourages activity, vitality and viability, enabling a greater level of security.

<u>Objectives</u>

- a) To ensure developments are safe and secure for pedestrians.
- b) To reduce opportunities for crime through environmental design.
- c) To contribute to the safety of the public domain.
- d) To encourage a sense of ownership over public and communal open spaces.

Controls

- Address 'Safer-by-Design' principles in the design of public and private domain, and in all developments including the NSW Police 'Safer by Design' Crime Prevention Though Environmental Design (CPTED) principles.
- Submit a 'Safer by Design' assessment in accordance with the CPTED principles from a qualified consultant for retail and commercial development with a gross floor area of more than 5000sqm.

29.2 Pedestrian Access and Mobility

Background

New development must be designed to ensure that safe and equitable access is provided to all, including mobility impaired people.

Objectives

- a) To provide safe and easy access to buildings.
- b) To ensure buildings and places are accessible to people with a disability
- c) To provide a safe and accessible public domain.

Controls

- Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage and high quality architectural detail.
- The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).
- Barrier free access is to be provided to not less than 20% of dwellings in each multidwelling development and associated common areas.
- One main pedestrian entrance is to be provided with convenient barrier free access in all multi-dwelling developments to the ground floor.
- Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.

30. Additional Uses

30.1 Restricted Premises

Background

Liverpool LEP 2008 permits restricted premises within the business zones. The following provisions are provisions for that particular land use.

Objectives

- a) To ensure that the design and external appearance of restricted premises, including colour scheme and lighting, does not have an adverse impact on the architectural character of the surrounding built environment and streetscape appearance.
- b) To ensure that the safety of all staff and visitors to restricted premises is maintained when approaching, entering and leaving the premises.
- To ensure that restricted premises are provided with appropriate facilities in accordance with the relevant occupational health and safety provisions.
- d) To ensure that adequate and suitable facilities are provided within restricted premises to ensure the privacy, comfort, safety and security of staff and patrons.
- e) To ensure that advertising and signage associated with restricted premises is discreet, does not draw attention to the use and does not result in visual clutter or other adverse visual impacts on the surrounding area.
- f) To minimise the potential for the operation of a restricted premises to cause a disturbance in the surrounding area because of its size, location, hours of operation, number of employees or clients, or proximity to other restricted premises or sex services premises.
- To ensure the safe and adequate storage, handling and disposal of contaminated waste.

Controls

Siting of Premises

- Restricted premises shall not be located within 150m of any land zoned residential or any place of worship, school, community facility, child care centre, hospital, rail station, bus stop, taxi stand, licensed premises (i.e. hotel, club, restaurant), or any place regularly frequented by children for recreational or cultural pursuits.
- Restricted premises shall not be located within 150m of any land for which a consent for the uses listed in item 1 above exists.
- In determining an application to carry out development for the purpose of restricted premises, the consent authority must consider the following matters:
 - whether the operation of the restricted premises will be likely to cause a disturbance in the neighbourhood because of its size, location, hours of operation, clients or the number of employees and other people working in it;
 - whether the operation of the restricted premises will be likely to interfere with the amenity of the area; and
 - whether the operation of the restricted premises will be likely to cause a disturbance in the neighbourhood when taking into account other businesses operating in the neighbourhood offering similar goods and services and involving similar hours of operation.

Design of Premises

- No part of the premises (other than an access corridor to the premises) shall be located at ground floor level, mezzanine, sub-basement level or street level or be visible from a public place.
- Restricted premises must be designed so that there is only one visible pedestrian entrance to the premises from the primary street frontage. In instances where there is no front access and/or front access is impractical, Council will consider a side or rear pedestrian access where adequate attention has been given to safety and security matters.
- 3. Rear or side pedestrian access is to be limited to one only, unless it can be demonstrated to Council's satisfaction that more than one access contributes to the amenity and functional efficiency of the restricted premises and surrounding uses and does not result in safety and security concerns or visual clutter via the need for additional signage.
- 4. The external appearance of restricted premises must respect the character and appearance of the streetscape, such that they do not become a prominent feature in the street. In this regard, the external colour scheme of these premises is to be consistent with surrounding colour schemes. Vivid and/or ostentatious colour schemes will not be permitted unless it can be demonstrated that the proposed colour scheme would be in keeping with the existing streetscape.
- 5. All entrances and exits of restricted premises must have appropriate lighting to ensure the safety of all staff and visitors as they arrive and leave the premises. Any flashing, intermittent etc. lighting used in conjunction with a restricted premises must not be visible from a public place.
- No merchandising display relating to the sex services premises shall be erected, displayed or exhibited in any location which is visible from a public place or in an access corridor (including any stairwell to the premises).

Signage

- Signage is to be discreet and is limited to a combination of the business name, address and phone number.
- There is to be one sign, not exceeding 1.m2 area, per premises. A second sign may be permitted where pedestrian access is provided at the side or rear of the site.
- 3. The content, illumination and shape of the sign must not interfere with the amenity of the locality. In this regard, signs are not to include suggestive or offensive material, or include colours or designs that may distract passing motorists. Illumination of signs must not cause nuisance to any adjoining premises or interfere with the amenity of the area.
- In addition to a business identification sign, a clearly visible street number is to be displayed on the premises.

Note: In addition to the above controls, applications for restricted premises must comply with the requirements of the Crimes Act 1900 Section 578 (e) and Classification (Publications, Films and Computer Games) Enforcement Act 1995.

30.2 Non Business Uses

Background

Liverpool LEP 2008 permits a range of Non Business land uses within the business zones. These Non-Business land uses may involve using an existing industrial development or construction of a new development. The following provisions are

additional provisions for particular land uses. These land uses shall also comply with the other provisions of the DCP.

Objectives

- Ensure that the Non Business developments are compatible with the Business environment
- Ensure that the Non Business developments do not unnecessarily restrict the operation of Business and related uses in Business areas.
- Ensure that Non Business developments are designed to operate without adverse impact from Business developments.

Controls

Site Planning

Site planning for a Non Business development shall give consideration to how
minimise the impact of uses on the site and how to ensure that a proposed use
would not unduly impose restrictions on existing or future nearby business
uses.

Building Appearance, Streetscape and Layout

 All developments in a business area shall present a shop front to the street. Closing in of windows or painting over windows shall not be permitted.

Amenity and Environmental Impact

- Where the hours of operation are after sunset, the car parking areas and any other public areas shall be provided with lighting to provide a safe environment for users of the premises after hours; and
- 4. A Noise Impact Assessment Statement prepared by a qualified Acoustics Engineer may be required to be submitted with the application depending on the scale and location of the proposed use to show that the use can operate satisfactorily in the business area.

30.3 Restaurants/Outdoor Cafes

<u>Background</u>

There is an increasing trend to have outdoor eating in conjunction with restaurants and cafes. This contributes to the activity in business areas. There is however a potential conflict between the users of outdoor eating areas and users of the footpath areas.

Objectives

- a) Ensure that outdoor cafes enhance the economic viability for centres
- Ensure that outdoor cafes enhance the streetscape to create attractive and vibrant surroundings.
- c) Preserve or enhance public amenity, safety and access.

Controls

These controls apply to outdoor eating areas on public footpaths. Other than Hours of operation, these controls do not apply to outdoor eating areas may also take place on private land.

Streetscape and Layout

General Requirements

 A minimum width of 2.5m of footpath shall be available for pedestrians thoroughfare at all times.

Liverpool Development Control Plan Part 1

Additional Uses

- There shall be no increase in the number of chairs and tables at each individual cafe site without further approval from Council.
- Outdoor furniture shall remain at least 3m away from a corner, pedestrian crossing, bus stop, taxi stand or anywhere pedestrians often congregate to cross the road or wait for services.
- 4. Outdoor furniture shall remain at an appropriate distance from any pedestrian crossing, disabled parking spaces, post box, public telephone, street sign, street tree or other street structure to ensure that these facilities remain accessible and/ or retain function. An appropriate distance will be determined by Council officers.

Controls for footpaths greater than 6m

- Outdoor furniture must be located at least 2.5m away from the shop front. This leaves an appropriate width to ensure there is unobstructed pedestrian thoroughfare. See Figure 42.
- Outdoor seating shall be arranged to ensure a minimum of a 1m clearance is retained from the back of the kerb to the furniture. This ensures that passengers in vehicles can enter and exit vehicles safely.
- In some instances Council may require more than 1m width from the back of the kerb

Controls for footpaths less than 6m

Outdoor furniture shall be located abutting the building frontage/shop front. This
provides an appropriate width for safe pedestrian passage.

Written Consent

- 9. A standard letter of consent must be provided by the owner of the building from which the associated business operates. However in the event that permission is withheld without due cause and Council judges this to be unreasonable consideration will be given to proceeding without it. The owner will be informed by letter of the development application at the commencement of the public exhibition.
- 10. A standard letter of consent must also be provided by neighbouring tenants on each side of the associated business. However in the event that permission is withheld without due cause and Council judges this to be unreasonable consideration will be given to proceeding without it. The neighbouring tenants will be informed by letter of the development application at the commencement of the public exhibition.

Car Parking and Access

11. No additional car parking is required for any outdoor eating area.

Amenity and Environmental Impact

 The hours of operation shall be restricted to between 7:00 to 10:00 pm, unless otherwise varied by Council.

Site Services

- 13. If any of Council's street furniture or other items such as garbage bins, seats and planter boxes has to be removed for the installation of outdoor cafe seating, then that removal and any subsequent re-erection in the vicinity shall be at the permit holder's expense and shall be completed to Council's satisfaction;
- 14. Any additional lighting to normal street lighting shall be provided at the applicant's expense and shall be completed to the satisfaction of Council; and
- 15.Any illuminations shall be appropriately managed during operations of the premises.

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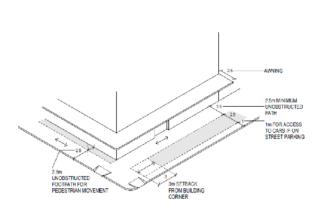


Figure 42 Indicative Outdoor Seating Zones

30.4 Child Care Centres

Background

There is an increasing need to have child care centres in close proximity to work places and places of residence. The need to locate child care centres in close proximity to work places and places of residence in business centres is balanced by the need to ensure that other business uses do not adversely affect the operation of a child care centre and vice versa.

The State Environmental Planning Policy (Educational Establishments and child Care Facilities) 2017 includes planning provisions for the development of centre-based child care facilities. The Child Care Planning Guideline 2017 provides additional guidance that must be addressed by any centre-based child care facility development application.

Provider and Service Approval

In order to operate a child care centre, the applicant needs to obtain the following:

- Development consent from Council under the Environmental Planning and Assessment Act 1979.
- Provider and service approval to operate from the NSW Department of Education.

<u>Objectives</u>

- a) Ensure that Child Care Centres are compatible with the business environment.
- b) Minimise any adverse impact of Child Care Centres on surrounding properties.
- Locate childcare centres where they would not have an adverse impact on the safety and health of children.

It is strongly recommended that applicants arrange a meeting with Council prior to submitting a development application to ensure that all the pre-requisite documentation is in order. This will save time and money for the applicant.

Building Appearance

<u>Objectives</u>

- a) Encourage designs that will enhance the character of the City Centre.
- Ensure high visibility of entrances when the child care facility is located in a multi storey building.
- c) Ensure child care buildings address all street frontages
- d) Ensure that the building design, detailing colour and finish shall add visual interest to the street and shall complement the street.

Controls

- 1. The building shall be designed so:
 - That it is in character with the surrounding residential area in terms of bulk, scale, size and height, and
 - That it employs passive solar and energy saving techniques where possible.
- 2. The front pedestrian entrance must be visible from the street.
- Buildings that face two street frontages or a street and public space must address both frontages by the use of verandas, balconies, windows or similar modulating elements.

Landscaping

- A landscape plan must be submitted to Council with the development application. Refer to Part 1 of the DCP.
- Areas of grass are to be limited to play areas. Other landscaped areas are to be planted.
- Trees adjacent to/or within the play area, are to provide shade and allow winter sun entry. Trees adjacent to private open space areas and living rooms should provide summer shade and allow winter sun entry.
- Landscaping species must be appropriate to prevent injury to children. No toxic, spiky or other hazardous plant species.
- 5. If there are setback areas these are to be utilised for canopy tree planting. The landscape design for all development must include canopy trees that will achieve a minimum 8m height at maturity within front and rear setback areas. Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.
- 6. Landscape planting should principally comprise of native species to maintain the character of Liverpool and provide an integrated streetscape appearance. Council will consider the use of deciduous trees in small private open space areas such as courtyards for control of local microclimate and to improve solar access.
- Tree and shrub planting alongside and rear boundaries should assist in providing effective screening to adjoining properties. The minimum height of screening to be provided is 2.5m to 3m at maturity.
- Landscaping on any podium level or planter box shall be appropriately designed and irrigated. See ADG Planting on Structures.

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Car Parking and Access

Access for the disabled including those with prams is to be provided from the car parking area to the building.

Amenity and Environmental Impact

- Child Care Centres shall be designed and operated so that noise generated by the centre does not impact significantly upon adjoining properties.
- 2. Child Care Centres shall not be constructed on sites that are contaminated.
- All buildings, whether to be built, extended, renovated or converted to a Child Care Centre shall not contain any material or substance that will cause lead or asbestos or other contamination or poisoning.

Appendix 1 - Definitions

The following list of definitions used in the DCP which are not defined in Liverpool LEP 2008 or the Environmental Planning and Assessment Act 1979. Please refer to these for the appropriate definition

A roadway extending from the edge of the frontage to the property boundary to connect with the first ramp, circulation roadway or aisle encountered, and Access Driveway

carrying one or two-way traffic.

Active Frontage A street frontage that is characterised by lively pedestrian activity

Adaptable Housing The definition as contained within Adaptable Housing Australian Standard AS

4299 (1995). Adaptation or

adaptive reuse

means the modification of a heritage place to a new use that conserves its heritage values. Adaptation may involve the introduction of new services, or a new use, or changes to safeguard a heritage item. A good adaptation is one that is sympathetic to the existing building and its historic context, and inserts new work, or makes changes that enhance and complement the heritage values

Land, which abuts the land, which is the subject of an application, or is separated from it only by a pathway, driveway or similar thoroughfare. Adjoining land

Affected person (a) who owns or occupies land that adjoins a site which is the subject of an means a person: application in which their enjoyment may be detrimentally affected by a proposed development; or

(b) who owns or occupies neighbouring land.

(Australian New Zealand Environmental Conservation Council) Guidelines for AN7FCC

the Assessment and Management of Contaminated Sites

Is the probability of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500 m³/s has an AEP of 1%, it means that there is a 1% probability (that is one-in-100 chance) of a peak flood of 500 m³/s or larger occurring in any one year Annual Exceedance Probability (AEP) (see average recurrence interval)

Apron The area in front of the loading dock including the service bay. A person who is qualified in arboriculture or tree surgery. Arborist

A void intersecting all building levels that brings light (and sometimes air) into a Atrium

building core.

Australian Height A common national plain of level corresponding approximately to mean sea Datum (AHD)

Australian Noise A contour marked on a map to determine a level of noise exposure by aircraft Certain restrictions apply to development within these contours. Exposure Forecast (ANEF) contour

The long-term average number of years between the occurrences of a flood as big as, or larger than, the selected event. For example, floods with a discharge as great as, or greater than, the 20 year ARI flood event will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event. Average Recurrence Interval (ARI)

Car parking areas generally below ground level, or above natural ground level Basement car parking

and enclosed by bunding, where inundation of the surrounding areas may raise water levels above the entry level to the basement, resulting in rapid inundation of the basement to depths greater than 0.8m. Basement car parks are areas where the means of drainage of accumulated water in the car park has an outflow discharge capacity significantly less than the potential inflow capacity.

Batter The slope of a dam embankment wall Soil piled against the length of a wall at an angle to reduce the exposure of surface area to solar radiation and to assist in the maintenance of equilibrium between subsoil ground temperature and the building's thermal mass. Berms also provide insulation against noise.

An area from which excavated soil is taken to construct the embankment of a

means all the processes of looking after a place so as to retain its cultural significance. It includes maintenance, and may according to circumstance, include preservation, restoration, reconstruction and adaptation and will commonly be a combination of more than one of these.

means a document prepared in accordance with the NSW Heritage Branch guidelines which establish the heritage significance of an item, place or heritage conservation area, and identify conservation policies and management mechanisms that are appropriate to enable that significance to be retained.

Soil that contains a concentration of chemical substances that are likely to pose an immediate or long-term hazard to human health or the environment.

means aesthetic, historic, scientific, or social value for past, present or future

Decibels of the 'A-scale' – a set frequency-weighted scale of noise which allows for lack of sensitivity of the ear to sound at very high and very low frequencies.

Berm

Borrow pit

	dani.	
Buffer zone	An area of land, set aside to minimise the impacts of land uses on each other	ner.
Building footprint	The area of the site occupied by buildings and includes other structures attact to the main building such as decks, verandas, garages and carports.	ched
Bushland	means land on which there is vegetation which is either a remainder of the naplants of the land or, if altered, is still representative of the structure and flori of the natural vegetation.	ative stics
Canopy	That part of the tree above the main stem comprising primarily branches foliage.	and
Car Space	The area of pavement required to park one car, and is usually delineated.	
Character	is defined by the combination of the particular characteristics or qualities place. $% \label{eq:particular}$	of a
Collector street	A non-Classified Road, which collects and distributes traffic in an area, as as servicing the abutting property.	well
Commercial Vehicle	The trucks and vans used for commercial purposes. Cars, station wagons utilities may also be used for commercial purposes but are, by definition, included because they become submerged in the large number of syehicles, which are used for private purposes. Dimensions of typical comme vehicles are found in Section 4 of this document.	, not such
Compatible use	means a use that involves no change to the culturally significant fabric, char which are substantially reversible or changes which require a minimal impa	
Composting	The breakdown of organic matter by microbial action.	

generations

The area directly beneath the outer canopy of the tree.

Drip Line Demolish a building

Conservation

conservation management plan

Council

cultural

dB(A)

significance

Design floor level

Contaminated soil

To wholly or partly dismantle the building.

The Council of the City of Liverpool.

Drive-in Food Outlets

One of three types of drive-in facilities:

- 1. Where customers park on site and walk to the food outlet, with no seating for the onsite consumption of food.
- 2. Similar to 1 but with seating for onsite food consumption
- With the features of 1 and/or 2 plus a drive through service for customers not wishing to consume food on the premises

Effective warning time

The time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response actions being undertaken. The effective warning time is typically used to move farm equipment, move stock, raise furniture, evacuate people and transport their possessions.

Embankment

The low permeability earth fill wall of a dam comprising crest, batter slopes and

Extreme flood

An estimate of the probable maximum flood, which is the largest flood that could conceivably occur at a particular location

fabric

means all the physical material of the place.

Fenestration

The disposition of glazing on a facade

A relatively high stream flow, which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding, associated with major drainage as defined by the FMM before entering a watercourse.

Flood awareness

An appreciation of the likely effects of flooding and knowledge of the relevant flood warning and evacuation procedures

Flood compatible building components

A combination of measures incorporated in the design and/or construction and alteration of individual buildings or structures subject to flooding, and the use of flood compatible materials for the reduction or elimination of flood damage.

Flood compatible

Materials used in building which are resistant to damage when inundated. A list of flood compatible materials is attached in Appendix 3.

Flood evacuation strategy

The proposed strategy for the evacuation of areas within effective warning time during periods of flood as specified within any policy of Council, the FRMP, the relevant State government disaster plan, by advices received from the State Emergency Services (SES) or as determined in the assessment of individual proposals

Flood hazard

The potential for damage to property or persons due to flooding.

Flood storage

Parts of the floodplain that are important for the temporary storage of

floodwaters during the passage of a flood.

Floodplain

The portion of a river valley, adjacent to the river channel, which is covered with water when the river overflows during floods.

Floodplain Development Manual (FDM) Refers to the document dated April 2005, published by the New South Wales Government and entitled "Floodplain Development Manual: the management of flood liable land"

Floodplain Risk Management Plan (FRMP)

A plan prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor

Floodplain Risk

A study prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor. $\label{eq:property}$

Management Study (FRMS)

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Floodways

Areas where a significant volume of water flows during floods. They are often aligned with obvious naturally defined channels. Floodways are areas, which, even if only partially blocked, would cause a significant redistribution of flood flow, which may in turn adversely affect other areas. They are often, but not necessarily, the areas of deeper flow or the areas where higher velocities occur. Form

means the overall shape and volume and the arrangement of its parts

Freeboard

A factor of safety expressed as the height above the design flood level Freeboard provides a factor of safety to compensate for uncertainties in the estimation of flood levels across the floodplain, such as wave action, localised hydraulic behaviour and impacts that are specific event related, such as levee and embankment settlement, and other effects such as "greenhouse" and climate change.

Frontage

The width of an allotment at the street boundary.

Full supply level

The top water level of a dam, equivalent to the spillway intake level.

Greenhouses / Igloos / Market Ğardening

A free - standing outbuilding covered in plastic / fabric / or other rigid coverings such as glass or poly-carbonate used to provide a controlled environment and improved crop production rates associated with the cultivation / propagation or growth of vegetables, flowers, mushrooms and other agricultural products.

Habitable floor area

means

- (a) in a residential situation: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom
- (b) in an industrial or commercial situation: an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood

Habitable room

A main living room, such as a living room, dining room, family room or bedroom.

Hatchet shaped

A lot which has frontage to a public street by only an access way

allotment Height

In relation to a building, means the vertical distance measured between ground level at any point at which the building is sited, and the ceiling of the topmost floor of the building above that point.

Hazard

A source of potential harm or a situation with a potential to cause loss. In relation to this plan, the hazard is flooding which has the potential to cause harm or loss

High hazard In the vicinity Possible danger to life and limb; evacuation by trucks difficult; potential for structural damage; social disruption and financial losses could be high. means surroundings, context, environment or vicinity of a heritage item

means a place, building, work, relic, movable object or precinct.

I FP

Local Environmental Plan

Leasable Floor Area (LFA)

Means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosure walls as measured at a height of 1400 millimetres above each floor level, excluding:

- Columns, fin walls, sun control devices, awnings and any other elements, projections or works outside the general lines of the outer face of the external wall; and
- Lift towers, cooling towers, machinery and plant rooms, ancillary storage space and air conditioning ducts; and
- Car parking needed to meet any requirements of the Council and any internal designated vehicular or pedestrian access thereto; and
- Space for loading and unloading of goods; and
- Internal public arcades and thoroughfares, terraces and balconies with outer walls less than 1400 millimetres high and the like.

LGA

Local Government Area

Liverpool Development Control Plan

Appendix 1

Loading Dock

The specific area set aside for loading and unloading of a commercial vehicle. Commonly the operation is carried out from a raised platform to which the vehicle is backed. Loading and unloading can, however take place from the side and/or ground level.

Local overland flooding

The inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam

Local street

A road or street used primarily for access to abutting properties.

I oft

The gross floor area contained within the roof space of a dwelling where:

- (a) the pitch of the roof creating the space does not exceed 35 degrees; and (b) the external enclosing walls do not exceed a height of 300mm measured
- vertically from the floor level of the loft (not including gabled end walls); and
- (c) there is no balcony, terrace, and the like forming part of the loft; and
- (d) the floor space of the loft does not exceed 60% of the footprint of the storey immediately below; and
- (e) one or more dormers may form part of the loft.

Lopping Low hazard The incomplete removal of branches leaving stumps attached to the tree

Should it be necessary, people and their possessions could be evacuated by trucks. Able-bodied adults would have little difficulty wading.

Merit approach

An approach, the principles of which are embodied in the Floodplain Development Manual which weighs social, economic and ecological impacts of land use options for different flood prone areas together with flood damage, hazard and behaviour implications, environmental protection and wellbeing of the State's rivers and floodplains.

Natural ventilation

A range of techniques that combine natural airflow with building design characteristics to induce fresh air into a building and exhaust stale air. Natural ventilation is also sometimes used as a means to reduce the temperature of a building's thermal mass.

Neighbouring land

Any land, other than adjoining land, which in the opinion of Council, may be detrimentally affected by a proposed development (and may include properties in a neighbouring Local Government area).

Notified Development Where Council writes to those people identified as requiring notification advising

of the submission of an application.

Number of Employees The number of persons anticipated to be working for re-numeration at a given development site, whether for salary or wages, part time or full time at the time of day, day of the week, which is being assessed. It should not be confused with employment which is the expected number of persons registered as working and which is thus equal to or greater than the number of employees on site at any given time.

Outbuilding

A building, which is ancillary to a principal residential building and includes sheds, garages, car ports and similar buildings.

Outdoor cafes

- (a) Food and drink are provided for public consumption.
- (b) Items of furniture, such as tables and chairs, are provided for use by cafe
- (c) The site is accessible, out-of-doors and available for public use
- (d) There is an adjacent associated business such as a cafe, coffee bar, milk bar, restaurant, ice-cream parlour, dining hall, food court or sandwich shop.
- (e) The associated business extends its supervised activities within the outdoor cafe location.

Outde	oor M	arl	rets
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Places or temporary structures / stalls for the purpose of retailing goods able to be carried away by the purchaser. Stalls are combined on suitable sites to form an outdoor market place.

Permeable ceiling

A false ceiling that allows air to come in direct contact with a slab above it.

Place

means an area of land, with or without improvements.

Potential koala

habitat

Areas of native vegetation where the trees of the types listed in Schedule 2 of the State Environmental Planning Policy No 44 - Koala Habitat Protection constitute at least 15% of the total number of trees in the upper or lower strata of the tree component.

Poultry

All forms of farmed bird including chickens, waterfowl, turkeys, ostriches, quail, squab and emus.

Poultry farming

Birds such as domestic fowls, turkeys, ducks geese, game birds, squab, quail and emus, whether as meat birds, layers or breeders and whether as free range or shedded birds.

Poultry processing plants

Poultry abattoirs and plants for the further processing of poultry (e.g. cutting up,

filleting etc.), packaging and dispatch

Probable maximum flood (PMF)

The largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation.

Probable maximum precipitation (PMP) The greatest depth of precipitation for a given duration meteorologically possible over a given size storm area at a particular location at a particular time of the year, with no allowance made for long-term climatic trends (World Meteorological Organisation, 1986). It is the primary input to the estimation of the probable maximum flood.

A statistical measure of the expected chance of flooding (see ARI).

Private open space

Probability

An open area of land or building attached to a dwelling (e.g. balcony or roof garden) intended for the exclusive use of the occupants of the dwelling, being located and designed so as to offer maximum privacy to occupants and

neighbours.

Primary frontage means

(a) the single frontage where an allotment has a single frontage to the street,

(b) the shortest frontage where an allotment has two or more frontages to the

the two frontages where an allotment (not including a corner allotment)

runs between two streets. Prune To remove some of the branches or roots of a tree.

Ramp

The circulation roadway, which connects an access driveway to an off-street car park, or service facility on a substantially different level, or which, connects two

levels in a multi-level development.

Rebuilt dwelling

Refers to the construction of a new dwelling on an allotment where an existing dwelling is demolished.

Reliable access

During a flood means the ability for people to safely evacuate an area subject to flooding, having regard to the depth and velocity of flood waters, the suitability of the evacuation route, and without a need to travel through areas where water

Remnant vegetation

Any patch of native vegetation around which most or all of the native vegetation has been removed. Remnant vegetation can range in size from a few plants to a very large group of plants.

REP

Ridgeline The highest point at which upward angled roof planes meet.

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Cutting through the bark and sapwood of the tree so as to stop the flow of water and nutrients between roots and leaves. Ring barking

Riparian Corridor That component of land (including floodplains) adjacent to creeks.

Any vegetation, which is adjacent to a water body and is reliant upon and contributes to the hydrological regime and ecology of that water body. Riparian vegetation

The chance of something happening that will have an impact. It is measured in terms of consequences and probability (likelihood). In the context of this plan, it Risk

is the likelihood of consequences arising from the interaction of floods,

communities and the environment.

Road A public thoroughfare used for the passage of vehicles or animals.

Root plate The volume of roots of a mature tree

Run-off The amount of water that actually ends up as storm flow

Rural shed

A building or structure erected on a rural zoned property for uses associated with agriculture or other permissible rural land uses on the site. This does not include buildings for the keeping of poultry or intensive horticultural activities.

means the size of a building and its relationship with its surrounding

buildings or landscape.

Secondary means frontage

(a) the longer frontages where an allotment has two or more frontages to the

(b) the frontage that adjoins a lane where an allotment (not including a corner allotment) runs between a street and a lane. A lane is a roadway that is

6mwide or less Sensitive Population groups that include Childcare centres, Hospitals, Education facilities

populations Separation distance

Scale

The distance between the point of generation of an environmental impact and a receptor sensitive to that impact that will allow for the effects to be minimised.

SEPP

and Retirement villages

Service Aisles The roadways, which connect, service areas with driveways and the street

system. They may be part of the internal circulation road system. Required widths for straight sections of service aisles are 4.5mon way and 6.5mtwo-way. The width of curved sections should be determined by the swept path of the

largest, relevant design vehicle.

The service bay/area is the specific area delineated for a commercial vehicle to Service Bay/Area

stand within a service area.

The service facility is the area in a development set aside for the manoeuvring lay-by, loading and unloading of commercial vehicles, together with shelter and Service Facility

equipment, which might be provided for the receipt and dispatch of freight. Normally included among the facilities is the storage of waste (garbage), prior

to its removal by a special purpose vehicle.

The horizontal distance measured from an external enclosing wall (including an above ground deck, balcony, and the like), a window, or the eaves of a building, Setback

(a) allotment boundary; or

(b) a window to a bedroom or living area of another dwelling.

Setting means the area around a heritage item that contributes to its heritage

significance. It may include views to and from the heritage item. The listing boundary of a heritage item does not always include the whole of its setting A basket, frame or flat base on wheels (or castors), usually of metal construction that is provided by a business for customers to transport items within the store and within any car packing area allocated for use by customers of the store.

Shopping Trolley and within any car parking area allocated for use by customers of the store.

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Side Boundary

The boundary between adjacent properties

Site Emergency Response Flood Plan A management plan that demonstrates the ability to move goods above the flood level within the available warning time, and includes a strategy to safely

evacuate persons.

Spillway The earth swale (or pipe) used to divert water from a dam. sqm Square metre

Stacked Car Parking

The car parking, which may require the removal of other vehicles in order to

gain access

Street sign A street name sign or a sign under Australian Standard AS 1742 being

> (a) guide sign; (b) warning sign;

(c) temporary warning sign;

(d) regulatory sign; (e) parking sign; (f) hazardous markers;

(g) service symbol;

(h) which is on a public road.

A plan prepared by a registered surveyor, which shows the information Survey plan

required for the assessment of an application in accordance with the provisions of this Policy.

The Environmental Planning and Assessment Act 1979. The Act

The Plan This Development Control Plan

Third party

The content of the advertisement is not related to the land, building or premises or goods sold on the land, building or premises to which the advertisement is advertising

Threatened species, population or community

means any species, population or ecological community which is scheduled under the Threatened Species Conservation Act 1995.

Topping The removal of the top portion of a tree including a section of trunk

Vegetative Waste Data File Naturally occurring or purpose planted vegetation (preferably species native to an area) to lessen the impacts of a development on the surrounding area

A File or Folder containing the Waste Management Plan together with records (waste receipts or dockets) of disposal and/ or recycling of demolition and construction materials. The Waste Data File is to be retained by the person responsible for the site.

Waste Management Plan or WMP An outline of any waste or recycling materials to be produced during

(a) Demolition (b) Construction and

(c) Future Use

for a particular demolition and/ or construction project. It is to include estimates of volumes or weights of waste produced as well as a description of reuse, recycling and final destination. A blank Waste Management Plan is shown in Appendix 4.

Liverpool Development Control Plan

Appendix 1

Appendix 2 - Recommended Plant Species List for Landscaping

 The following plant list is a guide only. It is a list of shrub and tree species known to grow well in the heavy clay soils of Liverpool. The list is a substitute for independent Landscape Architectural advice. It is recommended that a qualified Landscape Architect shall prepare all Landscape Plans submitted for Council approval.

Tall Evergreen Shrubs up to 3m high

Botanic Name	Common Name	Yr 1	Yr 2	Maturity
Westringia fruticosa	Coast Rosemary	0.5 m	1 m	1.5 m
Westringia longifolia	Westringia	0.5 m	1 m	1.5 m
Grevillea 'Robyn Gordon'	Grevillea 'Robyn Gordon'	0.5 m	1.5 m	1.5 m
Grevillea rosmarinifolia	Rosemary Gevillea	0.5 m	2 m	2 m
Melaleuca hypericifolia	Hillock Bush	0.5 m	1 m	2 m
Callistemon 'Captain Cook'	Bottlebrush	0.5 m	1 m	2 m
Grevillea 'Sandra Gordon'	Grevillea 'Sandra Gordon'	0.5 m	1.5 m	3 m
Banksia ericifolia	Heath Banksia	0.5 m	2 m	3 m
Leptospermum laevigatum	Coast Tea Tree	0.5 m	2 m	3 m
Melaleuca ericifolia	Melaleuca ericifolia	0.5 m	2 m	3 m
Melaleuca nesophyla	Melaleuca nesophyla	0.5 m	2 m	3 m
Hakea salicifolia	Silky Hakea	0.5 m	2 m	3 m
Doryanthes excelsa	Gymea Lily	0.5 m	2 m	3 m
Leptospermum spp.	Tea tree	0.5 m	2 m	3 m
Baekea spp.	Heath Myrtle	0.5 m	2 m	3 m
Pittosporum tenuifolium	New Zealand Pittosporum	0.5 m	2 m	3 m
Michelia figo	Port Wine Magnolia	0.5 m	2 m	3 m

Small Trees less than 9m high (D) = Deciduous

Botanic Name	Common Name	Yr 1	Yr 3	Maturity			
Planted a minimum of 1.5mfrom the building							
Callistemon hannah ray	Hannah Ray Bottlebrush	2 m	3 m	4 - 5 m			
Callistemon citrinus	Lemon Scented Bottlebrush	2 m	3 m	4 - 5 m			
Leptospermum petersonii	Lemon-scented Tea tree	1.5 m	3 m	4 - 6.m			
Acacia floribunda	Gossamer Wattle	2 m	3.m	4 - 6.m			
Acacia baileyana	Cootamundra Wattle	2 m	3 m	5 - 8.m			
Ceratopelum gummiferum	NSW Christmas Bush	2 m	4 m	5 - 8 m			
Elaeocarpus reticulatus	Blueberry Ash	1.5 m	2 m	6 - 8 m			
Banksia integrifolia	Coast Banksia	2 m	5 m	6 - 8 m			
Tristaniopsis laurina	Water Gum	2 m	3 m	6 - 8 m			

Medium Sized	Trees	9 -	15m	high
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Botanic Name	Common Name	Yr 1	Yr 3	Maturity			
Planted a minimum of 3mfrom the building							
Melaleuca bracteata	Melaleuca bracteata	3 m	5 m	8 - 10 m			
Melaleuca decora	White Cloud Tree	3 m	5 m	6 - 12 m			
Melia azedarch	White Cedar (D)	2 m	4 m	8 - 12 m			
Brachychiton acerifolium	Illawarra Flame Tree (D)	2 m	4 m	8 - 12 m			
Hymenosporum flavum	Native Frangipani	2 m	4 m	8 - 12 m			
Melaleuca quinquenervia	Broad-leaved Paper bark	3 m	5 m	8 - 15 m			
Eucalyptus scoparia	Willow Gum	3 m	5 m	8 - 15 m			
Angophora bakeri	Narrow leaved Apple	2 m	4 m	9 - 15 m			
Brachychiton populneus	Kurraiong	2 m	4 m	9 - 15 m			

Large Trees greater than 15m Tall

Native

Botanic Name	Common Name	Yr 1	Yr 3	Maturity
Planted a minimum of 4.0mfro	m the building			
Acacia elata	Cedar Wattle	2 m	5 m	10 –18 m
Casuarina glauca	Swamp She Oak	3 m	5 m	10 –18 m
Casuarina littoralis	Black She Oak	3 m	5 m	10 –18 m
Callistemon viminalis	Weeping Bottlebrush	3 m	5 m	10 –18 m
Planted a minimum of 5.0mfro	m the building			
Eucalyptus molucanna	Grey Box	3 m	5 m	12 -18 m
Eucalyptus crebra	Narrow Leaved Ironbark	3 m	5 m	12 -18 m
Eucalyptus fibrosa	Broad Leaved Ironbark	3 m	5 m	12 -18 m
Eucalyptus sclerophylla	Hard Leaved Scribbly	3 m	5 m	12 -18 m
Eucalyptus haemastoma	Scribbly Gum	3 m	5 m	12 -18 m
Planted a minimum of 6.0mfro	m the building			
Eucalyptus microcorys	Tallow-wood	3 m	5 m	15 - 20 m
Eucalyptus botryoides	Bangalay Tree	3 m	5 m	15 - 20 m
Eucalyptus tereticornis	River Red Gum	3 m	5 m	15 - 20 m
Eucalyptus sideroxylon	Red Ironbark	3 m	5 m	15 - 20 m
Syncarpia glomulifera	Turpentine	2 m	4 m	15 - 20 m
Casuarina cunninghamiana	River She Oak	3 m	5 m	15 - 20 m

Appendix 3 - List of Noxious Plants for Liverpool LGA

The following weeds are declared noxious in the Liverpool LGA:

The following weeds are declared noxious in the Liver Weed	Class	Legal requirements
African feathergrass [Pennisetum macrourum]	5	1
African turnipweed [Sisymbrium runcinatum]	5	1
African turnipweed [Sisymbrium thellungii]	5	1
Alligator weed [Alternanthera philoxeroides]	3	2
Anchored water hyacinth [Eichhornia azurea]	1	3
Annual ragweed [Ambrosia artemisiifolia]	5	1
Arrowhead [Sagittaria montevidensis]	5	1
Artichoke thistle [Cynara cardunculus]	5	1
Athel pine [Tamarix aphylla]	5	1
Bear-skin fescue [Festuca gautieri]	5	1
Bitou bush [Chrysanthemoides monilifera subspecies rotundata]	3	4
Black knapweed [Centaurea nigra]	1	3
Blackberry [Rubus fruticosus aggregate species] except cultivars Black satin, Chehalem, Chester Thornless, Dirksen Thornless, Loch Ness, Murrindindi, Silvan, Smoothstem, Thomfree	4	5
Boneseed [Chrysanthemoides monilifera subspecies monilifera]	3	4
Bridal creeper [Asparagus asparagoides]	5	1
Broomrapes [Orobanche species] Includes all Orobanche species except the native O. cernua variety australiana and O. minor	1	3
Burr ragweed [Ambrosia confertiflora]	5	1
Cabomba [Cabomba caroliniana]	5	1
Castor oil plant [Ricinus communis]	4	5
Cayenne snakeweed [Stachytarpheta cayennensis]	5	1
Chilean needle grass [Nassella neesiana]	4	5
Chinese violet [Asystasia gangetica subspecies micrantha]	1	3
Clockweed [Gaura lindheimeri]	5	1
Clockweed [Gaura parviflora]	5	1
Corn sowthistle [Sonchus arvensis]	5	1
<u>Dodder [Cuscuta species]</u> Includes All Cuscuta species except the native species C. australis, C. tasmanica and C. victoriana	5	1
East Indian hygrophila [Hygrophila polysperma]	1	3
Espartillo [Achnatherum brachychaetum]	5	1
Eurasian water milfoil [Myriophyllum spicatum]	1	3
Fine-bristled burr grass [Cenchrus brownii]	5	1
Fountain grass [Pennisetum setaceum]	5	1
Gallon's curse [Cenchrus biflorus]	5	1
Glaucous starthistle [Carthamus glaucus]	5	1
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Weed	Class	Legal requirements
Golden thistle [Scolymus hispanicus]	5	1
Green cestrum [Cestrum parqui]	3	2
Harrisia cactus [Harrisia species]	4	5
Hawkweed [Hieracium species]	1	3
Horsetail [Equisetum species]	1	3
Hygrophila [Hygrophila costata]	2	3
Hymenachne [Hymenachneamplexicaulis]	1	3
Karoo thorn [Acacia karroo]	1	3
Kochia [Bassia scoparia] except Bassia scoparia subspecies trichophylla	1	
Lagarosiphon [Lagarosiphon major]	1	3
Lantana [Lantana species]	4	6
Lantana [Lantana species]	5	1
Leafy elodea [Egeria densa]	5	1
Long-leaf willow primrose [Ludwigia longifolia]	3	2
Long-leaf willow primrose [Ludwigia longifolia]	5	1
Ludwigia [Ludwigia peruviana]	3	2
Mexican feather grass [Nassella tenuissima]	1	3
Mexican poppy [Argemone mexicana]	5	1
Miconia [Miconia species]	1	3
Mimosa [Mimosa pigra]	1	3
Mossman River grass [Cenchrus echinatus]	5	1
Onion grass [Romulea species] Includes all Romulea species and varieties except R. rosea var. australis	5	1
Oxalis [Oxalis species and varieties] Includes all Oxalis species and varieties except the native species O. chnoodes, O. exilis, O. perennans, O. radicosa, O. rubens, and O. thompsoniae	5	1
Pampas grass [Cortaderia species]	3	2
Parthenium weed [Parthenium hysterophorus]	1	3
Pellitory [Parietaria judaica]	4	6
Pond apple [Annona glabra]	1	3
Prickly acacia [Acacia nilotica]	1	3
Prickly pear [Cylindropuntia species]	4	5
Prickly pear [Opuntia species except O. ficus-indica]	4	5
Red rice [Oryza rufipogon]	5	1
Rhus tree [Toxicodendron succedaneum]	4	6
Rubbervine [Cryptostegia grandiflora]	1	3
Sagittaria [Sagittaria platyphylla]	5	1
Salvinia [Salvinia molesta]	2	3

Appendix 3

Weed	Class	Legal requirement
Sand oat [Avena strigosa]	5	1
Senegal tea plant [Gymnocoronis spilanthoides]	1	3
Serrated tussock [Nassella trichotoma]	4	5
Siam weed [Chromolaena odorata]	1	3
Smooth-stemmed turnip [Brassica barrelieri subspecies oxyrrhina]	5	1
Sddier thistle [Picnomon acarna]	5	1
Spotted knapweed [Centaurea maculosa]	1	3
St. John's wort [Hypericum perforatum]	4	6
Texas blueweed [Helianthus ciliaris]	5	1
Water caltrop [Trapa species]	1	3
Water hyacinth [Eichhornia crassipes]	2	3
Water lettuce [Pistia stratiotes]	1	3
Water soldier [Stratiotes aloides]	1	3
Willows [Salix species] Includes all Salix species except S. babylonica, S. x reichardtii, S. x calodendron	5	1
<u>Witchweed [Striga species]</u> Includes all Striga species except native species and Striga parviflora	1	3
Yellow burrhead [Limnocharis flava]	1	3
Yellow nutgrass [Cyperus esculentus]	5	1

- 1 The requirements in the Noxious Weeds Act 1993 for a notifiable weed must be complied with.
- 2 The plant must be fully and continuously suppressed and destroyed
- 3 The plant must be eradicated from the land and the land must be kept free of the plant
- 4 The plant must be fully and continuously suppressed and destroyed
- 5 The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local control authority and the plant may not be sold, propagated or knowingly distributed
- 6 The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local control authority
- 7 except B scoparia subspecies trichophylla The plant must be eradicated from the land and the land must be kept free of the plant

Appendix 4 - Flood Compatible Materials

Building	Flood compatible material	Building	Flood compatible material
Component	Prood compatible material	Component	riood compandie material
Flooring and Sub-floor	Concrete slab-on-ground monolith construction	Doors	Solid panel with water proof adhesives
Structure	re Suspension reinforced concrete slab.		Flush door with marine ply filled with closed cell foam
			Painted metal construction
			Aluminium or galvanised steel frame
Floor Covering	Clay tiles	Wall and Ceiling Linings	Fibro-cement board
	Concrete, precast or in situ Concrete tiles Epoxy, formed-in-place	Linings	Brick, face or glazed
		Clay tile glazed in waterproof mortar	
	Mastic flooring, formed-in-place		Concrete
	Rubber sheets or tiles with		Concrete block
	chemical-set adhesives		Steel with waterproof
	Silicone floors formed-in-place		applications
	Vinyl sheets or tiles with chemical-set adhesive		Stone, natural solid or veneer, waterproof grout
	Ceramic tiles, fixed with mortar		Glass blocks
	or chemical-set adhesive		Glass
	Asphalt tiles, fixed with water resistant adhesive		Plastic sheeting or wall with waterproof adhesive
Wall Structure	Solid brickwork, block work,	Insulation	Foam (closed cell types)
	reinforced, concrete or mass concrete		Aluminium frame with stainless steel rollers or similar corrosion
		Windows	and water resistant material.
Roofing Structure (for	Reinforced concrete construction	Nails, Bolts, Hinges and	Brass, nylon or stainless steel
Situations		Fittings	Removable pin hinges
Where the Relevant Flood Level is Above the Ceiling)	Galvanised metal construction		Hot dipped galvanised steel wire nails or similar

Article II. Electrical and Mechanical Equipment

Article III. For dwellings constructed on land to which this DCP applies, the electrical and mechanical materials, equipment and installation should conform to the following requirements.

Main power supply

Article V. Subject to the approval of the relevant authority the incoming main commercial power service equipment, including all metering equipment, shall be located above the relevant flood level. Means shall be available to easily disconnect the dwelling from the main power supply.

Wiring

Article VII. All wiring, power outlets, switches, etc., should, to the maximum extent possible, be located above the relevant flood level. All electrical wiring installed below the relevant flood level should be suitable for continuous submergence in water and should contain no fibrous components. Earth core linkage systems (or safety switches) are to be installed. Only submersible-type splices should be used below the relevant flood level. All conduits located below the relevant designated flood level should be so installed that they will be self-draining if subjected to flooding.

Equipment

Article IX. All equipment installed below or partially below the relevant flood level should be capable of disconnection by a single plug and socket assembly.

Reconnection

Article XI. Should any electrical device and/or part of the wiring be flooded it should be thoroughly cleaned or replaced and checked by an approved electrical contractor before reconnection.

Heating and Air Conditioning Systems

Article IV. Heating and air conditioning systems should, to the maximum extent possible, be installed in areas and spaces of the house above the relevant flood level. When this is not feasible every precaution should be taken to minimise the damage caused by submersion according to the following guidelines.

Fuel

Article VI. Heating systems using gas or oil as a fuel should have a manually operated valve located in the fuel supply line to enable fuel cut-off.

Installation

Article VIII. The heating equipment and fuel storage tanks should be mounted on and securely anchored to a foundation pad of sufficient mass to overcome buoyancy and prevent movement that could damage the fuel supply line. All storage tanks should be vented to an elevation of 600mmabove the relevant flood level.

Ducting

Article X. All ductwork located below the relevant flood level should be provided with openings for drainage and cleaning. Self-draining may be achieved by constructing the ductwork on a suitable grade. Where ductwork must pass through a watertight wall or floor below the relevant flood level, the ductwork should be protected by a closure assembly operated from above relevant flood level.

Article XII.





Liverpool Development Control Plan 2008 Part 4 Development in Liverpool city centre

DRAFT

Part 4 must be read in conjunction with Part 1

LIVERPOOL CITY COUNCIL.



Liverpool Development Control Plan 2008 Part 4 Liverpool city centre

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Part 4 DCP (as exhibited)

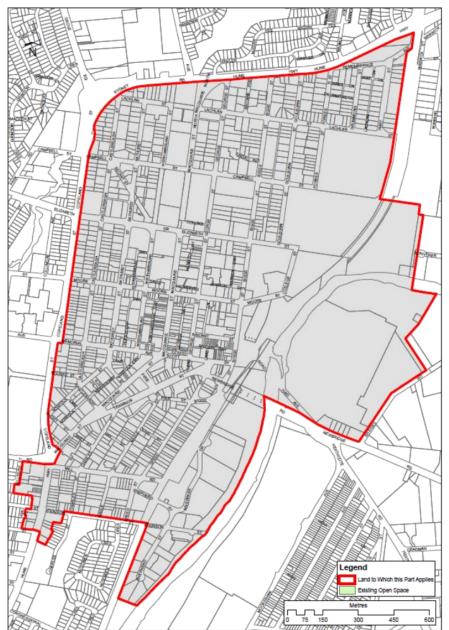
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4.1. **PRELIMINARY**

Applies to

This Part applies to the area shown in Figure 4-1. Part 1 also applies to the area shown in Figure 4-1.

Figure 4-1: Land to which this Part applies



Background

The Liverpool city centre was identified by the Department of Planning as a regional city through the Sydney Metropolitan Strategy – A City of Cities in 2005. This status was confirmed in A Plan for Growing Sydney released by the Department of Planning and Environment in December 2014.

In March 2018 the Sydney Regional Plan, *A metropolis of three cities* was published by the Greater Sydney Commission (GSC), establishing a renewed planning framework for the Sydney region as a whole towards 2056. The Western City District Plan — connecting communities (WCDP), was finalised by the GSC in March 2018 also. The WCDP provides detailed planning direction for the future development of Liverpool city centre, as part of the Liverpool LGA.

Liverpool city centre LEP revision

In 2015 Council launched a review of the planning controls applying to Liverpool city centre. The city centre LEP review sought to revitalise Liverpool city centre, to create a mixed-use, vibrant 18-hour city centre, a walkable city that offers living, recreation and work opportunities and a city focused along the river. To this end it was decided to significantly expand the area of B4 – Mixed Use zoned land and reduce the area of land zoned B3 – Commercial Core. This amendment to Liverpool Local Environmental Plan (LLEP) 2008 — Amendment 52, was gazetted and came into force on 5 September 2018.

In addition to rezoning land to reduce the size of the Commercial Core and expand the area of Mixed Use zoned land, Amendment 52 defined legible character precincts based on ownership, subdivision, street block patterns, and the role of the public domain. It also specified an urban form that responds to the character of each precinct, has different building typologies, and offers different economic opportunities.

Amendment 52 enables individual owners to develop sites without the requirement for amalgamation, improves connectivity to and within the city centre, de-couples car parking from development where appropriate and develops consistent urban form, where possible, for new development within the city centre. It is envisaged that increasing the number of residents in the city centre will activate the city centre, and will lead to increased demand for retail and services, resulting in more jobs.

This Part of Liverpool Development Control Plan (LDCP) 2008 seeks to provide appropriate development objectives and controls that will facilitate development in Liverpool city centre in concert with the Liverpool Local Environmental Plan (LLEP) 2008.

Characteristics of the Liverpool city centre

The character of Liverpool city centre can be divided into specific areas which have a number of character elements as described below. The character areas are illustrated in **Figure 4.2** below. However, where appropriate, reference is also made to which precinct, illustrated on the FSR map as amended by Amendment 52, also applies:

- Mixed Use (Area 7 and Area 8).
- High Density Residential.
- Education and Medical Precinct (Area 9).
- Commercial Core (Area 10)
- Standalone sites (including Area 11)
- City Centre Riverfront.
- Georges River Precinct.

Commercial Core

Land considered as part of Amendment 52, but which retains the B3 — Commercial Core zoning. Council aims to increase employment in the city centre to a total of 30,000 jobs by 2031. Commercial development is encouraged throughout the Mixed Use and Commercial Core areas of the city centre.

Liverpool city centre's commercial core is located near the public transport interchange on land bounded by Elizabeth Street to the north, Bigge Street to the east, George Street to the west and Railway Street to the south. In addition, the existing Westfield shopping centre is also part of the Commercial Core. Preservation of a Commercial Core in the city centre will support the broader base of uses likely to arise in the Mixed Use areas. Retail development will continue to be focused around the Macquarie Street Mall and Westfield shopping centre, though retail uses will also be permitted throughout the Mixed Use and Commercial precincts.

Mixed Use

Amendment 52 expanded the area of Liverpool city centre zoned B4 - Mixed Use. Land zoned B4 - Mixed Use may be developed for a range of retail/commercial and residential uses. Three new precincts have been defined for the rezoned sites in Liverpool city centre and some existing B4 sites. These precincts relate to the existing site characteristics, ownership patterns and subdivision patterns. The precincts are identified as Fine Grain, Midrise and Long Term Civic Sites. Certain lots within the Mid-Rise and Long-term Civic Sites (in addition to the Commercial Core) precincts may be developed pursuant to clause 7.5A of LLEP 2008, but only if they meet lot size and access requirements.

The Fine Grain and the Midrise sites use a perimeter block typology, defined by building envelopes (see 4.22 below). The building envelopes enable buildings constructed to these profiles to relate to each other and the street network.

Lots that may be developed pursuant to clause 7.5A are large, strategically located sites, which can be developed subject to a concept development application as defined by section 4.23 of the Environmental Planning and Assessment (EP&A) Act 1979 and the delivery of a public benefit, as defined by clause 7.5A(3)(b) of LLEP 2008 (see 4.2.5 below).

High Density Residential

Liverpool city centre is an increasingly popular residential destination. The Commercial Core and Mixed Use areas of the city centre are surrounded by R4 - High Density Residential zoned land. With the growth of the hospital, there will be increasing demand for accommodation for health workers. One of Council's aims is to improve access to residential areas and the city centre.

In addition to significant residential development in the Mixed Use areas of the city centre, residential development will be focused around the northern, western and southern periphery. It is desirable that the frontages to Macquarie Street at Pioneer Park accommodate retail/café/restaurant activities at ground floor with residential and potentially some office space on floors above. Shepherd Street (at the southern extremity of the city centre) offers the potential to accommodate residential development with good access to the Georges River. Planning controls have been reviewed to assist this outcome.

Education and Medical Precinct

The Education and Medical precinct is located on the eastern edge of the city centre. It is defined by the South-Western Sydney Area Health Service (Liverpool Hospital) and attendant medical centres and clinics, the Liverpool Private Hospital, public and private schools, and the Liverpool TAFE buildings. The precinct is centred on historic Bigge Park and the Francis Greenwaydesigned old Liverpool Hospital, now part of TAFE.

LLEP 2008 identifies Liverpool Hospital as a Long-Term Civic Site so that the site may develop using a concept development application and with a full range of building typologies.

Standalone sites

Standalone sites, as illustrated in **Figure 4.2**, describes a number of sites in certain locations around the city centre, which have been rezoned by Council independently of Amendment 52. The sites have been recognised by Council with development standards which will encourage architecturally significant buildings. It is envisaged that these buildings will develop using the tower on podium building typology.

City centre riverfront

Liverpool city centre was the first of the 'Macquarie towns', chartered by Governor Lachlan Macquarie in 1810. From its foundation, the city identity was closely connected to the Georges River. Since the development of the railway line along the river as early as 1856, the city centre has become increasingly divorced from the river. The State Rail Freight Line, which runs alongside the passenger line immediately adjacent to the river, has further divided the city and obstructs connections across the Georges River, both physically and visually.

The natural edge of the Georges River and the Chipping Norton lakes system is one of Liverpool's most valuable assets. Opportunities exist to create continuous urban parkland. Council is committed to exploring improved connections from the city centre to the river and to Moorebank.

Georges River Precinct

The Georges River Precinct has been identified for potential city centre expansion due to the large sites, the limited ownership and proximity to the train station. The site has a number of constraints however, including the location of the railway line, which presents a barrier to access to the city centre, the river and the site's location within the 1% AEP (i.e. 100 year flood). There is limited existing connectivity to the city centre.

Streets, Laneways and Serviceways

The Hoddle grid, adopted as the township plan shortly after Governor Macquarie founded Liverpool, provides an excellent and legible framework for development. It has a vital role in determining the city's built form.

Streets make up the largest area of public space in Liverpool city centre. Used primarily for traffic and pedestrian movement, they also accommodate business, shopping, festivals, dining, socialising and entertainment. Within the formal grid of north-south and east-west streets there are serviceways (lanes) and arcades. Currently the serviceways do not generally provide direct connections between streets but the arcades do.

In the southern part of the city centre, the grid distorts in response to the topography, forming a secondary grid. The meeting of the regular Hoddle grid with the secondary grid along Memorial Avenue creates corner blocks with obtuse and acute angles. This provides a valuable opportunity to reinforce the character and streetscape quality of Liverpool city centre.

The core of the city centre is bounded by Bathurst Street, Campbell Street, Bigge Street, Pirie Street and Terminus Street. These streets carry the bulk of through traffic around the city centre to access the major arterials – Newbridge Road, Hoxton Park Road, the Hume Highway, Elizabeth Drive and the Cumberland Highway.

The network of serviceways complements the dominant qualities of the main streets. Hidden within the blocks, the serviceways have the potential to be extended to provide important direct pedestrian links to the streets. If this can be achieved, the serviceways have the capacity to improve permeability and provide spaces that diversify and enrich the city structurally and economically. The active street frontages along Macquarie Street and throughout the city centre are also an asset that should be maintained and expanded.

The development controls in this Part complement the amended LLEP 2008 and define the built form required to ensure that the amenity of the streets and lanes/serviceways is protected and enhanced.

Satisfactory arrangements

At the request of Transport for NSW, Council conducted a review of the transport needs that would be created by the additional residential development that would be made possible by rezoning much of the existing commercial core of the city centre to permit residential development. The review made a number of recommendations, including that a range of improvements to designated State public infrastructure would be required to support the planned residential growth.

In order to fund the required infrastructure improvements, clause 6.4A of LLEP 2008 indicates that the development of any and all residential accommodation on land within the intensive urban development area of Liverpool city centre (i.e. "Area 7", "Area 8", "Area 9", "Area 10" or "Area 11" shown on the Floor Space Ratio Map), must demonstrate via written confirmation from the Secretary of the DP&E that, according to clause 6.4A(2), "satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relationship to the land on which the development is to be carried out."

The satisfactory arrangements provision must be satisfied prior to the determination of a DA which includes residential development. It is expected that the satisfactory arrangements will take the form of an additional levy on residential development, and may require the making of the planning agreement with the DP&E.

Development of hotel, motel, backpacker, bed-and-breakfast or serviced apartment accommodation is not considered "residential development" and will not be subject to satisfactory arrangements as described in clause 6.4A of LLEP 2008.

Site-specific Development Control Plan

Clause 6.6, Development control plan, of LLEP 2008 requires that:

(1) Development consent must not be granted for development on land in an urban release area or intensive urban development area unless a development control plan that provides for the matters specified in subclause (2) has been prepared for the land.

The "intensive urban development area" is defined in clause 6.4A as being "Area 7", "Area 8", "Area 9" or "Area 10" shown on the Floor Space Ratio Map.

Proposed development that does not rely on clause 7.5A of LLEP 2008 (see Section 2.1.4 below), would not require the lodgement of a site-specific DCP. Council will accept an assessment of compliance with Part 1 and Part 4 of LDCP 2008 in lieu of the submission of a site-specific DCP For development undertaken pursuant to the floor space bonuses described in clause 7.5A of LLEP 2008, please refer to Section 4.2.5 of this Part.

4.2. CONTROLS FOR BUILDING FORM

4.2.1 Building form

Background

Building form refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. LLEP 2008 includes provisions for land use, building heights, sun access, floor space ratio (FSR) and design excellence. The development controls in this Part of the DCP are intended to reinforce the desired outcomes for the city centre. The resulting built form and character of new development should contribute to an attractive public domain in Liverpool city centre and produce a desirable setting for the intended uses.

The provisions in the Apartment Design Guidelines (ADG) associated with State Environmental Planning Policy No.65 – Design Quality are incorporated in this DCP to apply to all residential development in the Liverpool city centre including apartments, any residential component of a mixed use development, and serviced apartments that are strata titled. Where there is an inconsistency between other provisions in the ADG and this DCP, the ADG prevails to the extent of the inconsistency.

Within the existing Liverpool city centre, the diversity of uses is reflected in the different building typologies. These are:

- Perimeter Block (accommodating commercial and residential uses).
- Towers on a Podium (accommodating commercial and residential uses).
- Detached Buildings (apartment buildings, religious, commercial, education and medical uses).

LLEP 2008 identifies specific precincts on the FSR map for Liverpool city centre (Area 7, Area 8, Area 9, Area 10 and Area 11). The precincts relate to specific character areas defined in this Part as follows:

- · "Area 7" is the Fine Grain Precinct;
- "Area 8" is the Midrise Precinct:
- "Area 9" is the Long-Term Civic Sites Precinct;
- "Area 10" is the Commercial Core Precinct: and
- "Area 11" is the Standalone site known as 77-83 Moore Street and 193 Macquarie Street.

The precincts are shown in Figure 4-2.

Objectives

- Establish the scale, dimensions, form and separation of buildings as appropriate for the city centre and the range of uses.
- 2. Provide a strong definition of the public domain with buildings on a common alignment.
- 3. Promote building frontages with good connections to the street.

Controls

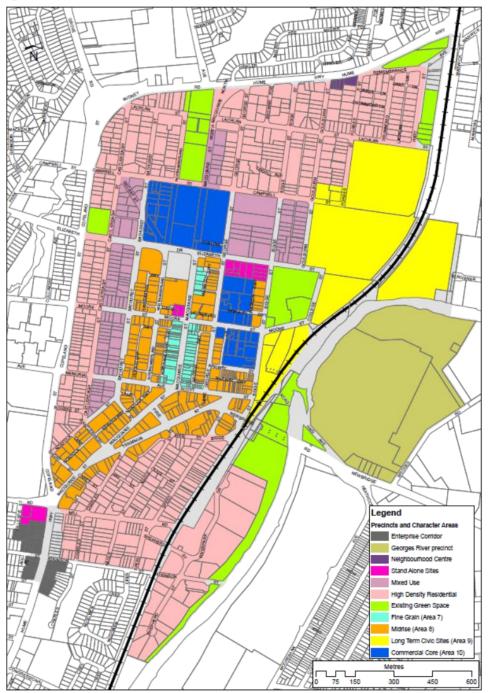
Develop new buildings in Liverpool city centre using the following building typologies for precincts as identified in **Figure 4-2**:

- Perimeter block typology for Fine Grain precinct.
- 2. Perimeter block typology for Midrise precinct, with the exception of those Midrise sites

- developed pursuant to clause 7.5A of LLEP 2008 (which may also be developed with a tower on podium typology).
- 3. Perimeter block, tower on podium or detached building typology for Long Term Civic Sites.
- 4. Tower on podium or detached building typology for standalone sites.
- 5. Perimeter block, tower on podium or detached building typology for Commercial Core sites.
- 6. Perimeter block, or detached building typology for Mixed Use.
- 7. Detached building typology for High Density Residential sites.
- 8. Perimeter block, or detached building typology for Enterprise Corridor sites and Neighbourhood Centre sites.

Part 4 DCP (as exhibited)

Figure 4-2 Precincts



4.2.2 Building Envelopes

Background

Building envelopes provide buildings with a strong address to the street, ensure compatibility between sites and maintain a suitable relationship to the scale of existing buildings. The lower scale buildings on the Fine Grain and Midrise sites contribute to the character of the existing city centre and make a positive contribution to its vitality, image and identity.

Midrise and Commercial Core sites of over 1,500m² in area may be developed as described in clause 7.5A of LLEP 2008 in certain circumstances. See section **4.2.5 Controls for sites requiring the submission of a DCP** for greater clarification.

4.2.3 Controls for the Fine Grain Precinct

Background

The Fine Grain Precinct is identified on **Figure 4-2**. Fine Grain Sites are small sites that have a very important role for pedestrian interface along streets. They are important because of their short frontages to streets, variety of uses, but also because the diverse ownership offers significant contrast of character, opening hours and price-point for retail offerings.

Objectives

- Create a contiguous street wall even though sites are developed independently.
- Address solar access/privacy and light within the building envelope so that separate studies are not required.
- 3. Provide active street and lane/serviceway frontages.
- 4. Encourage development without car parking on site.

Controls

Design new buildings in the Fine Grain Precinct as follows:

- Construct a maximum of four storeys to the street and four storeys to the serviceway frontages, with an additional two storeys set back to street frontages in accordance with Figures 4-3 and 4-4.
- Locate retail uses at the ground floor on street and lane/serviceway frontages (where possible).
- Develop no more than one level of (at grade) car parking (where necessary), which is to be appropriately screened or sleeved.
- Provide parking in accordance with LLEP 2008 provisions or make an alternative arrangement to the satisfaction of Council.

Figure 4-3: Fine Grain/Mid-Block

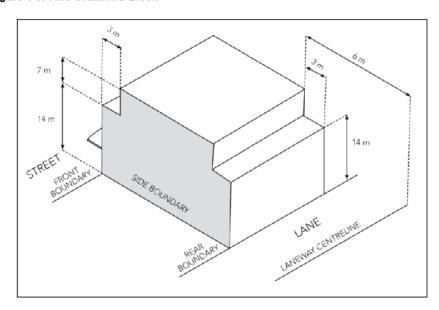
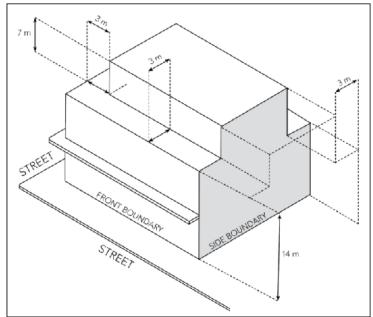


Figure 4-4: Fine Grain/Corner



4.2.4 Controls for the Midrise Precinct

<u>Background</u>

The Midrise Precinct is identified on **Figure 4-2**. Midrise Sites are capable of accommodating more development than Fine Grain Sites. They are important because of the relatively short-frontages to streets and their diverse range of uses. Differing ownership also provides a variety of use and form that single ownership of large city buildings does not achieve.

Objectives

- 1. Form a contiguous street wall even though sites are developed independently.
- Address solar access/privacy and light within the building envelope so that separate studies are not required.
- 3. Provide active street and lane/serviceway frontages.
- Allow flexibility of uses within the building envelope (long life/loose fit) that can change over time
- 5. Provide parking for the development on site.

Controls

Design new buildings in the Midrise Precinct as follows:

- Construct buildings to a maximum of six storeys to the street and four storeys to the lane/serviceway frontages, with an additional two storeys set back to both frontages in accordance with Figures 4-5 and 4-6.
- Develop retail uses at the ground floor at street and lane/serviceway frontages (where possible).
- Develop at least one level above the ground floor for a commercial use, or that is capable
 of being adapted to a commercial use.
- Provide parking in a basement car park. No more than one level of service (at grade) car
 parking is permitted and this is to be appropriately screened or sleeved.
- 5. Provide parking in accordance with the LLEP 2008.

7 m

21 m

21 m

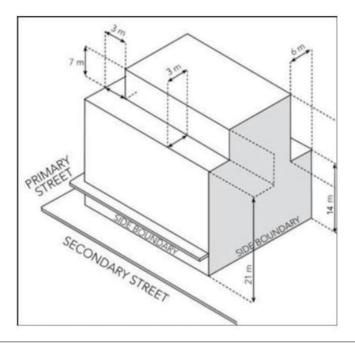
14 m

SIDE BOUNDARY

RELAR ABOUT

Figure 4-5: Mid-Rise/Mid-Block

Figure 4-6 Mid-Rise/Corner



4.2.5 Controls for sites that require the submission of a site specific DCP or concept DA

Background

Clause 7.5A of LLEP 2008 provides additional provisions relating to certain land in Liverpool city centre. This section specifies the requirements for a lot to be developed according to the provisions of clause 7.5A.

The provisions of clause 7.5A are not considered development standards and therefore may not be varied according to clause 4.6 of LLEP 2008. Minimum requirements for the development of a lot pursuant to clause 7.5A are:

- That the lot is situated within "Area 8", "Area 9" or "Area 10" on the Floor Space Ratio Map; and
- Has a lot size exceeding 1500m2; and
- Has two or more street frontages.

Pursuant to clause 7.5A(2), any building which is proposed to exceed the maximum height shown for the land on the Height of Buildings Map, and the maximum floor space ratio shown for the land on the Floor Space Ratio Map for the site (to a maximum FSR of 10: 1 in "Area 8" or "Area 10" and 7:1 in "Area 9"), must be developed so that at least 20% of the gross floor area is used for the purposes of:

- · business premises;
- · centre based childcare facilities;
- · community facilities;
- · educational establishments;
- entertainment facilities;
- food and drink premises;
- functions centres;
- · information and education facility;
- medical centres;
- · public administration buildings; or
- retail premises.

The Dictionary of LLEP 2008 defines the meaning and development requirements of each of the specified uses.

Development of sites pursuant to clause 7.5A of LLEP 2008 will require the submission of a DCP. According to section 4.23(2) of the EP&A Act 1979:

(2) However, if an environmental planning instrument requires the preparation of a development control plan before any particular or kind of development is carried out on any land, that obligation may be satisfied by the making and approval of a concept development application in respect of that land.

In other words, the requirement to lodge a DCP pursuant to clause 7.5A(3)(a) of LLEP 2008, may be satisfied by the lodging of a concept development application pursuant to the requirements of section 4.23 of the EP&A Act 1979 instead. It is to be noted however, that section 4.23(3) of the EP&A Act also applies to any such application meaning that:

3) Any such concept development application is to contain the information required to be

included in the development control plan by the environmental planning instrument or the regulations.

Objectives

- That development of sites within Liverpool city centre pursuant to clause 7.5A demonstrates the appropriate mix of uses and standards of design excellence.
- 2. Provide appropriate parking for the development on site.
- Provide active street and lane/serviceway uses .

Controls

- Sites that require the submission of a DCP are to be developed pursuant to the adopted site specific DCP or a concept development application consistent with Division 4.4 of the EP&A Act 1979 and clause 7.5A of LLEP 2008.
- 2. Clause 7.5A(3)(b) of LLEP 2008 specifies that any proposed development which seeks to utilise the additional provisions relating to certain land in Liverpool city centre must yield a public benefit, in that the site on which the building is to be located must also include one or more of the following uses (NB: in order to provide the required public benefit, these uses must be publicly accessible):
 - recreation areas;
 - · recreation facilities (indoor);
 - · community facilities;
 - information and education facilities;
 - · through site links; or
 - public car parks.

Each land use that is required to yield public benefit (with the exception of "through site links" and "public car parks", defined below), is defined in the Dictionary of LLEP 2008. The size, scale, location and detailed use of any such proposed development, must be included in the required site specific DCP or concept development application, and be to the satisfaction of Council.

Through site links are only to be developed on those sites indicated in Figure 4.12 and must be developed in accordance with the requirements of section 4.3 Pedestrian Amenity.

Public car parks are only to be developed with the written permission of Council and must be vested in or under the control of Council. Provision of public car parking must be consistent with Council's Parking Strategy and locational requirements. Any such public car park must be of sufficient scale and located so as to be of a public benefit acceptable to Council.

 The concept development application lodged pursuant to clause 7.5A of LLEP 2008, must demonstrate how the proposal addresses all matters described in 7.5A(4)(a-m), as follows:

(a) the suitability of the land for development.

The site specific DCP or concept development application must articulate planning and design principles relating to development of the land and explain how these address Part 4 of Liverpool Development Control Plan 2008 and any other relevant documents or plans. It must include an analysis of the characteristics and the local context of the land to which it applies.

It must conceptually outline and show graphically the proposed site layout and planning for the development of the land, including the conceptual vertical and horizontal distribution of potential future uses, arrangement, footprint, envelopes and mix of building types. Through analysis of a number of illustrated options for redevelopment it must determine the preferred approach.

(b) the existing and proposed uses and use mix.

The site specific DCP or concept development application must describe the existing uses of any building currently occupying the site, and the proposed use mix to be developed on the site (noting additional use requirements outlined in control 1 above),

(c) any heritage issues and streetscape constraints.

The site specific DCP or concept development application must describe how the proposal will address all heritage items in the vicinity, in accordance with the requirements of clause 5.10 of LLEP 2008 and section 4.6.1 of this Part,

(d) the impact on any conservation area.

The site specific DCP or concept development application must indicate how any proposed development within the Bigge Park Conservation Area addresses the requirements of clause 5.10 of LLEP 2008 and section 5.10 of this Part,

(e) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form.

Liverpool city centre is a mixed-use environment. The site specific DCP or concept development application must ensure that any proposed residential tower is consistent with ADG separation and side setback distances, taking into account existing or proposed towers on the same site or neighbouring sites. Siting of all proposed towers, residential or commercial, must be consistent with clause 7.4 of LLEP 2008 Building separation in Liverpool city centre.

(f) the bulk, massing and modulation of buildings

The site specific DCP or concept development application must illustrate the proposed bulk, massing and modulation of buildings to be developed on the site,

(g) street frontage heights.

The site specific DCP or concept development application must indicate the street frontage heights of any proposed building. A tower on podium building is to be designed so that the podium is:

- a. four to six storeys in height at the primary street frontage;
- b. four storevs in height to the lanes and/or serviceways; and
- c. 6 metres from a side/rear boundary if the site is adjoining a property that is not zoned B4 – Mixed Use or contains a stand-alone building. The setback should be in accordance with the ADG,

(h) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity.

The site specific DCP or concept development application must illustrate how the proposed design will satisfactorily address environmental impacts on the public domain and other sites in proximity, depending on the scale of the development. Designs must ensure the streetscape environment is of pedestrian scale and ensures human qualities of solar access, shade and amenity are provided and negative elements such as noise and wind are minimised.

(h) the achievement of the principles of ecologically sustainable development.

The site specific DCP or concept development application must illustrate the ways by which the development proposed maximises ecological sustainability,

 encouraging sustainable transport, including increased use of public transport, walking and cycling, road access and the circulation network and car parking 583

provision, including integrated options to reduce car use.

The site specific DCP or concept development application must incorporate a Transport Management and Access Plan (TMAP). The TMAP must illustrate how the proposed development will encourage sustainable transport including:

- measures to encourage increased use of public transport, walking and cycling;
- provisions for access (for pedestrians, cyclists and vehicles including heavy vehicles), circulation and car parking; and
- other measures to reduce car use (e.g. carpooling and car-share services),

(j) the impact on, and any proposed improvements to, the public domain.

The site specific DCP or concept development application must demonstrate how the proposed development will integrate with and/or make improvements to the existing public domain, including the provision of setbacks where required. The site specific DCP or concept development application must include a detailed public domain plan.

Improvements to the public domain include:

- Contributing to the urban tree canopy through new street tree plantings consistent with the Liverpool CBD Streetscape and Paving Manual 2018.
- 2. Providing street furniture and pedestrian amenity items.
- Installing high quality pedestrian paving consistent with the Liverpool CBD Streetscape and Paving Manual 2018.
- 4. Integrating public art in accordance with section 4.3.10 of this Part.
- 5. Making provision for pedestrians to access to sunlight and shade.
- Providing a design that contributes to activation of street frontages.
- Integration of WSUD elements to improve vegetation success within the public domain,

(k) achieving appropriate interface at ground level between buildings and the public domain.

The site specific DCP or concept development application must demonstrate how all buildings, including any proposed tower building, achieves an appropriate interface at ground level with existing and proposed buildings and the public domain, according to the requirements of Section 4.3.1 to 4.3.10 of this Part.

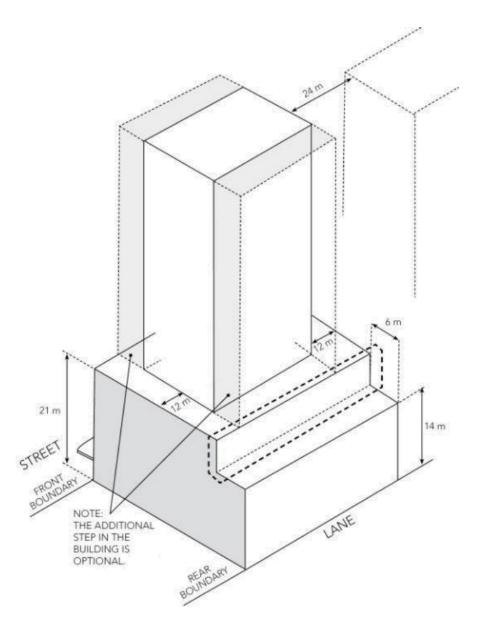
Electricity substations and waste collection points must be appropriately integrated into the building design to minimise disruption and visual clutter in the ground plane and streetscape

(I) the excellence and integration of landscape design.

The concept development application must demonstrate compliance with section 4.2.13 of this Part

- Locate non-residential uses at ground level that address all street frontages (and laneway/service way frontages, where possible).
- 5. Develop a maximum of two levels of above-ground car parking, provided it is sleeved by other uses on street frontages and appropriately screened or sleeved by other uses on lane/serviceway frontages. Aboveground parking must achieve minimum floor to ceiling heights that would permit adaption for another use (e.g. commercial/retail or residential).
- Construct buildings according to the requirements illustrated in Figure 4.7, Figure 4.8 or Figure 4.9, depending on the location of the site.

Figure 4-7: Tower on a Podium/Mid-Block



12 m 14 m 21 m PRIMARY STREET

Figure 4-8: Tower on a Podium/Corner Site

NOTE
THE ADDITIONAL STEP
IN THE BUILDING IS
OPTIONAL

6m
6m
6m

Figure 4-9: Tower on a Podium/Acute Corner Site

4.2.6 Building Floor Plates

Background

Limiting the size of tower floor plates allows for good internal amenity in terms of natural light and ventilation, while mitigating the potentially adverse impacts that tall and bulky buildings may have on the public domain including overshadowing and poor street amenity. Building depth is related to building use, meaning that commercial floor plates are typically deeper and larger than residential floor plates.

Objectives

- Achieve living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.
- 2. Provide viable and useable commercial and/or residential floor space.
- Contribute to useable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.
- 4. Reduce the apparent bulk and scale of buildings by limiting the size of the building.

Controls

- Design the floor plate sizes and depth of buildings for Fine Grain and Midrise sites as indicated in the building envelopes.
- Provide a maximum GFA of 700m2 per level for residential towers with maximum length of elevation of 45m.
- 3. Comply with ADG standards for building depth and number of apartments.
- Provide a maximum GFA of 1,000m2 per level for commercial towers with maximum length of elevation of 45m. Where sites are greater than 2,000m² a proportionally larger GFA per floor may be considered.

4.2.7 Street Alignments and Street Setbacks

<u>Background</u>

Buildings define the street network and public domain. For this reason, the alignment and setbacks of buildings are critical to the quality of internal and external environments. Land in the setback areas may be utilised as outdoor dining and may have basement car parking located under it if required.

Objectives

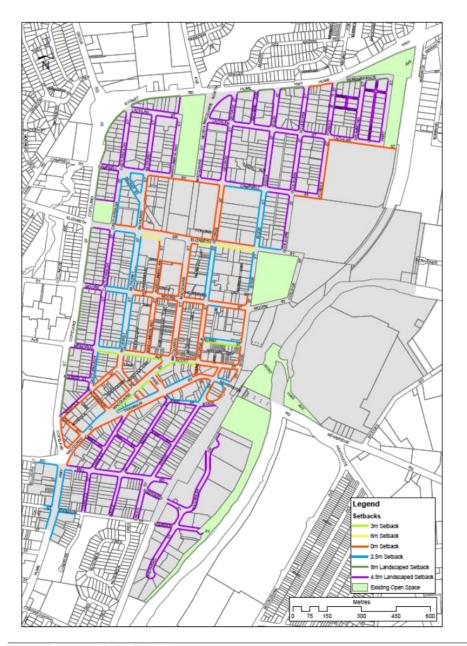
- Create a strong and consistent definition of the public domain.
- 2. Define the street as a spatial entity. Reinforce the importance of the public role of the street.
- 3. Provide front setbacks appropriate to building function and character.
- Establish the desired spatial proportions of the street.
- Provide sunlight access to streets, comfortable wind conditions, a generous footpath for pedestrians, and to assist growing conditions for street trees. Allow for street landscaping.
- Locate active uses, such as shopfronts, close to pedestrian activity areas. Allow an outlook to, and surveillance of, the street.
- 7. Create a transition between public and private space.

<u>Controls</u>

- Buildings are to comply with the front setbacks as set out in Figures 4-12.
- Upper level frontages to a lane/serviceway must be setback 6 metres from the centre line of the lane/serviceway.
- Construct perimeter block buildings and podiums, which comply with the building envelope requirement, to the street and side boundaries (0m setback).

- 4. Buildings with a boundary to the Hume Highway have a minimum setback of 8m.
- 5. Buildings on the southern side of streets identified in **Figure 4-10** have minimum front setbacks as follows, in order to maximise solar access:
 - a. Elizabeth Street between Bathurst Street and George Street 6m.
 - b. Railway Street, Scott Street and Memorial Avenue 3m.
 - c. Parts of George, Bathurst, Terminus and Bigge Streets 2.5m.

Figure 4-10 Street Setbacks



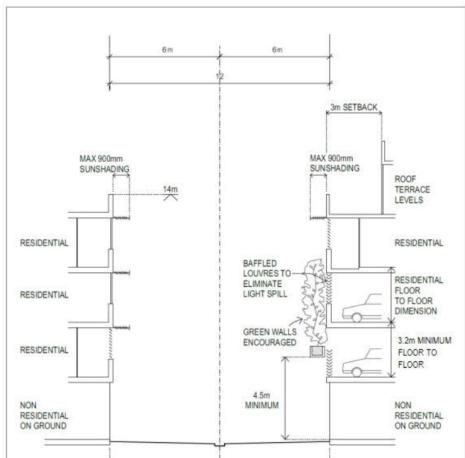


Figure 4-11 Laneway and Serviceway Setbacks

- 6. Pave the land in the set-back zone to match the paving in the public street so that it provides a seamless and level ground plane.
- 7. Ensure that no columns, blade walls or other building elements encroach the ground level of the front setback.
- 8 Ensure that balconies project a maximum of 1.2 metres into front building setbacks in the R4 - High Density Residential Zone.
- 9. Ensure that minor projections into front building lines and setbacks above ground level are designed for sun shading, entry protection or building articulation and enhance the amenity of the public domain.
- 10. Allow enclosures or screening of balconies only if they are moveable and aid the amenity of the apartments.

4.2.8 Side and rear boundary setbacks

Background

Side and rear setbacks, where provided, allow ventilation, solar and daylight access, assist with visual privacy, acoustic amenity, view sharing, and can reduce adverse wind effects. Building separation should relate to building height to ensure appropriate urban form, amenity and privacy for building occupants.

Objectives

Side and rear boundary setbacks must:

- Ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy.
- 2. Achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.

Controls

- All residential and commercial buildings must comply with the separation distances in SEPP 65 and the ADG unless otherwise agreed with Council in an approved concept development application.
- For existing buildings that do not comply with the setback requirements identified in control 1 above, appropriate screening must be installed should the building be refurbished or
- 3. Buildings with a rear or side boundary to the rail corridor are to provide a minimum setback of 12m. The setback is to be appropriately landscaped.
- 4. Buildings on land zoned B6 - Enterprise Corridor and B1 - Neighbourhood Centre located in the Liverpool city centre, to have setbacks consistent with Table 4-1 below.
- Construct buildings across the site facing the street and the rear boundaries rather than facing side boundaries.

Table 4-1 Side and rear boundary setbacks

Enterprise Corridor, Neighbourhood Centre and Existing Mixed Use	Set	backs
areas	Side	Rear
Podium up to six levels :		
 If adjoining development built to boundary 	0m	0m
 If adjoining stand-alone development 	ADG	ADG
Stand-Alone Buildings		
- Building height up to 12m	ADG	6m
- Building height 12-25m	ADG	9m
- Building height over 25m	ADG	12m

4.2.9 Minimum Floor to Ceiling Heights

The height of a ceiling contributes to amenity within an apartment and the perception of space. Well designed and appropriately defined ceilings can create spatial interest and hierarchy in apartments. Ceiling height is directly linked to achieving sufficient natural ventilation and daylight access to habitable rooms. The ground and first floor levels of mixed use apartment buildings should have increased ceiling heights to ensure their longer term adaptability for non-residential uses.

Objectives

Minimum floor to ceiling heights must:

- Address the internal amenity of all users.
- 2. Assist in ensuring buildings are well-proportioned, articulated and modulated.
- 3. Allow for the potential for commercial uses in the first floor of any new building.

The minimum floor to ceiling heights are:

- 1. Ground floor: 3.6m.
- Above ground level:
 - a) Commercial office 3 3m
 - Capable of adaptation to commercial uses 3.3m. b)
 - c) Residential 2 7m
 - Active public uses, such as retail and restaurants 3.6m.
- Car Parks: Sufficient to cater to the needs of all vehicles that will access the car park and, if aboveground, adaptable to another use, as above.

4.2.10 Housing Choice and Mix

<u>Background</u>

A mix of dwelling types is essential to cater for different family groups and lifestyles, and to achieve housing affordability. Dwellings require internal flexibility as well as a variety of outdoor and recreational areas.

Objectives

Developments must:

- Provide a mix of dwelling types, sizes and open space to cater for a range of household types and living styles.
- Provide dwelling layout that is sufficiently flexible for residents' changing needs over time. 2
- Meet the Australian Adaptable Housing Standard (AS 4299-1995) and provide a sufficient proportion of dwellings that include accessible layouts and features to accommodate the changing requirements of residents.

Controls

- In addition to the provisions for dwelling mix in the ADG, residential apartment buildings and shop-top housing must comply with the following apartment mix and size:
 - Studio and one bedroom units must not be less than 10% of the total mix of units within each development:
 - Three or more bedroom units must not be less than 10% of the total mix of units within each development:
 - Dual-key apartments must not exceed 10% of the total number of apartments; and
 - A minimum of 10% of all dwellings (or at least one dwelling whichever is greater) to be capable of adaptation for disabled or elderly residents.
- Adaptable dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995).
- 3. Provide certification from an Accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).
- Ensure car parking and garages allocated to adaptable dwellings comply with the requirements of the relevant Australian Standard for disabled parking spaces.

4.2.11 Deep Soil Zones and Site Cover

Deep soil zones are areas of natural ground retained within a development, uninhibited by artificial structures and with relatively natural soil profiles. Deep soil zones have important environmental benefits, including promoting healthy growth of large trees with large canopies, protecting existing mature trees, and allowing stormwater infiltration.

Limiting site cover provides separation between buildings. This space may be public (accessible and useable by the general public), communal (shared by all occupants of a development) or private (for the exclusive use of a single dwelling or tenancy).

Objectives

- Provide an area on site that enables soft landscaping and deep soil planting, permit the retention and/or planting of trees that will grow to a large or medium size.
- Improve amenity by allowing for good daylight access, ventilation, and assisting improved visual privacy.
- Integrate with the open space and provide passive and active recreational opportunities.

Controls

The maximum permitted site coverage for development is specified in Table 4-2.

Table 4-2 Site coverage

Zone	Commercial & Mixed Use	Residential
Commercial Core, Fine Grain and	Up to 100%	N/A
Midrise Existing Mixed Use	75%	N/A
Enterprise Corridor and Infrastructure	75%	50%
All other zones	60%	50%

Include a deep soil zone as per Section 3E of the ADG in all developments with a residential
component in all areas other than the Fine Grain Precinct and Midrise Precinct, or where
perimeter block buildings are developed.

4.2.12 Public Open Space and Communal Open Space

Background

Public and communal open spaces are critically important for outdoor recreation opportunities for residents, connection to the natural environment, and valuable 'breathing space' between apartment buildings and within the city centre.

They also contribute to the appeal of the city, the individual development and the wellbeing of residents. High quality open space is essential in higher density urban precincts. The size, location and design of public and communal open space will vary depending on the site context and the scale of development.

Council encourages the development of the rooftop of residential flat buildings and mixed-use developments for the purposes of communal open space, including rooftop gardens, where possible. Better use of the rooftop space will increase the overall amenity and quality of new development in Liverpool city centre.

Objectives

Open space must:

- Provide amenity in the form of:
 - a) landscape character and design;
 - opportunities for group and individual recreation and activities, including on the roof space of new residential flat buildings and mixed-use developments;
 - opportunities for social interaction;

- d) environmental and water cycle management; and
- e) opportunities to enhance microclimate.
- 2. Allow for a range of activities.
- Provide an attractive outlook for residents.
- 4. Respond to and enhance site characteristics and context.
- Optimise safety.

Controls

Existing Public Open Space

 Ensure that at least 70% of Bigge Park, Apex Park, Pioneer Park and any other public open space in the city centre has a minimum of 3 hours of sunlight between 10am and 3pm on 21 June (Winter Solstice).

New Public Open Space

- Dedicate open space to Council, where required, as part of an approved concept development application if the space meets the requirements of Council in terms of:
 - a) location:
 - b) aspect;
 - c) accessibility;
 - d) safety; and
 - e) solar access. The open space must be located and designed so that at least 50% of the open space provided has a minimum of 3 hours of sunlight between 10am and 3pm on 21 June (Winter Solstice).
- Developments with a residential component in all zones must comply with the sections 3D
 Communal Public Open Space and 4F Common Circulation and Spaces, of the ADG.
 Consistent with the requirements of the ADG, communal open space is to be collocated
 with areas of deep soil, where possible.
- 4. The roof space of residential flat buildings (RFBs) and mixed-use development (including shop-top housing) is to be developed for the purposes of communal open space that incorporate shade structures and amenity facilities (barbecue and rooftop garden) that complement the development.

4.2.13 Landscape Design

Background

Landscape design includes the planning, design, construction and maintenance of all utility, open space and garden areas. The landscape qualities of the city centre are an important influence on its image, comfort, public and private amenity. Landscaping within the public domain will be implemented within the framework established by the Liverpool CBD Streetscape and Paving Manual 2018. In the private domain, it is important that a strong and consistent approach to landscaping is achieved in order to contribute to both a high level of amenity and a cohesive image for the city centre.

Objectives

- Enhance quality of life for residents and occupants within a development in terms of privacy, outlook, views and recreational opportunities.
- Ensure potable water for irrigation is minimised. Incorporate passive irrigation where possible.
- 3. Ensure landscaping is integrated into the design of development.
- 4. Improve stormwater quality and control run-off.
- 5. Improve the microclimate and solar performance within the development.
- 6. Improve urban air quality and contribute to biodiversity.

Controls

 Submit a landscape plan prepared by a registered landscape architect that demonstrates consistency with the above objectives and section 4V, water management and conservation, of the ADG.

4.2.14 Planting on Structures

Background

The following controls apply in the Commercial, Mixed Use and Enterprise Corridor zones (as identified in **Figure 4-2**) for planting on roof tops or over car park structures, particularly for communal open space required as a component of mixed use residential development, and in non-residential developments where the landscaping proposed is not on natural ground.

Objectives

- Contribute to the quality and amenity of open space on roof tops and internal courtyards.
- 2. Encourage the establishment and healthy growth of trees in urban areas.
- 3. Minimise the use of potable water for irrigating planting on structures.

Controls

 Comply with the Section 4P, planting on structures in the ADG in all developments with a residential component and/or communal open space.

4.3. PEDESTRIAN AMENITY

Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. These provisions are intended to achieve a high standard of public domain design and pedestrian comfort in city centre public spaces. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to a regional city centre. The city's lanes, arcades and throughsite links are to form an integrated pedestrian network providing a choice of routes at ground level for pedestrians.

The controls in this section aim to increase the vitality, safety, security and amenity of the public domain by:

- 1. Developing future through-site links at ground level;
- Ensuring active street frontages;
- 3. Ensuring a positive relationship between the building and the public domain;
- 4. Ensuring provision of awnings along the retail frontages; and
- Mitigating adverse impacts on the street arising from driveway crossings.

4.3.1 Pedestrian Permeability

Background

The existing serviceways and through-site links are an integral component of the pedestrian movement system, providing direct access between the street frontage, serviceways and rear parking areas. The north-south oriented street grid in the city centre provides excellent connectivity in this direction, but the city's street pattern would benefit from additional through-site links in an east-west direction. This will assist in reducing the overall street block size.

In some blocks, additional north-south connections will also improve accessibility and choice. Additionally, laneways provide for site servicing in a manner that protects the quality of main street

frontages in the city centre.

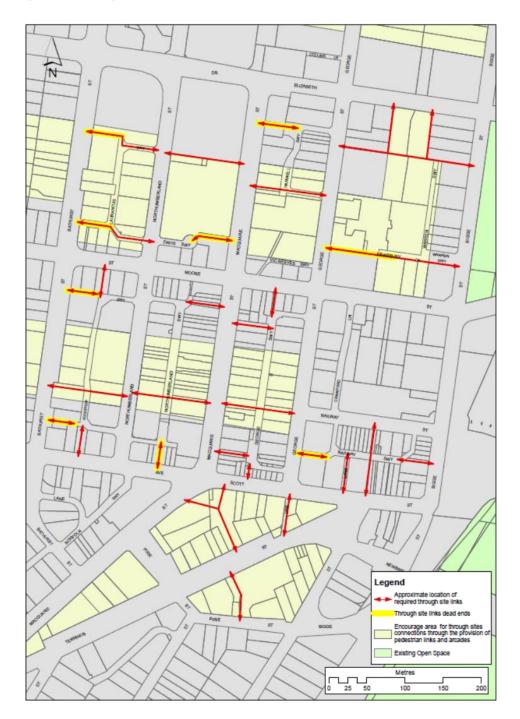
Objectives

- Improve access and choice in the city centre by providing through-site links as redevelopment occurs.
- 2. Reduce the size of large street blocks to provide greater movement choice.
- 3. Create clear and direct throughways for pedestrians.
- 4. Increase the range of economic opportunities.
- 5. Retain and enhance existing through site links as redevelopment occurs.
- 6. Enable active street frontages on through site links.
- Discourage vehicular access from the primary street frontages. Vehicular access shall be provided from secondary streets or laneways.

General Controls

- Design through-site links to have direct sight lines.
- 2. Locate through-site links as shown in Figure 4-12.
- Locate through-site links within "through site link encouragement areas" (as identified in Figure 4-12) opposite other through site links.
- Extend existing dead end lanes (as identified in in Figure 4-12) through to the next street as redevelopment occurs.
- Connect new through site links with existing and proposed through site links, serviceways, shared zones, arcades and pedestrian ways.
- The siting of new through site links may be varied where new links cannot be directly aligned with existing links.
- 7. Retain existing, publicly and privately owned, through-site links.
- 8. Locate active uses on through site links where possible.
- Nominate sites for through-site links, shared zones etc. that may be acquired by Council or may be dedicated to Council at no cost as part of a concept development application.
- Vehicular access shall be provided from secondary streets or laneways only. Vehicular access will not be allowed from the primary street.

Figure 4-12 Through Site Links



Specific Controls for Different Link Typologies

- Shareway | Pedestrians and Cars (Public) Through Site Links must:
 - a) Be a minimum width of 6m and clear of all obstructions.
 - b) Be open to the sky and to be publicly accessible at all times.
 - Display signage at street entries indicating public accessibility and the street to which the through site link connects.
- 2. Pedestrian Paths | (Public) Through Site Links must:
 - a) Be a minimum width of 3m clear of all obstructions.
 - b) Be open to the sky and to be publicly accessible at all times.
 - Have signage at street entries indicating public accessibility and the street to which the through site link connects.
- 3. Pedestrian Arcades and Through Site Links must:
 - Be a minimum width of 5m and clear of all obstructions (including columns, stairs, and escalators).
 - b) Provide public access at all business trading times.
 - c) Be at least 2 storeys high.
 - d) Have access to natural light for at least 50% of their length, where appropriate.
 - Incorporate clear glazed entry doors comprising at least 50% of the entrance where air conditioned, and to be accessible at least 18 hours per day, 7 days per week.
 - Display signage at street entries indicating public accessibility and the street to which the through site link connects

4.3.2 Pedestrian Overpasses and Underpasses

Background

Streets provide the best amenity and safety when activated by pedestrians. Pedestrians should be encouraged to use the street to enhance and contribute to street life, and to maximise safety and security of the public domain.

Pedestrian overpasses linking commercial or retail buildings over the public street are discouraged as they can have a negative impact on the streetscape quality and on views and vistas along streets. New pedestrian overpasses or underpasses will only be considered where they directly connect to major transport nodes (such as Liverpool railway station), and/or can substantially improve pedestrian safety and access over major arterial roads (such the Hume Highway).

<u>Objectives</u>

- Promote pedestrian activation of streets and public places by limiting pedestrian overpasses and underpasses.
- Encourage pedestrian circulation at street level.
- 3. Protect views and vistas along streets.

<u>Controls</u>

- Design underpasses or overpasses in accordance with Crime Prevention Through Environmental Design principles and compliant with the applicable Australian Standard for Disabled Access.
- Design overpasses to be fully glazed or open, and not greater than 3m wide or more than one level high.
- Consider underpasses for direct connection under adjacent streets to the railway station where they:

- a) would substantially improve pedestrian safety and accessibility;
- b) incorporate active uses, particularly at entry and exit points; and
- have a minimum width of 4.5m clear of all fixed obstructions and a minimum ceiling height of 6m.

4.3.3 Active Street Frontages

Background

Active street frontages promote an interesting and safe pedestrian environment.

Active frontage uses are defined as one or a combination of the following at street level:

- entrance to retail;
- glazed entries to commercial and residential lobbies;
- café or restaurant, if accompanied by an entry from the street;
- active office uses, such as reception, if visible from the street; and/or
- public building if accompanied by an entry.

Objectives

- 1. Promote pedestrian activity and safety in the public domain.
- Maximise active street frontages in Liverpool city centre.
- Development in Liverpool city Centre is consistent with the Liverpool City Activation Strategy 2019-24.

<u>Controls</u>

- Locate active street frontages on the ground level of all commercial or mixed use buildings, including adjacent through-site links.
- Locate active street frontages in the Mixed Use, Commercial Core, Enterprise Corridor and Neighbourhood zones (as identified in Figure 4-2), on ground level. This does not preclude servicing activities particularly in the serviceways.
- Locate active street frontages at first floor level in addition to ground for sites addressing major roads as depicted in Figure 4-16.
- 4. Locate street fronts at the same level as the footpath and with direct access from the street.
- Use only open grill or transparent security (at least 50% visually transparent) shutters to retail frontages.

4.3.4 Street Address

Background

Street address is defined as that part of a building that has a frontage to the street, contains entries, lobbies, balconies and habitable rooms overlooking the street. Buildings can contribute positively to the street by providing a clear address to, direct access from and outlook over, the street.

Objectives

- The street address for buildings must provide:
 - a) An attractive interface between the public and private domains.
 - b) Legible entries to the building from the street.
 - c) Opportunities for surveillance of the street and public domain.

- Provide a clear street address and direct pedestrian access off the primary street frontage in mixed use and residential developments.
- Provide multiple entrances to large developments on all street frontages.

EGROW 02 Attachment 2

> Provide direct 'front door' and/or garden access to the street in ground floor residential units.

Street and Building Interface 4.3.5

Background

Buildings are to provide privacy if dwellings are located on the ground floor. Where fences are used, they need to be designed to enable a positive relationship between the building and the street. Front fences include all fences to the primary and secondary street frontages, and side boundary fences forward of the building alignment.

<u>Objectives</u>

- 1. Clearly define the interface between the public and private domain.
- 2 Provide privacy for dwellings on the ground floor of buildings.
- 3 Ensure front fences allow for passive surveillance of the street.
- Encourage the preservation and/or construction of fences, walls and landscaped areas that contribute to the character of the locality.

Controls

- Design the area between the building and the public footpath so that it:
 - provides visibility to and from the street (if non-residential use);
 - b) provides privacy if residential uses are on the ground floor;
 - introduces paving and/or landscaping between the street and the building; and/or C)
 - d) screens any above ground car parking.
- 2. Use front fences that:
 - do not present a solid edge to the public domain greater than 1.2 m above the a) footpath / public domain level; and
 - are not constructed of sheet metal or opaque glass.

4.3.6 Lane / Serviceways and Building Interface

Background

Council envisages lane ways and serviceways in Liverpool city centre developing to offer some of the higher order functions of streets. While preserving functions necessary to the servicing of businesses, lane ways and serviceways may develop to include independent/niche retail businesses and/or residential accommodation in addition in addition to providing back of house services. Active street frontages on service ways can assist in promoting interesting and safe environments in which vehicles and pedestrians have access and a range of uses may flourish.

Objectives

- 1. Clearly define the interface between the public and private domain.
- 2. Provide for passive surveillance of the street from the building to the serviceway.
- 3. Minimise the impact of above ground car parking
- 4. Provide suitable non-residential uses with direct pedestrian access to the lane/serviceway.
- 5 Ensure the effective operation of loading facilities.

- Set back all levels above ground of buildings 6m from the centre line of the lane/serviceway so that residential uses can be accommodated on opposite sides of the serviceway, as described in Figure 4-11.
- 2. Provide active uses and/or entries at ground level where possible.
- 3 Screen or sleeve above ground car parking with green walls or other screening devices.
- 4 Electricity substations (where required) shall be situated within the building or its basement.
- Vehicular entry points must be of high quality design. The impact of vehicular entry points

- on pedestrians must be minimised.
- Garbage collection points, fire services and other service requirements are to be integrated into the design of the building.

4.3.7 Awnings

Background

Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. Awnings provide a public presence and interface within the public domain to contribute to the identity of a development.

Objectives

Awnings on buildings must:

- 1. Provide shelter for public streets where most pedestrian activity occurs.
- 2. Address the streetscape by providing a consistent street frontage.

- Provide street frontage awnings for all new developments on streets identified in Figure 4-13.
- 2. Awnings must be:
 - a) horizontal in form;
 - b) minimum 2.4m deep (dependent on footpath width);
 - c) minimum soffit height of 3.2m and maximum of 4m;
 - d) stepped to accommodate sloping streets;
 - e) integral with the building design;
 - f) slim vertical faciae or eaves (generally not to exceed 300mm height); and
 - g) setback 1.2m from kerb to allow for clearance of street furniture, trees, and other public amenity elements.
- Match awning design to building facades, so that they maintain continuity and are complementary to those of adjoining buildings.
- Include appropriate sun shading device for the outer edge of awnings along east-west streets if required. These blinds must not carry advertising or signage.
- Provide lighting recessed into the soffit of the awning to facilitate night use and to improve public safety.
- Maintain a minimum clearance of 2.8m from the level of the pavement to the underside of awning signage.
- Provide all residential buildings in areas not identified for continuous awnings in Figure 4-13 with awnings or other weather protection at their main entrance area.

Figure 4-13 Awnings



4.3.8 Building Design and Public Domain Interface

Background

Liverpool's public domain is defined by the buildings, streets and public places. The quality of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.

Dark coloured finishes (e.g. black, charcoal) can tend to increase heat absorption and add to the urban heat island effect, whereby the urban environment is hotter than surrounding land. Council encourages the use of lighter coloured finishes to help reduce the urban heat island effect in Liverpool city centre.

Objectives

The design of new/modified buildings in Liverpool city centre must:

- Contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes.
- Provide richness of detail and architectural interest especially at visually prominent parts of buildings such as lower levels and roof tops.
- Clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security.
- Seek to reduce the urban heat island effect by selecting lighter coloured external finishes.

- Design new buildings that adjoin existing buildings, particularly heritage buildings and those
 of architectural merit so that they consider:
 - a) the street 'wall' alignment and building envelope;
 - b) the 'depth' within the façade;
 - c) facade proportions; and
 - d) the response to the corners at street intersections.
- Provide balconies and terraces appropriately orientated where buildings face public spaces.
- Articulate façades to address the street, proportion the building, provide 'depth' in the street wall when viewed obliquely along the street and add visual interest.
- Use high quality robust finishes and avoid finishes with high maintenance costs, and those susceptible to degradation due to a corrosive environment. Large expanses of rented concrete finish is discouraged.
- Select lighter-coloured materials for external finishes including roofs and avoid the use of darker-coloured materials (e.g. black, charcoal) to reduce the urban heat island effect.
- Maximise glazing in the facades for retail uses.
- For residential components of buildings, do not use highly reflective finishes and curtain wall glazing above ground floor level.
- Construct only minor projections up to 600mm from building walls into the public space.
 These must not add to the GFA and must provide a benefit, such as:
 - a) expressed cornice lines that assist in enhancing the definition of the street; or
 - b) projections such as entry canopies that add visual interest and amenity.
- Do not locate communication towers such as mobile phone towers, but excluding satellite dishes, on residential buildings or mixed use buildings with a residential component.
- Incorporate roof top structures, such as air conditioning and lift motor rooms, into the architectural design of the building.
- 11. Screen air conditioning units on balconies.
- 12. No clothes drying facilities to be allowed on balconies.

4.3.9 Street Intersections and Corner Buildings

Background

As buildings located on corner sites address two street frontages instead of one, they are more visibly prominent than mid-block buildings. Corner buildings therefore play a particularly important role in the city centre. Corners can strengthen the form of city blocks, streets and intersections, identify important junctions, assist in revealing topographic features and define pedestrian routes.

Objectives

Comer buildings must:

- Contribute to the legibility of the city.
- 2. Ensure they address all street frontages.
- 3. Support the role of comer sites in creating a clear skyline and minimising apparent density.
- 4. Respond to any heritage buildings on opposing corner sites.

Controls

- 1. Address all street frontages in the design of corner buildings.
- Design the corner buildings to respond to the character of the intersection by recognising the different hierarchies of the street typologies.

Note: Intersections of different street types all require varied design responses.

4.3.10 Public Artworks

Background

Public Art enhances the visual quality and cultural influence of both the public domain. It contributes to people feeling positive about their surroundings. Public Art may be ephemeral, temporary or permanent in nature. It may be located in or part of a public space or facility and may be commissioned by either the public or private sector.

Public art also includes the conceptual contribution of an artist to the design of public spaces and facilities. Public Art is crucial to the development of public places which are innovative, vibrant and meaningful and allow curiosity, playfulness and or a sense of connection to form. Public art may take any of the following forms:

- a) Functional Connection; seating, lighting, bollards
- b) Decorative: Incorporated into structures eg paving, awnings
- c) Iconic: Stand-alone sculptural works
- d) Integrated: fully incorporated within the design eg flooring, windows
- e) Interpretative: describe, inform or educate, on issues, events, situations eg signage, plaques, text based work

Objectives

Public Art in Liverpool city centre must:

- Contribute to the city's physical attractiveness and the quality of life that it offers visitors
 and residents
- Interpret and express Liverpool's historical and cultural themes, particularly as identified in Our Home, Liverpool 2027. Community Strategic Plan
- 3. Improve the quality of public artworks in Liverpool.
- 4. Encourage the development of public art as consistent with Council's Public Art Policy.

Controls

Design public art to respond to the particular site of the development as well as the city as

- a whole.
- Provide well designed and visually interesting public art created by artists or organisations that are competent in the selected field and committed to best practice.
- Construct Public Art of materials that are durable, resistant to vandalism, safe for the public and constructed to ensure minimal maintenance.
- Develop clear and concise agreements with artists/organisations in relation to expectations and deaccession (the process used to permanently remove an object, artwork or assemblage).

4.4. TRAFFIC AND ACCESS

Background

This section contains objectives specifically related to pedestrian access, vehicular access, onsite parking and site facilities in the city centre. An upgrade of the intersection of the Hume Highway and Hoxton Park Road is also under consideration.

4.4.1 Vehicular Access and Manoeuvring Areas

Background

The location, type and design of vehicular access points to a development can have significant impacts on the streetscape, the site layout and the building façade design.

Objectives

The design and location of vehicular access to developments must:

- Avoid or minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian priority areas identified in Figure 4-14.
- 2. Not intrude visually into the streetscape continuity.

- Vehicular access shall be restricted to the secondary street (other than along a High Pedestrian Priority Area) where possible.
- Design of vehicle entry points must be of high quality and relate to the architecture of the building, including being constructed of high quality materials and finishes.
- All weather access:
 - a) Locate and design porte cochere (for hotels only) to address urban design, streetscape, heritage and pedestrian amenity considerations.
 - b) Design porte cochere to be internal to the building, where practical, with one combined vehicle entry and exit point, or one entry and one exit point on two different frontages of the development.
 - c) In exceptional circumstances for buildings with one street frontage only, an indented porte cochere with separate entry and exit points across the footpath may be permitted, as long as it is constructed entirely at the footpath level and provides an active frontage at its perimeter.

Legend

Figure 4-14 High Pedestrian Priority Areas

4.4.2 On Site Parking

Background

On-site parking includes underground (basement), surface (at grade) and above ground parking, including parking stations. Parking requirements for buildings on land zoned B3 — Commercial Core B4 — Mixed Use within Liverpool city centre are detailed in clause 7.3 of LLEP 2008. For other development (including buildings on land zoned R4 — High Density Residential, B1 — Neighbourhood Centre or B6 — Enterprise Corridor) are detailed below. Bicycle parking requirements are detailed in section 21.3 of Part 1 LDCP 2008, On-Site Car Parking Provision and Service Facilities by Land Use.

Objectives

On site car parking must:

- Provide a sufficient supply of on-site parking on the outskirts of the city centre to cater for a mix of development types.
- 2. Encourage economic growth within the city centre.
- 3. Enable the conversion of above ground parking to other uses in the future.
- Encourage a modal shift in transport and recognise the complementary use and benefit of public transportation and non-motorised modes of transport such as bicycles and walking.

Controls

- All required car parking is to be provided on site in an underground (basement) carpark except to the extent provided below:
 - On Fine Grain and Midrise sites, a maximum of one level of surface (at grade) parking may be provided where it is fully integrated into the building design; and
 - b) On sites requiring the lodgement of a concept DA, a maximum of one level of surface (at grade) and one additional level of above ground parking may be provided where it is fully integrated into the building design.
- Provide car parking for buildings developed on land in the R4 High Density Residential zone as follows:
 - a) 1 space per two studio apartments.
 - b) 1 space per one bedroom or two bedroom apartments.
 - c) 1.5 spaces per three or more bedroom apartments.
- Provide car parking for buildings developed on land in other zones (B1 Neighbourhood Centre and B6 — Enterprise Corridor) as follows:
- a) 1 space per 100 m² of floor area
- 4. Service and visitor parking is to be provided for all development within the city centre. For sites zoned B3 Commercial Core or B4 Mixed Use, service and visitor parking is to be provided as part of the parking required according to clause 7.3 of LLEP 2008, Car parking in Liverpool city centre. For all other sites, service and visitor parking requirements are additional to that specified in controls 2 and 3 above.

Service and visitor parking is to be provided In accordance with the following formula:

Residential (including residential components of mixed-use or other developments)

- 1 space per 10 apartments or part thereof, for visitors; and
- 1 space per 40 apartments for service vehicles (including removalist vans and car washing bays) up to a maximum of 4 spaces per building

All other development

Sufficient service and delivery vehicle parking adequate to provide for the needs of the development.

- Provision is to be made for motorcycle parking at the rate of 1 motorcycle space per 20 car spaces.
- No less than 2% of the total parking demand generated by development shall be accessible parking spaces, designed and appropriately signposted for use by persons with a disability.

4.5. ENVIRONMENTAL MANAGEMENT

4.5.1 Wind Mitigation

Background

Windy conditions can cause discomfort and be dangerous to pedestrians. Downdrafts from buildings can inhibit the growth of street trees. Conversely, moderate breezes that penetrate streets can enhance pedestrian amenity and disperse vehicle emissions and air conditioning plant exhausts.

Objectives

Wind mitigation measures must:

- Ensure that new developments satisfy nominated wind standards and maintain comfortable conditions for pedestrians.
- 2. Ensure that the moderate breezes are able to penetrate the streets of Liverpool city centre.

Controls

- Design all new buildings to meet the following maximum wind criteria :
 - a) 10m/second in retail streets:
 - b) 13m/second along major pedestrian streets, parks and public places; and
 - c) 16m/second in all other streets.
- Submit a Wind Effects Report with the DA for all buildings greater than 35m in height
- 3. Submit results of a Wind Tunnel Testing report for buildings over 48m in height.

4.5.2 Noise

Background

Noise sources from major road and railway corridors and mixed-use and commercial development have been identified within and adjacent to the city centre. It is important for the amenity and comfort of future occupants of buildings in proximity to these areas that appropriate measures are put in place.

Obiectives

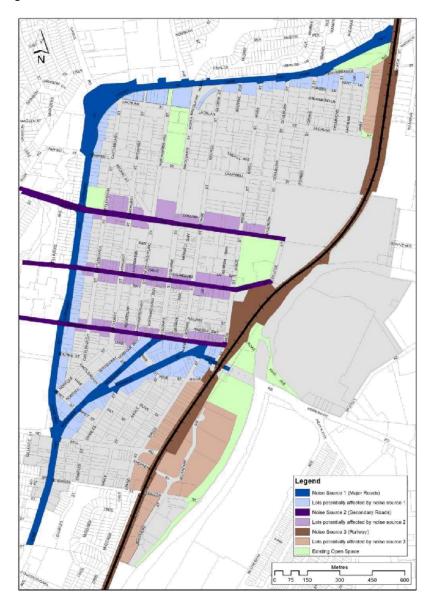
Noise mitigation measures must achieve appropriate amenity in noise affected locations.

<u>Controls</u>

- Design development on sites adjacent to road and rail noise sources identified in Figure 4-15, in a manner that shields any residential development from the noise source through the location and orientation of built form on the site, supported by an appropriate acoustic report as required by the State Environmental Planning Policy (Infrastructure) 2007.
- Provide an 8m setback from the primary street frontage to any residential component of development located along Terminus Street and the Hume Highway.

3. All residential apartments and / or serviced apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as appropriate insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s).

Figure 4-15 Noise



4.6. CONTROLS FOR SPECIFIC AREAS

Background

The following controls are in addition to the general controls elsewhere in this DCP. The purpose of this section is to provide additional, site specific controls for areas of sensitivity within the city centre. These included heritage areas and sites requiring the lodgement of a site-specific DCP.

4.6.1 Heritage Items and Conservation Areas

Background

Heritage items and heritage conservation areas identified on the heritage map and in Schedule 5 of the LLEP 2008. Works affecting listed heritage items or areas, or development on listed heritage sites, are subject to the provisions of the LLEP 2008. As part of the assessment process, the consent authority must have regard to:

- Heritage provisions outlined in Clause 5.10 of the LLEP 2008;
- Heritage objectives, controls and conservation criteria as listed below;
- The relevant Statement of Significance for each item;
- Any conservation management plan, heritage impact statement or study required by the consent authority in response to proposed development of these areas;
- For development that may impact a heritage item, information addressing relevant issues must be included in a Statement of Heritage Impact submitted with the DA; and
- Development within the curtilage of a listed item, or a heritage conservation area, or which will impact upon the setting of a heritage item or heritage conservation area is also subject to the following provisions. Where there is a discrepancy with general controls elsewhere in this DCP, the following objectives and controls are to apply.

Objectives

- Facilitate the conservation and protection of heritage items and heritage conservation areas and their settings.
- Reinforce the special attributes and qualities of the heritage significance by ensuring that development has regard to the fabric and prevailing character of the item or conservation area, including scale, proportions, materials and finishes.
- Design infill development to complement the heritage values and address the desired future character.
- Conserve, maintain and enhance existing views and vistas to buildings and places of heritage significance.
- Ensure new buildings and landscaping in heritage precincts recognise community values and provide a sense of continuity. Refer to the joint NSW Heritage Office and RAIA publication "Designing in Context: Guidelines for Infill Development in the Historic Environment" (2005) for further guidance.

<u>Controls</u>

- Submit a Conservation Management Plan prior to the submission of any development application for the following sites:
 - a) St Luke's Church;
 - b) Liverpool Railway Station; and
 - c) Liverpool College of TAFE (Francis Greenway Building).
- Ensure that all development in the Bigge Park Conservation Area addresses any potential impact on the heritage significance of the area as a whole.
- Retain and enhance the significance of heritage items and their setting in any new development within Liverpool city centre.

- Undertake an assessment for sites in the vicinity of heritage items or heritage conservation
 areas, of the impact of the proposal on the setting of nearby heritage items or heritage
 conservation areas.
- Establish the relevant criteria for each proposal depending on the nature of development, the proximity of the development to surrounding heritage items and conservation areas in addition to any other factors considered in the design of the subject building.
- Infill building must not precisely imitate its neighbour but use recognisable tools such as spatial organisation, massing, scale, alignment, detailing, materials, roof forms and coursing lines to complement adjacent heritage items.
- 7. New buildings must not obstruct important views and vistas of a heritage item.

4.6.2 Site specific DCPs

Background

As noted in Section 4.2.5 above, certain sites in Liverpool city centre (having a minimum lot size of 1500 m² with two or more Street frontages and situated in "Area 8", "Area 9" or "Area 10") may be developed pursuant to Clause 7.5A of LLEP 2008. While Council's preferred option is that development of these sites proceeds pursuant to a concept developed application, the option is to lodge a site specific DCP which meets all the requirements of clause 7.5A(4) of LLEP 2008. Any such site-specific DCPs are to be considered as amendments to Part 4 LDCP 2008 and included in this section.

Draft Liverpool Development Control Plan (LDCP) 2008 (Amendment 25) Summary and Response to Submissions

Number	Name	Issues	Issues raised	Staff response	
1	Endeavour Energy	•	Would prefer new electricity substations, required for newly developed multistorey buildings to be	 Requiring the development of electricity substations within multistorey buildings (including the basement), reduces visual 	
			padmounted.	clutter and improves the quality of public domain.	
		•	Endeavour Energy recognised Liverpool city centre is a	 The fact that Endeavour Energy is willing to accept substations 	
			high density, mixed-use environment, and will accept	developed within multistorey buildings, means that it is not	
			substations developed within buildings, in most	necessary to amend the draft DCP in response to the submission.	
			circumstances.	It is recommended that no further amendment be made to Part 4 LDCP	
				2008 on the basis of the issues raised in the Endeavour Energy submission.	
2	Councillor	ij	Does the DCP include any incentive for shading and	1. Section 4.2.12 encourages the use of rooftops of mixed-use	_
	briefing		trees for rooftops?	developments for communal open space.	
	Part 4	2.	Would an increase in pedestrian malls improve	2. Section 4.3.1 encourages the extension of laneways and the use of	
	LDCP 2008		pedestrian permeability?	secondary streets for vehicular access to properties on busy	
		œ.	Owing to the inferior provision of public transport in	pedestrian thoroughfares, reducing congestion and navigational	
			Liverpool, could on-site parking requirements in	issues.	
			Liverpool city centre be increased to account for high	ñ	
			rates of car use in the community?	(i) Minimum parking rates, for developments in the city	
		4	Is there anything in the DCP requiring that buildings on	centre on land zoned B3 Commercial Core or B4 Mixed Use	
			busy roads use double glazed windows to mitigate	are determined by clause 7.3 of LLEP 2008 and that under	
			noise levels?	the Environmental Planning and Assessment (EP&A) Act	
				1979, provisions of a DCP may not contradict those of an	
				LEP,	
				(ii) Section 3J of the Apartment Design Guidelines (ADG),	
				contained within State Environmental Planning Policy	
				(SEPP) 65, reduces the requirement for on-site parking for	
				buildings developed within 800 m of a metropolitan	
				railway station. This provision overrides parking provision	
				in LLEP 2008 or LDCP 2008; and	

			 (iii) The majority of RFBs and mixed-use buildings in Liverpool city centre are within 800 m of either Liverpool or Warwick Farm railway station and therefore benefit from the reduced parking requirements. 4. State Environmental Planning Policy (SEPP) Infrastructure 2007 requires that buildings are attenuated against noise from busy roads and rail lines. Australian standards are already being used to control ambient noise. Additional provisions have been added to the DCP to address noise from nighttime uses, including restaurants/bars. It is recommended that no further amendment be made to Part 4 LDCP
м	Council floodplain engineers' submission	 Add an additional objective to Section 6 of Part 1LDCP 2008, Water Cycle Management, i) To reduce the cost of providing and maintaining water infrastructure; Add an additional paragraph to Section 6.1 Gravity Drainage to Council's drainage system, to clarify requirements for disposal of pumped stormwater; Amend control one of Section 6.4, Stormwater Runoff Quality, to bring stormwater quality in line with requirements included in section 6.5 Stormwater Quality Management; Amend the objectives for Section 6.5 Stormwater Quality Management, to include two additional objectives d) and f), requiring the harvest of rainwater and urban stormwater, where appropriate and clarifying the requirement to preserve predevelopment groundwater and surface water regimes and interactions, as far as practicable; and Amend control 2 for section 6.5 Stormwater Quality Management, to correct/clarify requirements for documentation that must be submitted for stormwater quality management assessments 	The proposed amendments would increase the clarity and functionality of the DCP. It is recommended that the proposed amendments to Part 1 LDCP 2008 outlined in the Council floodplain engineers' submission be adopted in full.

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

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Gateway determination



PP_2019_LPOOL_006_00/IRF19/5806

Kiersten Fishburn Chief Executive Officer Liverpool City council Locked Bag 7064 Liverpool BC NSW 1871

Dear Ms Fishburn

Planning proposal PP_2019_LPOOL_006_00 to amend Liverpool Local Environmental Plan 2008

I am writing in response to Council's request for a Gateway determination under section 3.34(1) of the *Environmental Planning and Assessment Act 1979* (the Act) in respect of the planning proposal to make changes to zoning and development controls in Liverpool LEP 2008 to reflect the revised footprint of the Stormwater Basin 14 and to rectify mapping anomalies for certain land fronting Bernera Road to rationalise zone boundaries with lot boundaries at Edmondson Park.

As delegate of the Minister for Planning and Public Spaces, I have now determined that the planning proposal should proceed subject to the conditions in the enclosed Gateway determination.

I have also agreed, as delegate of the Secretary, the planning proposal's inconsistencies with section 9.1 Directions: 3.1 Residential Zones; 4.3 Flood Prone Land; and, 6.2 Reserving Land for Public Purposes, are justified in accordance with the terms of the Direction. No further approval is required in relation to these Directions.

It is noted that Council has requested to be authorised as the local plan-making authority. I have considered the nature of Council's planning proposal and have conditioned the Gateway for Council to be authorised as the local plan-making authority.

The amending local environmental plan (LEP) is to be finalised within 12 months of the date of the Gateway determination. Council should aim to commence the exhibition of the planning proposal as soon as possible. Council's request to draft and finalise the LEP should be made directly to Parliamentary Counsel's Office six weeks prior to the projected publication date. A copy of the request should be forwarded to the Department of Planning, Industry and Environment.

The state government is committed to reducing the time taken to complete LEPs by tailoring the steps in the process to the complexity of the proposal, and by providing clear and publicly available justification for each plan at an early stage. In order to

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

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Gateway determination

meet these commitments, the Minister may take action under section 3.32(2)(d) of the Act if the time frames outlined in this determination are not met.

Should you have any enquiries about this matter, I have arranged for Ms Cho Cho Myint to assist you. Ms Myint can be contacted on 98601507.

Yours sincerely

24/09/19

Catherine Van Laeren Acting Executive Director

Central River City and Western Parkland City

Enci: Gateway determination Authorised plan-making reporting template

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

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Gateway determination



Gateway Determination

Planning proposal (Department Ref: **PP_2019_LPOOL_006_00**): to make changes to zoning and development controls in Liverpool LEP 2008 to reflect the revised footprint of the proposed Stormwater Basin 14 and rectify anomalies between detailed design and construction of Bernera Road within the Edmondson Park Release Area.

I, the Acting Executive Director, Central River City and Western Parkland City, at the Department of Planning, Industry and Environment, as delegate of the Minister for Planning and Public Spaces, have determined under section 3.34(2) of the *Environmental Planning and Assessment Act 1979* (the Act) that an amendment to the Liverpool Local Environmental Plan (LEP) 2008 to make changes to zoning and development controls in Liverpool LEP 2008 to reflect the revised footprint of the revised Stormwater Basin 14 and rectify anomalies between detailed design and construction of Bernera Road within the Edmondson Park Release Area should proceed subject to the following conditions:

- 1. Prior to public exhibition, Council is to amend an appropriate diagram within the planning proposal to show the boundaries of the proposed basin and include an appropriate key on the diagram.
- 2. Public exhibition is required under section 3.34(2)(c) and schedule 1 clause 4 of the *Environmental Planning and Assessment Act 1979* as follows:
 - a. the planning proposal must be made publicly available for a minimum of 28 days; and
 - b. the planning proposal authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in section 5.5.2 of A guide to preparing local environmental plans.
- Consultation is required with the following public authorities/organisations under section 3.34(2)(d) of the Act and/or to comply with the requirements of relevant section 9.1 Directions:
 - Sydney Water;
 - · Roads and Maritime Services;
 - Department of Planning, Industries and Environment (Environment, Energy and Science)
 - · Endeavour Energy and Transgrid; and
 - APA Gas and Jamena.

Attachment 1

Gateway determination

Each public authority/organisation is to be provided with a copy of the planning proposal and any relevant supporting material and given at least 21 days to comment on the proposal.

- Council is to include the final concept design of the basin in the exhibition material and within the material made available to the consulted public authorities.
- 5. A public hearing is not required to be held into the matter by any person or body under section 3.34(2)(e) of the Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
- 6. The planning proposal authority is authorised as the local plan-making authority to exercise the functions under section 3.36(2) of the Act subject to the following:
 - (a) the planning proposal authority has satisfied all the conditions of the Gateway determination;
 - (b) the planning proposal is consistent with section 9.1 Directions or the Secretary has agreed that any inconsistencies are justified; and
 - (c) there are no outstanding written objections from public authorities.
- 7. The time frame for completing the LEP is to be **12 months** following the date of the Gateway determination.

24/09/19

Catherine Van Laeren
Acting Executive Director
Central River City and Western
Parkland City
Department of Planning, Industry and
Environment

Delegate of the Minister for Planning and Public Spaces

Gateway determination



Attachment 5 – Authorised plan-making reporting template

Reporting template for authorised LEP amendments Notes:

- The planning proposal number will be provided by the Department of Planning, Industry and Environment following receipt of the planning proposal.
- The Department will fill in the details of Tables 1 and 3.
- The local plan-making authority is to fill in the details of Table 2.
- If the planning proposal is exhibited more than once, the local plan-making authority should add rows to **Table 2** to include this information.
- The local plan-making authority must notify the relevant contact officer in the regional office in writing of the dates as they occur to ensure the publicly accessible LEP Tracking System is kept up to date.
- · The plan should be signed using the following format:

[Name]

[Title]

[Council name]

Delegate of [Council name], the local plan-making authority [date]

 A copy of this completed report must be provided to the Department with the local plan-making authority's request to have the LEP notified.

Table 1: To be completed by the Department

Stage	Date/Details
Planning proposal number	PP_2019_LPOOL_006_00
Date sent to DPIE under section 3.34(1)	28 August 2019
Gateway determination date	

Table 2: To be completed by the local plan-making authority

Stage	Date/Details	Notified regional office
Dates draft LEP exhibited		
Date of public hearing (if held)		
Date draft LEP requested from PCO		
Date draft LEP received from PCO		
Date PCO Opinion requested		
Date PCO Opinion received		
Date GIS data or maps		
provided/requested		
Date ePlanning confirmed mapping is		
suitable and sent to PCO		
Date LEP finalised		
Date sent to DPIE requesting		
notification		

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Table 3: To be completed by the Department

Stage		Date/Details	-	·
Notification date and	details			

Additional relevant information:

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Public authority submissions

Gorodok Pty Limited ABN 30 057 156 751 Level 1, 121 Wharf Street Spring Hill, QLD 4000 GPO Box 1390. QLD 4001 APA Group | apa.com.au



18 November 2019

APA Ref: 444142 Council Ref: RZ-2/2019

Nancy-Leigh Norris Strategic Planner Liverpool City Council Locked Bag 7064 Liverpool BC NSW 1871

EMAIL OUT: NorrisN@liverpool.nsw.gov.au

Dear Nancy-Leigh,

RE: Proposed Amended to Liverpool Local Environment Plan 2008 Planning Proposal - Rezoning land subject to Stormwater 'Basin 14' and Bernera Road, Edmondson Park

Thank you for your email dated 16 October 2019 of the abovereferenced Planning Proposal.

APA Group (APA) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high pressure gas transmission pipelines across Australia.

Gorodok Pty Ltd (**APA**) has one pipeline located within easement adjacent to the subject site (Camden Valley Way) being for the Moomba to Sydney Ethane Pipeline (see Table 1 for details):

Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)	Measurement Length (m)
Moomba to Sydney Ethane Pipeline	PL15	1 & Var.	200	600
Note: measurement length is applied	to either side	of the pipeline.	,	

APA statutory obligations

As a Licensee under the *Pipelines Act 1967*, APA is required to operate pipelines in a manner that minimises adverse environmental impacts and protects the public from health and safety risks resulting from operation of our high pressure gas transmission pipelines (**HPGTP**). Once a HPGTP is in place, APA is required to constantly monitor both the pipeline corridor and also a broader area within which we are required to consider land use changes and development and to assess what such changes means to the risk profile of the HPGTP.

APA has a number of responsibilities and duties to perform under a complex framework of legislation, standards and controls across Federal, State and Local Government landscapes. In particular, the *Pipelines Act 1967*, cites Australian Standard 2885 (**AS2885**) as a mandatory safety standard for the design, construction, operation and maintenance of transmission pipelines. In discharging our regulative responsibilities, APA needs to continuously review what is happening around its assets, what land use changes are occurring and what development is taking place to ensure it remains in a positon to comply with applicable operational and safety standards and legislation whilst meeting its commercial obligations and imperatives.

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Pipeline Risk Profile and the Measurement Length

In managing HPGTP's and considering land use changes, APA must focus on that area geographically defined by AS2885 as the Measurement Length (**ML**). The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy.

The ML is determined by the design parameters of the pipe (driven by the surrounding environment at the time of construction) and the Maximum Allowable Operating Pressure (MAOP) of the pipe. APA must consider any change of land uses within the ML area to determine the effect of a new use on the risk profile of the pipeline.

For reference, the ML of the Moomba to Sydney Ethane Pipeline is 600m each side of the pipeline.

Safety Management Study

AS2885 requires a Safety Management Study (**SMS**) to be undertaken whenever the land use classification of land within the ML changes. The purpose of an SMS is to assess the risk associated with a change in land use, including both construction risks and ongoing land use risks. The SMS will also develop appropriate controls to reduce risks to 'as low as reasonably practicable' (**ALARP**).

The cost of undertaking an SMS including any mitigation measures required are to be borne by the proponent as the 'agent of change'. APA has developed a list of preferred SMS facilitators. This ensures facilitators are both independent and satisfactorily qualified to undertake this assessment. This list is available from APA on request. Mitigation measures may include slabbing of the pipeline, additional signage, marker tape, and controls during construction.

The SMS process does not preclude development from occurring, but ensures it occurs in a manner which maintains the pipeline integrity and community safety.

The current primary location class for the APA pipeline at the subject location is **Residential (T1)** and will not change as a result of the development proposal. Accordingly, a SMS is **not** required to be undertaken in this instance.

Pipeline corridor management

To ensure compliance with the safety requirements of AS2885, APA needs to ensure our pipeline is managed to an appropriate standard. This includes:

- Ensuring the pipeline is maintained free of inappropriate vegetation and structures.
- Place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries.
- Maintain a constant line of sight between warning signs.
- Undertake physical patrols and inspections.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community. All crossings of the pipeline should be as close to 90 degrees and minimised as much as possible.

Any works within 3 metres of the pipeline must be approved by APA through our Third Party Works Authorisation process. This process will ensure all works are undertaken in a safe manner that does not physically impact on the pipeline. If you are seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, please contact Dial Before You Dig on 1100 or APA directly at APAprotection@apa.com.au.

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Proposed development

The comments in this letter are based on the Stormwater 'Basin 14' Design as shown on Sketch 07 prepared by Storm Consulting, Drawing Reference No. 2072-SK-0007, Revision A, dated 17 September 2019.

Planning Proposal

It is understood the Planning Proposal seeks to amend the Liverpool Local Environmental Plan 2008 to facilitate the development of a revised design for Basin 14 providing stormwater infrastructure and public open space for surrounding residents.

Stormwater Basin Design

The proposed Stormwater Basin 14 introduces several design elements in close proximity to APA's Moomba to Sydney Ethane Pipeline. These being the proposed gabian and concrete footpath / maintenance track (MT15) along the Camden Valley Way frontages of Lot 2 on DP567321 and Lot 1 on DP1052613.

All crossings of the pipeline should be as close to 90 degrees and minimised as much as possible.

APA has a suite of standard drawings to assist in detailed design. These drawings are available upon request.

APA's Pipeline Exact Location and Depth Confirmation

Pot holing must be carried out by the Applicant to identify the exact location and depth of the pipeline. This can be achieved through the Applicant completing a Dial Before You Dig on 1100 or APA directly at APAprotection@apa.com.au.

Construction Methodology

Details of construction equipment, construction vehicles (including TARE weights) and works methodology will need to be submitted to APA for approval in a Construction Management Plan format.

Proposal Plans and Pipeline Easement Notation

APA's pipeline easement is not clearly marked as being for a high pressure gas transmission pipeline. The level of risk associated with any intrusion of the pipeline is not adequately communicated to those undertaking site works. The APA Moomba to Sydney Ethane Pipeline should be clearly identified as high pressure gas transmission pipeline on all relevant plans.

APA's pipeline easement should be clearly marked as being for a high pressure gas transmission pipeline easement. This is to ensure the level of risk associated with any intrusion into the easement is adequately communicated to those undertaking future site works. The easement should be clearly identified as an easement for a high pressure gas transmission pipeline on all relevant plans. In addition the easement should be hatched and notated as 'no works to occur without the prior authorisation of the pipeline operator'.

The proposed development will not change the location class of the pipeline. Standard conditions are required to ensure any works near the easement do not impact on the pipeline.

Comments

On the basis of the information provided, APA does not object to the proposed development subject to the following conditions being included with any approval issued for the proposal.

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Conditions of Approval

1. No improvements within 3 metres of the pipeline

Buildings, structures, roadway, pavement, pipeline, cable, fence or any other improvement on or under the land within three metres of the gas transmission pipeline must not be constructed without prior consent in writing from APA.

2. Third Party Works Authorisation

Prior to the commencement of any works within three metres of the gas transmission pipeline, the proponent must provide detail of the proposed works to APA, and seek an authorisation third party works approval from APA. No works within APA's easement are permitted without the prior authorisation of APA. Works within the easement must comply with any conditions attached to a third party works approval.

3. Construction Management Plan

Prior to the commencement of any works, including demolition, on land within 50 metres of the pipeline easement, a construction management plan must be submitted to and approved by APA. The plan must:

- Prohibit the use of rippers or horizontal directional drills unless otherwise agreed by the operator of the gas transmission pipeline.
- Avoid significant vibration, heavy loadings stored over the pipeline and heavy vehicle / plant crossings of the pipeline.
- Be endorsed by the operator of the gas transmission pipeline where the works are within the road reserve.

The construction management plan must be implemented to the satisfaction of APA. The construction management plan may be amended to the satisfaction of APA.

4. Pipeline Delineation On Plans

All plans which include the area of the gas pipeline must be clearly labelled as '- no works to occur without the prior authorisation of the pipeline operator'.

5. Easement Delineation On Site

During construction, the boundary of the easement must be clearly delineated on site by temporary fencing (or other means as agreed by APA), and clearly marked as a hazardous work zone/ restricted area.

Note

If you are planning on undertaking any physical works on property containing or proximate to a pipeline, or are seeking details on the physical location of a pipeline, please contact Dial Before you Dig on 1100 or https://www.1100.com.au/, or APA directly on APAprotection@apa.com.au/.

Note

An early works agreement from APA is required for any assessments/approvals that require greater than 1 day assessment or supervision. Lead in times for agreements can be up to 12 weeks. Please contact APA at APAprotection@apa.com.au or 1800 103 452.

Note

Any improvements within the transmission gas pipeline easement undertaken by third parties is at the risk of the proponent who will remain liable. APA will not be liable for any costs associated with the maintenance or reinstatement of any vegetation and/or infrastructure constructed on the easement.

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<u>Note</u>

APA has a suite of standard engineering drawings to assist with detailed design. These are available upon request. Please contact APA at APAprotection@apa.com.au or 1800 103 452.

Should you wish to discuss the contents of this correspondence, or have any further queries, please contact me on 07 3223 3385 or the Infrastructure Planning & Protection team at planningnsw@apa.com.au.

Yours faithfully,

Ben Setchfield Senior Urban Planner

Infrastructure Planning and Protection

cc. lcc@liverpool.nsw.gov.au

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 2 Public authority submissions

The General Manager Liverpool City Council

ATTENTION: Ian Stendara, Executive Planner

Dear Sir or Madam

I refer to Council's letter of 16 October 2019 regarding Planning Proposal RZ-2/2019 at Basin 14 and Bernera Road Edmondson Park for Draft Liverpool Local Environmental Plan 2008 Amendment 78 to amend land use zones and development standards for certain land in Edmondson Park, to reflect the revised footprint of Stormwater Basin 14 and to rectify mapping anomalies along Bernera Road. Submissions need to be made to Council by 15 November 2019.

As shown in the below site plans from Endeavour Energy's G/Net master facility model (and extracts from Google Maps Street View) there is:

- An easement over the site benefitting Endeavour Energy (indicated by red hatching) on Lot 304 DP 1238463 & Lot 164 DP 1218597 for 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines.
- Low voltage overhead power lines / extended service conductor to Lot 2 DP 567321
 utilising customer owned poles (indicated by the green circles) on the site which will
 become a redundant electrical asset when the existing dwelling is demolished for the
 construction of Basin 14.
- Padmount substation no. 36721 located on Lot 1 DP 567321 over which in due course an
 easement and fire restriction will be registered in accordance with the requirements of
 Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure
 Rights'.
- Low voltage and 11 kV high voltage overhead power lines and underground cables to the Camden Valley Way road verge / roadway.
- Low voltage overhead power lines and low voltage and 11 kV high voltage underground cables to the Croatia Avenue road verge / roadway.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the <u>Electricity Supply Act 1995</u> (NSW).

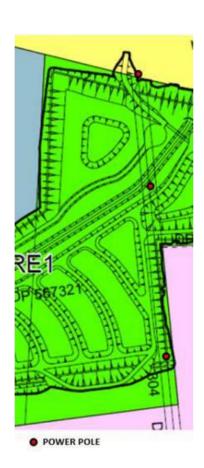
Although the Planning Proposal in itself does not entail the undertaking of any works, the RE1 Public Recreation zoning to facilitate the construction of Basin 14 will impact Endeavour Energy's electricity infrastructure / easement.

The following is an overlay of Endeavour Energy's G/Net master facility model onto the design of Basin 14 showing the approximate location of the poles within the easement for 11 kV high voltage overhead power lines.

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Public authority submissions



Endeavour Energy has noted that the Council Report on Page 5 mentions 'It is noted that a transmission easement for electrical lines runs through the site'. Similarly this is mentioned in the Planning Proposal with an additional comment on Page 17 that 'Some of the land is restricted by flood constraints as well as a transmission easement for electrical lines limiting its development potential'. However there appears to be no further detail of the impact of the planning Proposal on endeavour Energy's electrical network / easement.

The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the landowner:

- Not install or permit to be installed any services or structures within the easement site.
- Not alter the surface level of the easement site.
- Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

Endeavour Energy's preference is for no activities or encroachments to occur within its easement areas. However, if any proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load or asset relocation project) will encroach/affect Endeavour Energy's easements or protected assets, contact must first be made with the Endeavour Energy's Easements Officer, Philip Wilson, on

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 2 Public authority submissions

direct telephone 9853 7110 or alternately by email Philip.Wilson@endeavourenergy.com.au or Easements@endeavourenergy.com.au .

Please find attached for the Council's reference copies of Endeavour Energy's:

- · General Restrictions for Overhead Power Lines.
- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which deals with activities / encroachments within easements.

In regards to the having power poles within a flood / stormwater retention basin, if the area becomes overwhelmed with too much water which is unable to be readily discharged or absorbed into the soil or evaporate, the ground becoming damp and soggy In the vicinity of the pole may affect the integrity of the pole and cause difficulty for access for maintenance crews. During broken pole or downed power lines conditions, access to the poles and a clear work area is essential to undertake the required restoration works eg. crews will need to be access with heavy vehicles to lift and bore poles and restring power lines. Although not likely to be a significant issue / risk, in the event of a fault occurring in the electricity network, damp or wet soil and puddles which as good conductors of electricity will increase the area a fault voltage is dissipated as well as the 'step and touch' potential as a result of the difference in voltage between two points increases (please also refer to the below point 'Earthing').

Endeavour Energy's Asset Strategy & Planning Branch has provided the following advice:

The existing 11 kV high voltage overhead mains from Camden Valley Way go south to pole mounted substation no. 1320 going through the subject area via an easement will need to be addressed by this proposal such that 11 kV supply to the pole mounted substation should be sourced from other nearby network connection point thus allowing for the removal of the overhead conductors through the proposed basin.

A Level 3 Accredited Service Provider will be required to assess and determine a suitable solution. Asset Strategy & Planning Branch suggest installing a new 11 kV underground cable from spare switch of padmount substation no. 36781 to a new underground to overhead (UGOH) pole near pole mounted substation no. 1320, and augment remaining overhead span to the pole substation, then remove drop out fuse and overhead assets from Camden Valley Way to the new UGOH pole. The easement can then be released via the normal channels. Please refer to attached Diagram 2755 001.pdf by Capacity Planner – Endeavour Energy.

The proposed new road (shown purple) is likely to need road crossing ducts or relocation of existing ones at Bernera Road.

In case electricity supply or public lighting is required for the future Dog Park and the future Playground Area, one set of Type 04 road crossing ducts should be provided across proposed/future road (shown blue) to source supply from future subdivision development on the southern side to each. Alternatively one set of Type 04 ducts is advised from Bernera Rd should supply be required prior to any subdivision activity to the south of the basin.

Due to the foregoing, Endeavour Energy's preference is for the existing 11 kV high voltage overhead power lines with the easements on Lot 304 DP 1238463 & Lot 164 DP 1218597 to be relocated. Please find attached a copy of Endeavour Energy's Form FPJ4015 'Application for the Relocation / Removal of Endeavour Energy's Electrical Network Assets' which can be used to make a request to

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

Attachment 2 Public authority submissions

Endeavour Energy's Network Connections Branch (who can be contacted via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm) for relocation of the 11 kV overhead power lines. As indicated in Form FPJ4015, 'The developer is encouraged to approach a Level 3 Accredited Service Provider (ASP) to obtain preliminary details of the assets and discuss possible solutions to the developer's requirements. The developer must provide as much detail as possible concerning the Endeavour Energy assets that the developer wishes to relocate / remove'. The ASP scheme is administered by NSW Energy and details are available on their website via the following link or telephone 13 77 88:

 $\frac{https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works \ .$

Even if an asset relocation project is undertaken, Endeavour Energy does not automatically release redundant network easements. Under Endeavour Energy's Company Policy 9.2.3 'Property Tenure for Network Assets', the company will assess all applications prior to acceptance or refusal to identify and manage risks to its network, commercial and community interests. In some circumstances the release of easement may be for nil compensation eg. the affected land is subject to dedication as public road or as part of an asset relocation / capital works project where the alternative network arrangements occur at the same voltage and level of easement affectation. Otherwise the release will be subject to monetary compensation paid by the applicant having regard to the potential increase in value of the land as a result of the easement release / reduction in the extent of easement affectation (whilst also allowing appropriate consideration for the applicant's alternative network arrangements).

Endeavour Energy's Property Services Section is responsible for managing requests for network easement release. The request should be submitted by email to the following group e-mail address and include details of the property, the easement and the owners contact details.

network property@endeavourenergy.com.au

Subject to the resolution and the following recommendations and comments Endeavour energy has no objection to the Planning Proposal.

Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical installations, including ensuring there is adequate connection to the earth. Inadequate connection to the earth to allow a leaking/fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury.

Network Access

It is imperative that the access to the existing electrical infrastructure on and in proximity of the site be maintained at all times. To ensure that supply electricity is available to the community, access to the electricity infrastructure may be required at any time. Restricted access to electricity infrastructure by maintenance workers causes delays in power restoration and may have severe consequences in the event of an emergency.

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• Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure (including any new electricity infrastructure required to facilitate the proposed development). Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant.

Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy's Vegetation Management program and/or the provisions of the *Electricity Supply Act 1995* (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

• Dial Before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the *Dial Before You Dig* 1100 service in accordance with the requirements of the *Electricity Supply Act* 1995 (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

 $\frac{\text{http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures}{\text{http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures}{\text{http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety+brochures}}.$

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of multiple stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au.

Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days. Endeavour Energy's contact details should be included in any relevant risk and safety management plan.

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Public authority submissions Attachment 2

> I appreciate that not all the foregoing issues may be directly or immediately relevant or significant to the Planning Proposal. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

> Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

Yours faithfully Cornelis Duba **Development Application Specialist** Network Environment & Assessment T: 9853 7896

E: cornelis.duba@endeavouren

ergy.com.au

51 Huntingwood Drive, Huntingwood NSW 2148 www.endeavourenergy.com.au



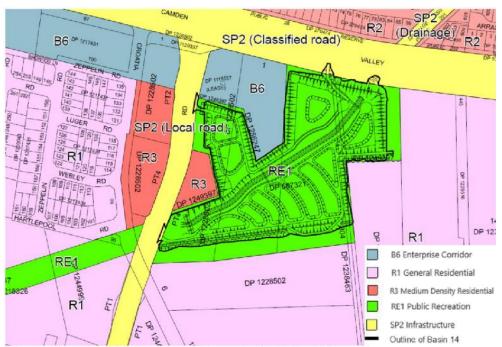


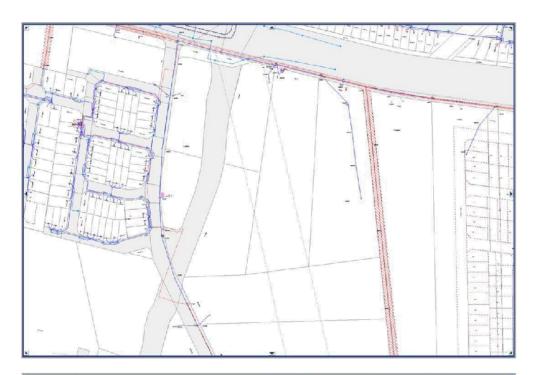
Figure 4: Proposed zoning map with boundary and design of Basin 14

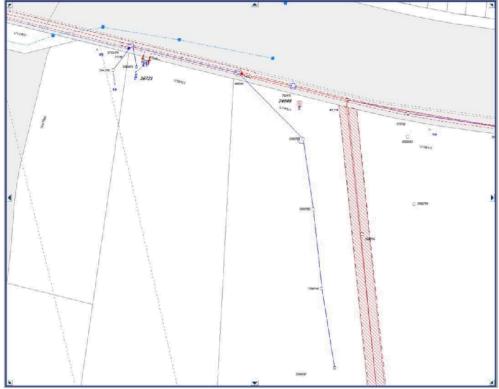
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Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

Public authority submissions

Attachment 2





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Attachment 2 Public authority submissions



Low voltage and 11 kV high voltage overhead power lines (including pole mounted substation no. 24848) and extended service conductor to Lot 2 DP 567321. There are also low voltage (for the streetlight) and 11 kV underground cables in this area.



11 kV high voltage overhead power lines to the easement over Lot 304 DP 1238463 & Lot 164 DP 1218597.

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 2 Public authority submissions



23 January 2020

lan Stendara Executive Planner 33 Moore Street Liverpool NSW 2170

Attention: Nancy-Leigh Norris

Re: Draft Amendment to the Liverpool Local Environmental Plan 2008 (Amendment 78) and draft Liverpool Development Control Plan 2008 (Amendment 35)

Dear lan

Thank you for your letter of 16 October 2019 in relation to Planning Proposal **RZ-2/2019** which proposes to amend land use zones and development standards for land in Edmondson Park to accommodate the footprint of stormwater 'Basin 14' and rectify mapping anomalies along Bernera Road. Sydney Water provides the following information for Council's consideration.

Based on the information provided, Sydney Water understands that the proposed amendment to the Liverpool Local Environmental Plan 2008 and Liverpool Development Control Plan 2008 will result in the construction of stormwater infrastructure, known as 'Basin 14' in Edmondson Park and may require road realignment and new pedestrian paths as part of these works.

Sydney Water has a 450mm recycled water main and 280mm sewer main located within the boundary of the proposed development site. The proposed development has the potential to impact these assets.

Due to the potential risk of damage to Sydney Water's assets, as well as impairing maintenance access to the assets, Sydney Water recommends that Council engage a Water Servicing Coordinator to develop design options that comply with Sydney Water's Building Over and Adjacent to Sydney Water Assets requirements. Please note, that based on the proposed design Sydney Water may determine that further adjustment works and/or protection works are required to ensure there is no risk of damage to our assets.

This advice is not formal approval of our requirements. Detailed requirements will be provided once the development has been referred to Sydney Water by a Water Servicing Coordinator.

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 2 Public authority submissions



If you require any further information, please contact the Growth Planning Team by emailing urbangrowth@sydneywater.com.au.

Yours sincerely

Kristine Leitch

Growth Intelligence Manager

City Growth and Development, Liveable City Solutions Sydney Water, 1 Smith Street, Parramatta NSW 2150

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

Attachment 4

Final Planning Proposal

Planning Proposal

Draft Amendment to Liverpool Local Environmental Plan 2008 to rezone and amend development standards for certain land subject to Basin 14 and Bernera Road, Edmondson Park

April 2019





Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park Final Planning Proposal

Attachment 4

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Attachment 4

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E

Final Planning Proposal

Background

The Edmondson Park precinct was rezoned from 1(e) Rural – Future Urban to 2(e) Residential – Developing Communities by Amendment 83 to the *Liverpool Local Environmental Plan 1997* on the 31st March 2006. Following the adoption of the *Liverpool Local Environmental Plan 2008* (LLEP 2008) the precinct was primarily zoned R1 (General Residential). Since the initial rezoning, the precinct has been undergoing urbanisation. This rezoning formed part of an extensive planning exercise, which was informed by numerous investigations including a variety of flooding studies. Since this time, the forecasted growth for Edmondson Park has increased, particularly with the development of Edmondson Park South under the *State Environmental Planning Policy (State Significant Precincts) 2005*. It is anticipated that Edmondson Park will accommodate approximately 30,000 new residents living in approximately 8,200 homes over the next 10 to 15 years. This has placed increased pressure on existing and proposed infrastructure in Edmondson Park.

Land subject to this planning proposal contains an area known as 'Basin 14', which is to be acquired by Liverpool City Council for the purposes of stormwater infrastructure and flood mitigation measures. A basin is necessary to cater for the current and forecasted growth of this area. Quality open space is also in high demand in Edmondson Park due to rapid residential development, and the basin will have a secondary function of providing land for open space and recreation purposes. Consultation with Storm Consultants regarding the development of a basin design began in December 2017 and the detailed basin design is to be finalised in 2019. The LLEP 2008 zoning and development standards currently reflect Council's preliminary conceptual design for the basin. The basin is no longer being constructed in accordance with the preliminary concept design as there is an access driveway to a house of worship bisecting the site, and the arrangements and costs involved to move this access driveway are undesirable. Given that the detailed concept design has proposed a modified footprint, a planning proposal has been prepared to address the following matters:

- The revised design of Basin 14 extends the basin further south, resulting in additional land to be acquired by Council. This extension has resulted in a long narrow parcel of residential zoned land that is unfeasible to develop due to its current size;
- 2. The revised design has resulted in land currently zoned R3 Medium Density Residential identified as being required for the basin footprint;
- The revised design has resulted in RE1 Public Recreation land identified as surplus to Councils initial requirements for the basin footprint. This land is no longer required for acquisition by Council and can be rezoned to assist in the orderly development of the area surrounding the basin;
- 4. The revised basin design has resulted in amendments to the indicative layout plan (ILP) within Part 2.11 of the Liverpool Development Control Plan 2008 (LDCP 2008). This is to reflect a new road layout and pedestrian access around the site. The development standards for a parcel of land south of the basin are to be altered to rationalise the boundaries of its standards in accordance with the amended road layout; and

The detailed design and construction of Bernera Road (adjacent to the basin), has resulted in inconsistencies between LEP mapping, the new road alignment and adjacent lot boundaries.

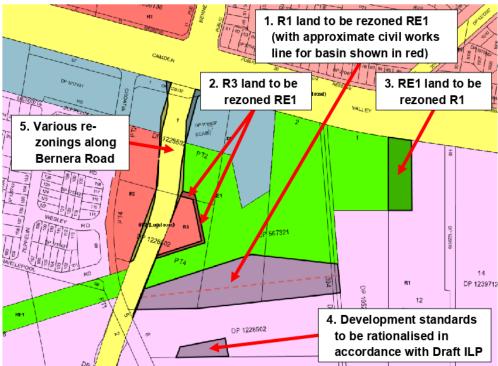


Figure 1: Matters addressed within the planning proposal

It is noted that one of the subject lots (Lot 12 DP 1239712) is currently subject to two development applications (DA-665/2018 and DA-561/2016/A), for the construction of a multi dwelling housing development comprising 11 dwellings and including strata subdivision, and for the modification of stormwater easements and lot sizes, respectively. The planning proposal is not required to support these developments, nor will this planning proposal alter any planning controls which will influence the development applications.

The proposal has been drafted in accordance with Section 3.33 of the *Environmental Planning* and *Assessment Act 1979* ('the Act') and the Department of Planning and Environment's 'A Guide to Preparing Planning Proposals'.

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Site Identification

The planning proposal relates to ten lots accessible from Camden Valley Way, Bernera Road and Croatia Avenue, which contain a variety of land use zones and are largely undeveloped. One of these lots form part of the recently re-aligned Bernera Road and one lot is also accessible from Manchuria and Poziers Road. The subject site is located within the South West Growth Centre within the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Growth Centres SEPP) and has been biodiversity certified.

Lot 12 DP 1239712 is subject to two development applications (DA-665/2018 and DA-561/2016/A) for the construction of a multi dwelling housing development, and for modifications to stormwater easements and lot sizes. Residential subdivision and the recent development of low density residential dwellings is occurring to the east, west and south of the site, whilst established residential areas are located north of Camden Valley Way. High density residential development is proposed to be concentrated further south of the site, near Edmondson Park station.

In addition to its stormwater infrastructure use, Basin 14 is to provide a public recreation function. The subject land contains a tributary of Maxwells Creek and also contains 'Maxwells Creek North Riparian Park', which is one of three riparian parks identified under Part 2.11 Edmondson Park of the Liverpool Development Control Plan 2008 (LDCP 2008). This park is forecasted to contain passive open space and a children's play area in accordance with Items 10 and 11 within Section 6.4 of the Edmondson Park Contributions Plan 2008 (the Contributions Plan). It is noted that a transmission easement for electrical lines runs through the site.

The addresses and legal descriptions of the subject lots are detailed within Table 1 below and identified in Figure 2. Note that the planning proposal does not intend on rezoning the entirety of all of the subject lands, rather part of some land parcels are proposed to be rezoned.

Table 1: Subject lot addresses and legal descriptions

SP2 SP2
SP2
B6
R3
RE1
RE1
R3
RE1
RE1
RE1
R1
RE1
RE1
R1
RE1
RE1

*Note: Part of lots only

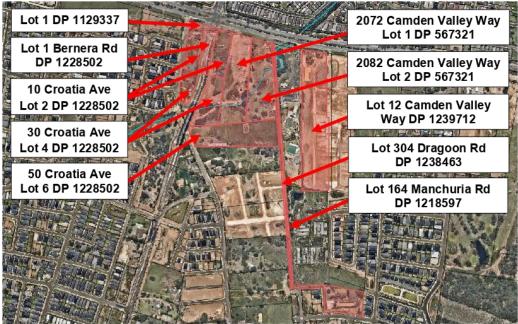


Figure 2: Aerial view of the subject lots (Note: Parts of lots are subject to the planning proposal and not the entire lots)

The portions of land subject to the planning proposal are outlined in Figure 3. Land to be rezoned for the facilitation of Basin 14 include approximately 14,000m² of R1 General Residential zoned land, 3,200m² of RE1 Public Recreation zoned land and 400m² of R3 Medium Density Residential zoned land. Miscellaneous zonings along Bernera Road, and development standards for a portion of land south of the basin are to also be amended.



Figure 3: Parcels of land subject to the planning proposal

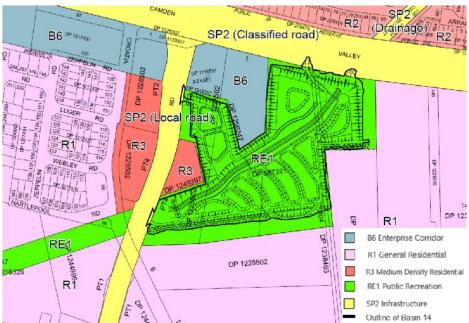


Figure 4: Proposed zoning map with boundary and design of Basin 14

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Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Delegation of plan making functions

This planning proposal seeks to amend the *Liverpool Local Environmental Plan 2008*. As such, Council is seeking authority of plan making functions pursuant to Section 3.36 of the *Environmental Planning and Assessment Act 1979* ("EP&A Act").

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 4 Final Planning Proposal

Part 1 – Objectives

The objective of this planning proposal is to facilitate the development of the revised design for Basin 14, which will provide much needed stormwater infrastructure and public open space to the rapidly growing suburb of Edmondson Park. The planning proposal seeks to enable the appropriate acquisition of land by Council, as well as the rationalisation of land use zones and development standards to reduce undevelopable parcels of land, and assist in the orderly development of land adjacent to the basin. Additionally, the planning proposal is to amend LLEP 2008 mapping inconsistencies along Bernera Road resulting from the re-alignment of the road.

Part 2 – Explanation of provisions

The objectives of the planning proposal will be achieved through changes to land identified in Figures 4 to 8 and their corresponding planning controls listed in Tables 2 to 7. Draft maps are provided in Part 4.

To facilitate the proposed changes, the following LLEP 2008 maps are to be amended:

Land Zoning

4900_COM_LZN_009_020_20160628

Minimum Lot Size

4900_COM_LSZ_009_020_20160217

Floor Space Ratio

4900 COM FSR 009 020 20160217

Maximum Height of Buildings

4900_COM_HOB_009_020_20160217

Land Reservation for Acquisition

• 4900 COM LRA 009 020 20160217

Minimum Dwelling Density

4900_COM_DWD_009_020_20160217

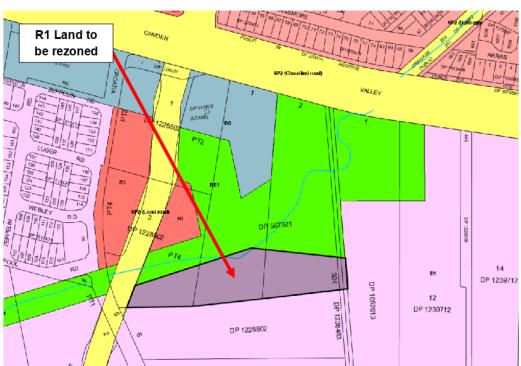


Figure 5: R1 General Residential land to be rezoned

Table 2: Current and proposed standards for land zoned R1 General Residential at: 30 Croatia Avenue (Lot 4 DP 1228502), 2072 Camden Valley Way (Lot 1 DP 567321), 2082 Camden Valley Way (Lot 2 DP 567321), Lot 304 Dragoon Road (DP 1238463) and Lot 164 Manchuria Road (DP 1218597)

Control	Current	Proposed
Zoning (LZN)	R1 General Residential	RE1 Public Recreation
Minimum Lot Size (LSZ)	240m² (Area 3), 450m² & no standard	No standard
Floor Space Ratio (FSR)	1.0:1, 0.65:1 & no standard	No standard
Maximum Height of Buildings (HOB)	15m, 8.5m & no standard	No standard
Land Reservation Acquisition (LRA)	No standard	RE1 Local Open Space
Minimum Dwelling Density (RDN)	17 and 14 dwellings/ha & no standard	No standard

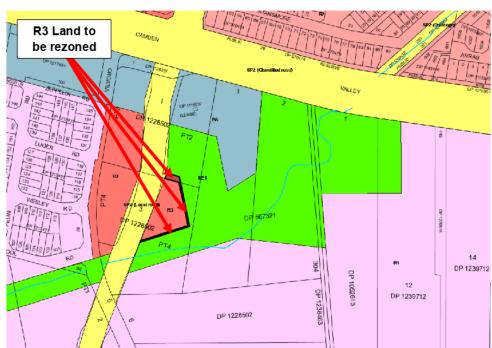


Figure 6: R3 Medium Density Residential land to be rezoned

Table 3: Current and proposed standards for land zoned R3 Medium Density Residential at: 10 Croatia Avenue (Lot 2 DP 1228502) and 30 Croatia Avenue (Lot 4 DP 1228502)

Control	Current	Proposed
Zoning (LZN)	R3 Medium Density Residential	RE1 Public Recreation
Minimum Lot Size (LSZ)	240m² (Area 3)	No standard
Floor Space Ratio (FSR)	1.0:1	No standard
Maximum Height of Buildings (HOB)	15m	No standard
Land Reservation Acquisition (LRA)	No standard	RE1 Local Open Space
Minimum Dwelling Density (RDN)	17 dwellings/ha	No standard

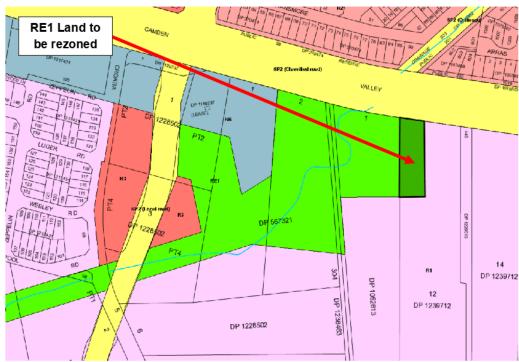


Figure 7: RE1 Public Recreation land to be rezoned

Table 4: Current and proposed standards for land zoned RE1 Public Recreation at: Lot 12 Camden Valley Way (DP 1239712)

Control	Current	Proposed
Zoning (LZN)	RE1 Public Recreation	R1 General Residential
Minimum Lot Size (LSZ)	No standard	450m ²
Floor Space Ratio (FSR)	No standard	0.65:1
Maximum Height of Buildings (HOB)	No standard	8.5m
Land Reservation Acquisition (LRA)	RE1 Local Open Space	No standard
Minimum Dwelling Density (RDN)	No standard	14 dwellings/ha

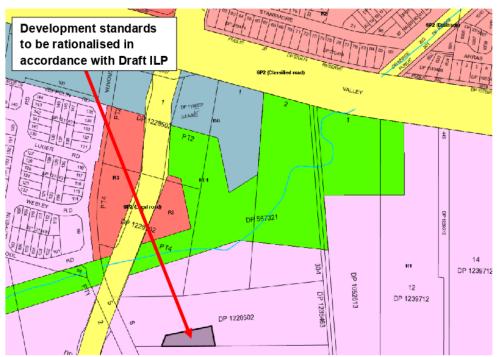


Figure 8: Parcel of land subject to amended development standards

Table 5: Current and proposed standards for a portion of land at: 50 Croatia Avenue (Lot 6 DP 1228502)

Control	Current	Proposed
Zoning (LZN)	R1 General Residential	No change
Minimum Lot Size (LSZ)	450m ²	240m ² (Area 3)
Floor Space Ratio (FSR)	0.65:1	1.0:1
Maximum Height of Buildings (HOB)	8.5m	15m
Land Reservation Acquisition (LRA)	No standard	No change
Minimum Dwelling Density (RDN)	14 dwellings/ha	17 dwellings/ha

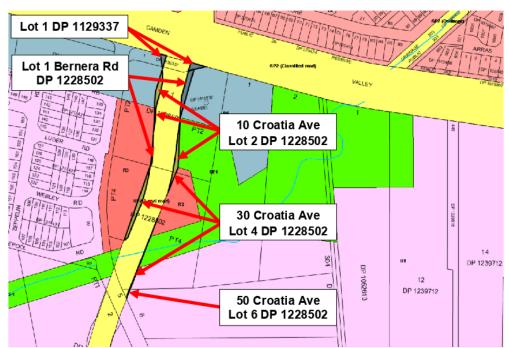


Figure 9: Miscellaneous zoned land adjacent to Bernera Road to be rezoned

Table 6: Current and proposed land use zones for certain portions of land to be rezoned in accordance with their lot boundaries along Bernera Road, at: Lot 1 DP 1129337, Lot 1 Bernera Road (DP 1228502), 10 Croatia Avenue (Lot 2 DP 1228502), 30 Croatia Avenue (Lot 4 DP 1228502), 50 Croatia Avenue (Lot 6 DP 1228502)

Address	Legal Description	Current Zoning	Proposed Zoning
N/A	Lot 1 DP 1129337	B6	SP2
Lot 1 Bernera Road	Lot 1 DP 1228502	B6	SP2
		R3	SP2
No. 10 Croatia Avenue	Lot 2 DP 1228502	SP2	B6
		SP2	R3
		SP2	RE1
No. 30 Croatia Avenue	Lot 4 DP 1228502	SP2	R3
		SP2	RE1
No. 50 Croatia Avenue	Lot 6 DP 1228502	SP2	R1

Table 7: Current and proposed development standards for certain portions of land to be rezoned in accordance with their lot boundaries along Bernera Road, at: Lot 1 DP 1129337, Lot 1 Bernera Road (DP 1228502), 10 Croatia Avenue (Lot 2 DP 1228502), 30 Croatia Avenue (Lot 4 DP 1228502), 50 Croatia Avenue (Lot 6 DP 1228502)

Control	Current	Proposed
Minimum Lot Size (LSZ)	Various	Alignment of lot size standards with their lot boundaries
Floor Space Ratio (FSR)	Various	Alignment of floor space ratio standards with their lot boundaries
Maximum Height of Buildings (HOB)	Various	Alignment of height of building standards with their lot boundaries

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Land Reservation Acquisition (LRA)	Various	Alignment of acquisition requirements with their lot boundaries
Minimum Dwelling Density (RDN)	Various	Alignment of dwelling density standards with their lot boundaries

Part 3 - Justification

Section A - Need for the planning proposal

3.1 Is the planning proposal a result of any strategic study or report?

No. The proposal has been driven by alterations to the design of the footprint for Basin 14. The basin is broadly identified within the Cabramatta Creek Basin Strategy which was developed in the 1980's to ensure forecasted development would not increase flooding impacts to the creek and locality. Storm Consultants were engaged by Council in 2015 to develop a plan for Basin 14. A report was prepared in 2018 which provided basin design options, with the preferred option being recommended based on hydrology, hydraulics and water quality principles. The preferred option has been drafted and is currently being finalised. Whilst the redesign results in the optimal configuration and performance of the basin, it also results in a required change to the land use zoning and acquisition standards to facilitate its development.

The alteration of development standards for a portion of land at 50 Croatia Avenue (Lot 6 DP 1228502) and rezoning of parts of lots to amend inconsistencies regarding zone boundaries along Bernera Road, is not the result of a strategic study or report. The planning proposal will facilitate the resulting changes in land zoning, land acquisition and planning standards.

3.2 Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Yes. The planning proposal is the best means of achieving the intended outcomes. The subject land is currently zoned in accordance with the concept basin footprint and concept road alignment. As the basin footprint has been extended south, the LLEP 2008 zoning and development standards maps are required to be amended to enable the development of this revised basin design.

If the land is not rezoned, the land-use zoning will not reflect the intended use of the site. This may hinder property acquisition should Council be forced to enter a compulsory acquisition process. Construction of the basin is considered necessary so that a number of temporary detention basins on privately owned land can be decommissioned and redeveloped for other uses, as per the zoning of those lands. Additionally, due to reconfiguration of the basin footprint, land has been identified which is now surplus to requirements. As the land will not be required for drainage or open space purposes, the planning proposal will remove the land acquisition from Council and will allow the land to be developed in an orderly fashion. The quantum of open space land will be balanced by the gain of additional open space land towards the south of the basin area.

Furthermore, the planning proposal is to amend development standards for part of 50 Croatia Avenue (Lot 6 DP 1228502) to rationalise standards in accordance with the Draft ILP within Part 2.11 of the LDCP 2008, as well as amend inconsistencies in LLEP 2008 mapping around the recently re-aligned Bernera Road. A planning proposal facilitating the necessary amendments to the LLEP 2008 is therefore the best means of achieving the objectives and intended outcomes.

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Section B - Relationship to strategic planning framework

- 3.3 Is the planning proposal consistent with the objectives and actions of the applicable regional, subregional or district plan or strategy (including any exhibited draft plans or strategies)?
 - a. Strategic Merit

The planning proposal is considered to be consistent with relevant regional, sub-regional or district plan or strategies. The objective of the planning proposal is not to increase residential, commercial or industrial development, rather it is to amend land use zones and relevant development standards to enable the provision of essential stormwater and community infrastructure, as well as to correct mapping errors. The infrastructure is necessary to accommodate the planned growth of the Edmondson Park area and will further assist in the provision of open space and recreational facilities to the community. The proposal rationalises land uses and development standards to enable the orderly development of surrounding land.

Greater Sydney Region Plan - A Metropolis of Three Cities

The planning proposal is broadly consistent with Objective 6: Services and infrastructure meet communities' changing needs. The rezoning of R1 General Residential land to RE1 Public Recreation is in accordance with the revised design for Basin 14 to accommodate the forecasted growth of the area. This proposal will enable the provision of much needed recreation areas in the rapidly growing locality. It also creates the potential for passive recreation and a children's play area to be developed on non-flood affected land, thereby optimising the use of public land for social infrastructure.

The planning proposal is broadly consistent with Objective 7: Communities are healthy, resilient and socially connected. The revised basin design allows for the optimal development of public open space which can be designed to include recreation facilities such as walkways, seating, cycle ways and a children's play area. Although not part of this proposal, the planning proposal will result in amendment to Part 2.11 Edmondson Park of the LDCP 2008, to improve connectivity to the public open space.

The planning proposal is consistent with Objective 10: Greater housing supply. The planning proposal facilitates the best and most efficient use of land, as it provides stormwater infrastructure and public open space to cater for growth of housing supply in Edmondson Park. The planning proposal will enable the decommissioning of several temporary on-site detention basins scattered throughout the suburb that are currently withholding the development of residential zoned land. The planning proposal results in the following:

- Approximately 14,000m² of R1 General Residential land being rezoned to RE1 Public Recreation
 and in return, approximately 3,200m² of RE1 Public Recreation being rezoned to R1 General
 Residential. It is noted that significant portions of this land is identified as a Flood Planning Area
 under the LLEP 2008. Despite the proposal resulting in an approximate loss of 10,800m² R1
 General Residential land, some of the land is restricted by flood constraints as well as a
 transmission easement for electrical lines limiting its development potential;
- The rezoning of R3 Medium Density Residential land to RE1 Public Recreation, to facilitate the footprint of the basin. This includes approximately 150m² of land at 10 Croatia Avenue (Lot 2 DP 1228502) which is too small to develop independently. Approximately 250m² of land has been removed from the outskirts of R3 Medium Density Residential land at 30 Croatia Avenue (Lot 4 DP 1228502) to facilitate the development of the basin. Despite this, the remaining area is considered to contain an acceptable level of development potential; and

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The amendment of development standards on a portion of land at 50 Croatia Avenue (Lot 6 DP 1228502) will rationalise standards in accordance with the Draft ILP. This amendment will slightly improve development yield of the lot, as height, floor space ratio and dwelling density standards are increased, and minimum lot size standards are reduced, to correspond with the current development standards on the western part of this lot.

The planning proposal is broadly consistent with Objective 12: Great places that bring people together. The proposal will rezone residential land to allow for the implementation of a revised basin design. The basin will include public open space in its design, featuring walkways, seating, and a children's play area on non-flood affected land

The planning proposal is broadly consistent with Objective 27: Biodiversity is protected, urban bushland and remnant vegetation is enhanced. The proposal results in an approximate gain of 11,200m² of land for the use of the basin and public open space. The development of the basin will require substantial earthworks which will result in the removal of existing vegetation. Despite this, the basin and public open space will provide an area where native trees can be established and grow to maturity. The co-location of the basin with the open space will enhance the relationship between vegetation, habitat and riparian land.

The planning proposal is broadly consistent with Objective 30: Urban tree canopy is increased. As previously mentioned, the development of the basin will require the removal of existing vegetation. Despite this, the future use of this land as a basin and area of public open space will create potential for the establishment of urban tree canopy within Edmondson Park.

The planning proposal is broadly consistent with Objective 31: Public open space is accessible, protected and enhanced. The rezoning to facilitate the development of stormwater infrastructure, integrated with public recreation, is an innovative way to implement open space in conjunction with local waterways. Whilst not a part of this proposal, these amendments will result in changes to the indicative layout plan of the Edmondson Park locality in Part 2.11 of the LDCP 2008, improving accessibility and connectivity to the public open space.

The planning proposal is broadly consistent with Objective 37: Exposure to natural and urban hazards is reduced. The proposal ensures the stormwater infrastructure, as specified within the revised design of Basin 14, will meet the needs of the growing Edmondson Park area and will limit flooding impacts in the locality.

Western City District Plan

The planning proposal is to facilitate the development of the improved design for Basin 14. This will provide flood mitigation infrastructure to Edmondson Park and social infrastructure in the form of quality open space, including a children's play area. Despite requiring the removal of vegetation for the basins' development, the proposal will result in the protection of the tributary of Maxwells Creek which traverses through the site, and will provide an area for the establishment and growth of native vegetation. This is considered to be consistent with the following priorities:

- W1: Planning for a city supported by infrastructure;
- W3: Providing services and social infrastructure to meet people's changing needs;
- W12: Protecting and improving the health and enjoyment of the District's waterways;
- W15: Increasing urban tree canopy cover and delivering Green Grid connections;
- W18: Delivering high quality open space; and
- W20: Adapting to the impacts of urban and natural hazards and climate change.

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Local Strategy

Assessment of the proposal with regards to Council's Community Strategic Plan is detailed in Section 3.4.

b. Site Specific Merit

The planning proposal will enable Council to acquire land for a stormwater detention basin, which will result in the protection of the existing and future built environment, as well as the enhancement of the natural environment and provision of passive recreation facilities. The proposal includes the rezoning of flood prone land, from residential uses to public recreation uses.

A portion of land at Lot 12 Camden Valley Way (DP 1239712) will be rezoned to enable residential development. This land is flood prone, however the remainder of Lot 12 Camden Valley Way is already zoned for residential uses. The DCP provides controls to ensure that the land can be made flood free appropriately, preventing harm to life and property in the event of a flood.

The planning proposal is not drastically altering the existing or future uses of the precinct; rather the rezoning will rearrange these existing uses, which will facilitate the development of the basin, repurpose land zoned for public open space which Council is not seeking to acquire, rationalise development standards in accordance with the Draft ILP, and amend the mapping inconsistencies along Bernera Road. The subject lands have all utility infrastructure available. Any additional yield from the development of Lot 12 Camden Valley Way (DP 1239712) or 50 Croatia Avenue (Lot 6 DP 1228502) will be captured by the existing contributions plan, which will ensure contributions for infrastructure and services are collected.

3.4 Is the planning proposal consistent with a council's local strategy or other local strategic plan?

The Planning Proposal is generally consistent with Council's Community Strategic Plan: *Our Home, Liverpool 2027*. Council's strategy adopts a quadruple bottom line approach, being Creating Connection (Social), Strengthening and Protecting Our Environment (Environment), Generating Opportunity (Economic), and Leading through Collaboration (Civic Leadership).

The planning proposal is consistent with the following desires of the community:

- Creation of more green spaces
 - The planning proposal increases the extent of land to be zoned for public open space.
 Continued residential development within Edmondson Park has resulted in an increased demand for quality open space.
- Creation of well-planned, attractive and people-friendly urban environments
 - The planning proposal will enable the LLEP 2008 to facilitate the development of the redesigned basin. This will ensure that down-stream flooding impacts are mitigated, and that temporary detention basins can be decommissioned. The provision of a more regular shaped space for the basin and public open space allows Council to provide synergies between these two spaces. The basin footprint is to be embellished with footpaths and landscaping providing passive recreation opportunities.
- Well managed use of their resources
 - The planning proposal results in the well managed use of Council resources as it will
 facilitate the optimal design of the basin and public open space. The rezoning of land at
 part of Lot 12 Camden Valley Way (DP 1239712) to residential uses means that Council
 does not have to acquire land which is surplus to the requirements of the new basin design,

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thereby optimising Council resources. Although the revised basin design requires Council to acquire additional land, the new design ensures the optimal performance of the basin to best meet the stormwater and social infrastructure needs of Edmondson Park.

The planning proposal is consistent with the following actions for Council:

- Protect and enhance bushland, rivers and the visual landscape
 - The proposed rezoning to facilitate the development of Basin 14 will result in the provision of public open space surrounding the North Tributary of Maxwells Creek. The addition of land currently zoned for residential uses, to land dedicated for the basin, will result in the increased protection of the creek.
- Exercise planning controls to create high-quality, inclusive, urban environments
 - In addition to the facilitation of Basin 14, the planning proposal seeks to rationalise planning controls on the site to align development standards with the Draft ILP, amend mapping inconsistencies, ensure the orderly development of land and remove isolated land zonings resulting in undevelopable land.

3.5 Is the planning proposal consistent with applicable State Environmental Planning Policies?

Compliance with any SEPP which applies to the land is given in Table 8 below. Note: any SEPP which does not apply to the land, or for which the planning proposal will not preclude the operation of, is not listed.

Table 8: Compliance with SEPPs

Table 8: Compliance with	h SEPPs	
SEPP	Complies	Justification
No 19 Bushland in Urban Areas	Yes	The planning proposal is not inconsistent with the SEPP. The rezoning of land from residential uses to RE1 Public Recreation will facilitate the development of the basin. Whilst this will require the removal of existing vegetation, the completed development will result in an area where native vegetation can be established and grow to maturity.
No 44 Koala Habitat Protection	Yes	This planning proposal will not undermine any Koala Habitats to a greater extent than for which is already permitted. The rezoning results in the reduction of land zoned for residential purposes and increases land zoned for public open space. In the case of land to be rezoned at part of Lot 12 Camden Valley Way (DP 1239712), the remainder of the lot is already zoned for urban purposes.
No 55 Remediation of Land	Yes	This planning proposal will not undermine the need for any future development to undergo a Phase 1 Contamination Assessment. Part of Lot 12 DP 1239712 contains RE1 Public Recreation land which is to be rezoned to R1 General Residential. This part of the lot will therefore permit residential development. The lot is subject to approved DA-561/2016 for residential subdivision. This Development Application included the assessment of a Preliminary & Detailed Site Investigation Report, Contamination and Salinity Report and Remedial Works Action Plan. These reports were approved as part of development consent. Refer to Attachment A for this supporting documentation. The site is deemed to have addressed contamination on this lot as part of this DA.
No 65 Design Quality of	Yes	Land zoned for recreation uses at Lot 12 Camden Valley Way (DP 1239712) is to be rezoned to R1 General Residential, in

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Residential Flat Development		accordance with the remainder of the lot. This zone allows for the development of Residential Flat Buildings. Where applicable, any amended or future Development Application on this lot will be assessed in accordance with this SEPP.
Exempt and Complying Development Codes 2008	Yes	It is proposed that the land reservation acquisition maps are amended in accordance with the revised land-use zoning maps to ensure exempt and complying development can be carried out in accordance with the zone objectives.
Infrastructure 2007	Yes	The planning proposal seeks to enable flood mitigation works as part of Basin 14. This is classified as development permitted without consent under Part 3, Division 7 of the SEPP. Part 3, Division 12 contains provisions for development within parks and public reserves, and Part 3, Division 17, Subdivision 2 contains provisions for development adjacent a classified road. The proposal is not inconsistent with these clauses.
		The proposal also includes the change of the zoning of land adjacent to Bernera Road, both to and from SP2 Infrastructure. This is for the purposes of amending mapping inconsistencies only.
		The proposal does not seek to intensify or enable further development which would interfere with operation of, or delivery of infrastructure. Council expects a condition of Gateway would be to consult with public utility providers.
Sydney Region Growth Centres	Yes	The subject site is located within the South West Growth Centre and is biodiversity certified under this SEPP. Despite this, landuse zoning under the LLEP 2008 applies to the site. The proposal is consistent with the aims of the SEPP as it facilitates infrastructure for the orderly development of the growth centre.
Vegetation in Non- Rural Areas 2017	Yes	The planning proposal is not inconsistent with the SEPP. Whilst the development of the basin will result in the removal of existing vegetation, it will provide an area for vegetation to be established and grow to maturity. Additionally, Council's DCP provides controls for the removal of any vegetation.

3.6 Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The planning proposal seeks an amendment to the Liverpool Local Environmental Plan 2008. Compliance with Ministerial Directions is provided in Table 9 below. Note: any Direction which does not apply to the planning proposal is not listed.

Table 9: Compliance with s.9.1 Directions

S.9.1 Directions	Complies	Justification
Employment and Res	ources	
1.1 Business and Industrial Zones	Yes	The proposal includes changes to land containing B6 Enterprise Corridor zoning. The proposed changes are to the zone realignment adjacent to Bemera Road and are not inconsistent with the objectives of this Direction. The proposed changes to and from the B6 zoning are minor in nature, are not considered to reduce the development potential of these zones and are to amend mapping inconsistencies only.

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Housing, Infrastructure and Urban Development

3.1 Residential Zones

Yes

The inconsistency with the Direction is justified under Part (6)(d) of Direction 3.1, as the changes to residential land use zones are considered to be of minor significance.

The proposal includes to the rezoning of approximately 14,400m² of residential land that is partially burdened with an easement for transmission lines. The revised design for the basin is extended south to envelop R1 General Residential land and also encroaches on R3 Medium Density Residential land. This will provide for the stormwater needs of the surrounding urban area, as well as allow for the provision of a children's play area on non-flood affected land. Despite the net loss of residential zoned land, the proposed use results in the optimal use of land for the site and locality.

The proposal compensates for the loss of this residential zoned land by adding approximately 3,200m² of R1 land to Lot 12 Camden Valley Way (DP 1239712) and increasing development standards on a portion of land at 50 Croatia Avenue (Lot 6 DP 1228502).

The addition and removal of residential land adjacent to Bernera Road is for the purposes of amending LLEP 2008 mapping inconsistencies.

3.4 Integrating Land-Use and Transport Yes

This planning proposal amends the zoning and development standards of land zoned for residential and business purposes. The proposed changes are minor in nature, as the objective of the planning proposal is to facilitate the development of the revised basin design and is not for the uplift or downzoning of residential or urban uses. Whilst not part of this proposal, the planning proposal will result in amendments to the LDCP 2008 seeking to improve traffic and pedestrian access to and from the public open space. In turn, this has required the amendment of development standards for part of 50 Croatia Avenue (Lot 6 DP 1228502) as the current development standard boundaries do not align with the draft road layout.

The proposal is also to amend mapping inconsistencies resulting from the re-alignment of Bernera Road.

Hazard and Risk

4.3 Flood Prone Land

Yes

Land to be rezoned from RE1 Public Recreation to R1 General Residential is identified as being within a flood planning area under the LLEP 2008. However, the land can be made flood free if developed in accordance with controls within Council's DCP and the flood development manual, and therefore Council believes this change is of minor significance and satisfies Part (9)(b) of the Direction.

The planning proposal is to facilitate the development of a basin for stormwater infrastructure. This will mitigate the effects of flooding on several downstream properties.

Despite this minor inconsistency, the planning proposal is considered to result in positive changes to flood management within the subject site and the locality.

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Regional Planning		
5.10 Implementation of Regional Plan	Yes	The regional strategy in effect is the Western City District Plan. Consistency with this plan is demonstrated in section 3.3 of this report.
Local Plan Making		
6.1 Approval and Referral Requirements	Yes	The planning proposal does not contain provisions requiring additional concurrence, consultation, or referral to a Minister or public authorities.
6.2 Reserving Land for Public Purposes	Yes	The proposal seeks to include the acquisition of certain land within the LLEP 2008 land reservation acquisition maps. The planning proposal seeks to remove the acquisition of land requirements at Lot 12 Camden Valley Way (DP 1239712). The proposed inclusion and exclusion of land is in accordance with the redesign of the basin footprint and amendments to mapping inconsistencies adjacent to Bernera Road.
		The redesign of the basin footprint includes approximately 14,400m² of land to be zoned RE1 Public Recreation, and approximately 3,200m² of land to be zoned R1 General Residential, as it is surplus to the revised design requirements. The land acquisition maps are proposed to be amended to match the revised zoning extent.
		Council is nominated as the acquisition authority for any additional lands to be acquired as per the LLEP 2008. The proposed changes result in a net gain of land reserved for public purposes, which will result in a preferred outcome as the optimal basin design can be realised.
Metropolitan Planning		
7.1 Implementation of A Plan for Growing Sydney	Yes	Consistency with <i>Greater Sydney Region Plan – A Metropolis</i> of <i>Three Cities</i> is demonstrated in section 3.3 of this report.

Section C - Environmental, social, and economic impact

3.7 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No. The planning proposal seeks to rezone land from predominately residential uses to public recreation uses to facilitate the development of the basin, which will result in an increase to the extent of land zoned for public open space. The RE1 Public Recreation zone objectives aim to enhance, maintain and protect the natural environment. Land subject to the planning proposal has been biodiversity certified and the LLEP 2008 and LDCP 2008 contain provisions in relation to native vegetation retention in these areas.

As land at 50 Croatia Avenue (Lot 6 DP 1228502) is already zoned for residential uses, the alteration of development standards on part of this lot will not result in additional environmental impacts. Similarly, the realignment of zone boundaries adjacent to Bernera Road to amend the mapping inconsistencies, will not change or intensify the existing use of land, and therefore will not result in additional environmental impacts.

3.8 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed? EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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No. The rezoning of certain lands and alterations of development standards is not likely to have any significant environmental impacts on the site or locality. Whilst the development of the basin will involve substantial earthworks and the removal of existing vegetation, it will result in an area where native vegetation can be established, grow to maturity and potentially provide habitat for native fauna. The rezoning of land to recreation uses for the development of Basin 14 will reduce any impact upon existing vegetation and habitats. It is noted that the proposal results in a net increase of land to be zoned for recreation uses.

In relation to Lot 12 Camden Valley Way (DP 1239712), the rezoning of part of this lot residential uses is not likely to cause negative environmental effects, as the land has already been cleared and developed for the purpose of a temporary on-site detention basin. Additionally, land subject to flooding is addressed by the LLEP 2008 and the LDCP 2008. As the rezoning of land adjacent to Bernera Road is for the purposes of amending mapping inconsistencies, and land at 50 Croatia Avenue (Lot 6 DP 1228502) is already zoned for residential uses, the proposed changes will not result in any significant environmental effects.

3.9 Has the planning proposal adequately addressed any social and economic effects?

The most likely economic effects of the planning proposal would be to the owners of land being rezoned from R1 General Residential or R3 Medium Density Residential to RE1 Public Recreation. This is to facilitate the essential redesign of Basin 14, which will cater for the growth of Edmondson Park and also provide an area of non-flood affected land for the development of an area of open space, including a children's play area. Council's acquisition of this land will be subject to the *Land Acquisition (Just Terms Compensation) Act* 1991.

The rezoning will result in both positive social and economic effects to Edmondson Park as it will ensure the timely delivery of flood mitigation infrastructure, which will serve to protect the existing and proposed built environment. Additionally, the rezoning will result in an increased area of open space for the community, ensuring adequate recreational facilities are provided for current and future residents.

An objective of this proposal is to rationalise the development of land surrounding the basin. This includes the rezoning of part of Lot 12 Camden Valley Way (DP1239712) to R1 General Residential. As this land has been identified as surplus to the revised basin design requirements, the rezoning removes the obligation for Council to acquire this land. This will remove the economic burden for Council for acquisition, which can otherwise be focused on acquiring land required for the basin.

The planning proposal has resulted in amendments to the Edmondson Park ILP within the LDCP 2008. In turn, the development standards for part of 50 Croatia Avenue (Lot 6 DP 1228502) are to be altered so the development standard boundaries align with the draft road layout. This change will increase the dwelling density, height and floor space ratio standards, whilst reducing the minimum lot size standard, resulting in a slight improvement in development potential for the lot.

The amendment of mapping inconsistencies along Bernera Road is likely to result in positive social and economic effects for Council and land owners. Rezoning these lots will allow land that is zoned SP2 Infrastructure, but is not needed for the road, to be rezoned for other purposes (R1, R3 and B6), whilst ensuring land that is needed for the road is zoned SP2 Infrastructure.

The overall zoning amendments will provide for the efficient use of the land for the stormwater network, public open space facilities and vehicular and pedestrian access, thereby having a positive impact to the economic activities in the business zoned land. Public exhibition of the planning proposal will provide an opportunity for Council to engage with property owners if they have any concerns as to what impact the proposal may have upon their property.

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Section D - State and Commonwealth interests

3.10 Is there adequate public infrastructure for the planning proposal?

The planning proposal is not considered to demand any additional public infrastructure. The planning proposal may result in a marginal increase in development yield for Lot 12 Camden Valley Way (DP1239712) due to a portion of the lot being rezoned to residential uses, and 50 Croatia Avenue (Lot 6 DP 1228502) due to amended development standards. It is considered that the extinguishment of development in land being rezoned to RE1 will off-set this marginal increase. The proposal seeks to facilitate the delivery of flood mitigation infrastructure adjacent to an area of public open space. Given the current and forecasted growth of Edmondson Park, there is increased demand for both stormwater infrastructure and quality open space.

3.11 What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

The views of State and Commonwealth public authorities will be considered following a Gateway determination. The following government agencies, or utility owners, have been identified as potentially interested parties for reasons given below:

- NSW Department of Primary Industries: A tributary of Maxwells Creek runs through the subject site:
- Ausgrid & Transgrid: An easement for a transmission line runs through the subject site;
- Roads and Maritime Services: The subject site is adjacent to Camden Valley Way, which is a classified road;
- APA Gas & Jemena: A gas pipeline is located under Camden Valley Way, which places the subject site within the asset notification zone; and
- NSW Office of Environment and Heritage: The subject site contains riparian land, flood-prone land, and vegetation.

Part 4 – Mapping

The existing standards and the proposed changes to the LLEP 2008 are shown in the maps below.

Land Use Zoning Maps

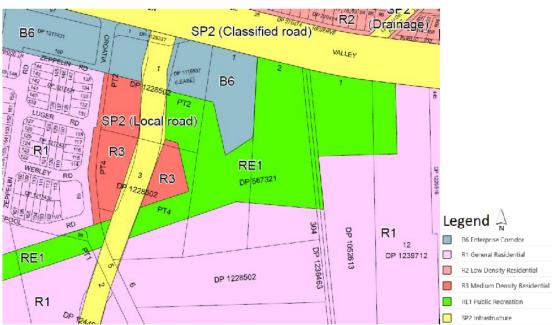


Figure 10: Existing land use zoning map for the subject site



Figure 11: Proposed land use zoning map for the subject site

Minimum Lot Size Maps

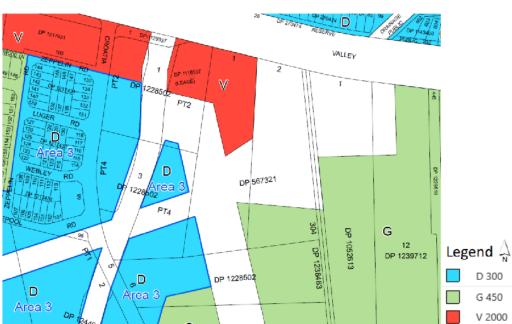


Figure 12: Existing minimum lot size map for the subject site



Figure 13: Proposed minimum lot size map for the subject site

Floor Space Ratio Maps

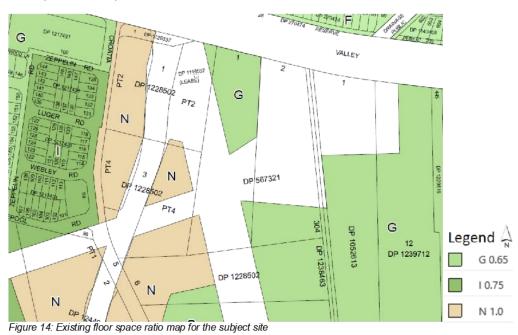




Figure 15: Proposed floor space ratio map for the subject site

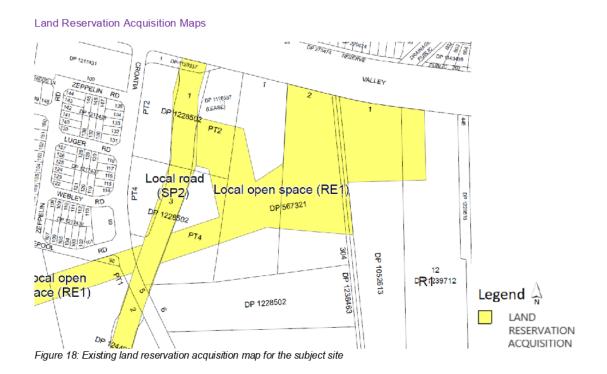
Height of Buildings Maps

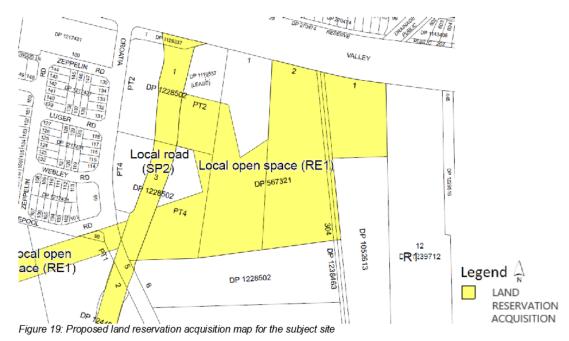


Figure 16: Existing height of building map for the subject site



Figure 17: Proposed height of building map for the subject site





Minimum Dwelling Density Maps



Figure 20: Existing minimum dwelling density map for the subject site



Figure 21: Proposed minimum dwelling density map for the subject site

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Part 5 - Community Consultation

Community consultation will be undertaken in accordance with the Gateway determination. It is anticipated that the proposal will be exhibited a period of at least 28 days through:

- · Newspaper advertisements in the Liverpool Leader;
- · Notification on Liverpool City Council's public exhibition website; and
- Letters to the affected landowners.

Part 6 - Project Timeline

An anticipated project timeline is shown in Table 10 below.

Table 10: Anticipated project timeline

Timeframe	Action
June 2019	Submission of Planning Proposal to DP&E
July 2019	Gateway Determination issued
August 2019	Completion of required technical information
September 2019	State agency consultation
October 2019	Community consultation
November 2019	Public hearing if required
December 2019	Consideration of submissions and proposal post-exhibition
January 2020	Post-exhibition report to Council
February 2020	Drafting and making of the plan

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Attachment A - Additional Information for DA-561/2016

- Remedial Works Action Plan (19 December 2016)
- Contamination and Salinity Report (27 April 2016)
- Preliminary & Detailed Site Investigation Report (08 December 2014)

EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Attachment 5 Final DCP

Amending Liverpool Development Control Plan 2008 Part 2.11

Land Subdivision and Development in Edmondson Park

June 2019

Part 2.11 must be read in conjunction with Part 1





EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

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Note that text which is to be inserted is shown in <u>green and underlined</u>, text which is to be deleted is shown in <u>red with strikethrough</u> and explanatory notes are shown in <u>blue italics</u>.

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Liverpool Development Control Plan 2008

Part 2.11 Edmondson Park

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1. Preliminary

Applies to

- 1. Part 2.11 applies to the land, shown in Figure 1.
- 2. Part 1 also applies to the land shown in Figure 1.
- 3. Part 3.8 also applies for non-residential development on the land.
- 4. Parts 3.1 3.7 do not apply to the land.



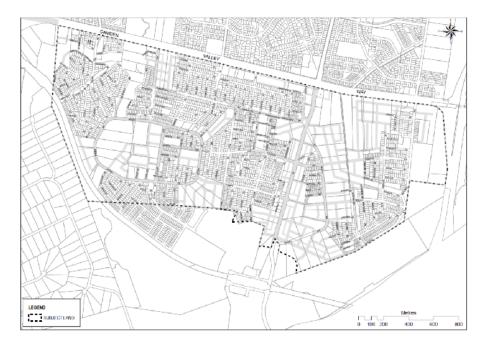


Figure 1: Land to which this part applies *This figure has been amended to reflect the new indicative road layout in the vicinity of Maxwells Creek North Riparian Park, as detailed in Council report dated 26 June 2019.*

Background

- Edmondson Park has been master planned to achieve current public policy objectives in terms of meeting the future housing needs for the changing community, reducing the environmental impact and enabling greater social interaction. The proposed development will be characterised by a greater mix of housing types, higher residential densities, vibrant communities, active streets and environmentally responsible development.
- 2. The vision of Edmondson Park is to create a primarily residential neighbourhood located and focused around neighbourhood centres or the Town Centre. The neighbourhood centres will provide a central node and will accommodate a mix of convenience retail, limited commercial uses and residential development. The Town Centre will be located centrally within the release area, supported by the Edmondson Park train station, part of the South West Rail Link. The Town Centre will provide a full range of retail, commercial and high density residential uses and development will be orientated around a main street. This vibrant development is to be set in a context of high value natural habitat, which is both a visual backdrop and a usable open space amenity to the residents.
- A primary precursor to success of the development, as an attractive and vibrant place to live, will be the controls of the built form and the consideration given to safety and security, the quality of the public open space and the provision of public transport services, both bus and rail.
- 4. The need to respond to the potential for integrated uses, higher residential densities and higher public transport use at this location and at this time is a critical responsibility when considered in the context of:
 - Limited land resources;
 - Minimisation of the development footprint; and
 - The environmental damage caused to water systems, ecological communities and decreasing air quality by current suburban development.
- The specific qualities of Edmondson Park provide the opportunity to create an environment that addresses future community needs while being sustainable and urban.

Objectives

- a) To facilitate urban design that responds to the physical, cultural and urban heritage of the area;
- To facilitate urban development that meets environmental sustainability objectives;
- To ensure all development achieves a high standard of urban and architectural design quality;
- d) To ensure housing density targets are met through the provision of a range of housing types that offer greater diversity and affordability:
- e) To create walkable neighbourhoods, with good access to public transport;
- To ensure vehicular, pedestrian and cycle ways link efficiently within and between all land uses;
- g) To accommodate access for all people throughout Edmondson Park;
- To maximise opportunities for local employment and business in appropriate locations;
- i) To create a compact, vibrant and successful town and village centres;
- j) To provide cultural, recreational and social infrastructure that is flexible, adaptable and accessible;
- k) To protect and enhance riparian corridors, significant trees and vegetation;

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- To ensure the timely delivery of critical infrastructure and efficient use of land and existing infrastructure;
- m) To deliver quality places of learning to service the future educational demands of the precinct; and
- To provide opportunities to reduce water consumption and manage stormwater runoff.

1.1 Indicative Layout

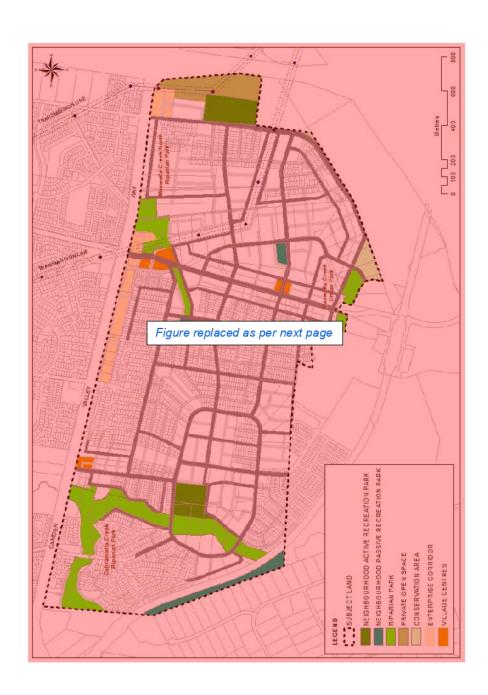
The Indicative Layout Plan (ILP) at Figure 2 illustrates the broad level development outcomes for Edmondson Park. It outlines the development footprint, land uses, density ranges, open space and riparian corridors, heritage areas, major transport linkages and location of community facilities and schools.

Objectives

a) To ensure that development of the precinct is undertaken in a co-ordinated manner consistent with the South West Structure Plan and the DCP.

Controls

- All development is to be undertaken generally in accordance with the Indicative Layout Plan at Figure 2 subject to compliance with the objectives and development controls set out in this Part;
- Where variation from the ILP is proposed, the applicant is to demonstrate that the proposed development is consistent with the Vision and Development Objectives for the precinct set out within this Part.



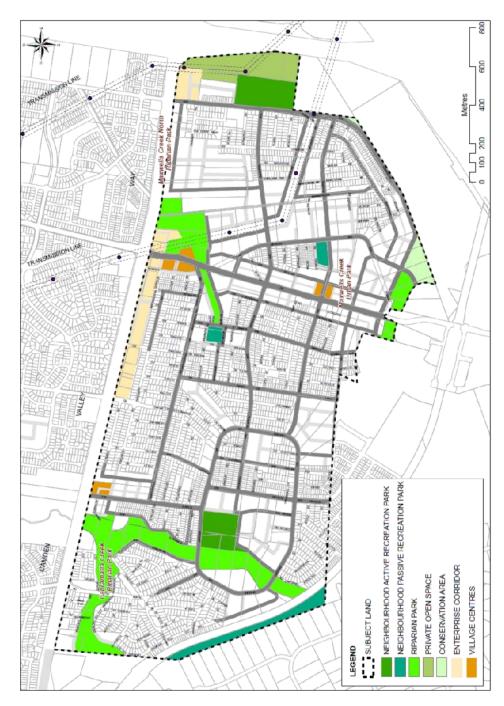


Figure 2: Indicative Edmondson Park Layout Plan This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park, as detailed in Council report dated 26 June 2019.

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1.2 Development within Sub Precincts

Sub-Precincts are defined by the main fixed streets as show in Figure 3. While the boundary streets to the sub-precincts are fixed, there is flexibility to make layout changes to the internal streets except those identified as 'Fixed Roads' in Figure 7, subject to meeting the Objectives and Controls below.

Objectives

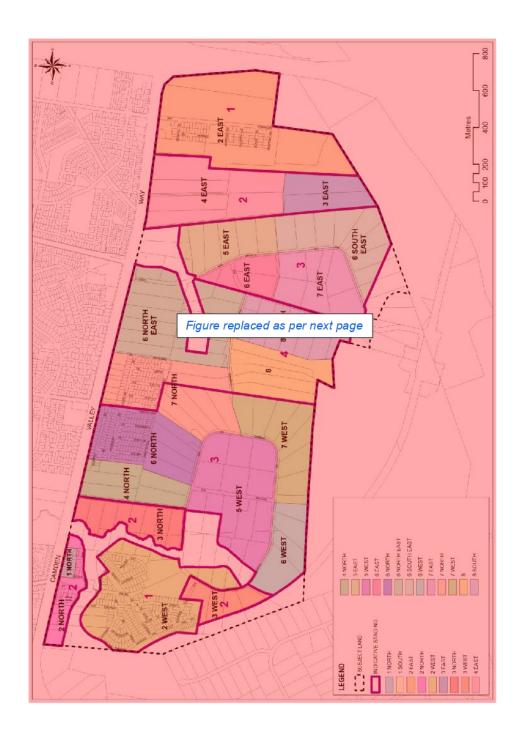
- To allow departure from the Indicative Layout Plan should a demonstrated development and community benefit be achieved; and
- b) To ensure that access, drainage and servicing is appropriately provided

Controls

An applicant may depart from the subdivision layout within a sub-precinct provided that it is demonstrated that:

- The block layout and subdivision objectives and controls outlined in Figure 3 are met
- 2. The level of access to fixed roads is retained.
- 3. The provision of drainage and service infrastructure is retained.
- 4. There is no adverse impact on adjoining sub-precincts.

Figure 3 also shows an indicative staging of development based on the location of existing infrastructure. Development can proceed outside of this indicative staging should access to services, drainage & roads be resolved to the satisfaction of Council.



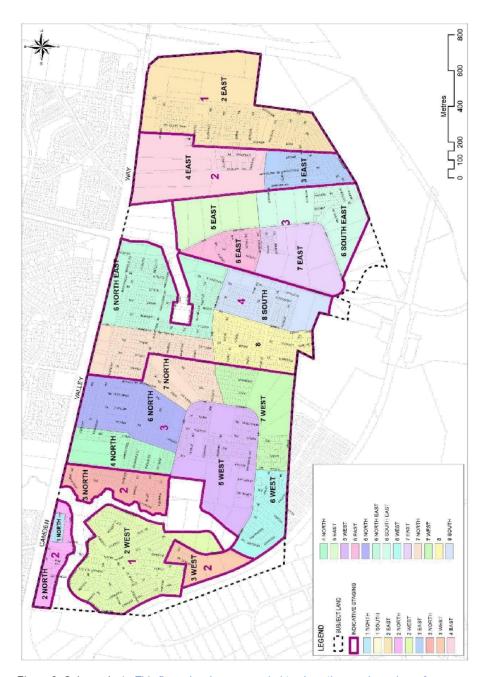


Figure 3: Sub-precincts This figure has been amended to show the new boundary of 'Indicative Stage: 5 East' in response to the revised footprint of Maxwells Creek North Riparian Park.

1.3 Hierarchy of Centres

Objectives

- To ensure an appropriate supply, distribution, and mix of retail, commercial and employment floor space across the precinct.
- b) To ensure that the retail floor space within Edmondson Park does not undermine the potential of existing and proposed centres within the region.
- c) To create a compact, vibrant and successful town centre and village centres.
- d) To encourage the early investment and delivery of employment generating development and retail uses to serve the population.

<u>Controls</u>

Development is to be consistent with the characteristics detailed as follows.

Edmondson Park Town Centre

 Development in the Edmondson Park Town Centre is facilitated by the SEPP (State Significant Precincts) 2005 and is not subject to this Part.

Village Centres

- Village Centres (up to 1000sqm of retail space) are not intended to act competitively with the proposed Edmondson Park Precinct town centre. Rather they provide a convenient alternative for residents who would otherwise have to invest more time and money to visit a larger centre.
- The following criteria have been used to determine the location of the village centres:
 - 750 1,000 housing lots within a 500m catchment of the village centre.
 - The proximity of key destinations such as parks, water bodies and schools.
- It is envisaged that Edmondson Park will have 3 mixed-use village centres that respond to various qualities of the site, such as environmental amenities or access routes. The character envisaged for the village centres are described in Section 6

1.4 Character Area Statements

As the Edmondson Park Release Area will create a new town centre with large areas of surrounding residential neighbourhoods and village centres. It is important that there is variety, diversity and choice in living, working and recreational environments. There is more to development than land use and density. It is important that the built form, layout, style and public domain reinforce the desired character for each area, and gives an identity and sense of place to different areas within Edmondson Park. The character areas are:

- The Town Centre,
- Village Centres,
- Enterprise Corridor.
- Urban.
- Urban Transition,
- Suburban, and
- Residential Large Lot.

The character areas are loosely tied to the minimum dwelling density maps (LLEP 2008), refer to Figure 5 for the locations of Character Areas.

Town Centre

 The Edmondson Park Town Centre is situated on land in Edmondson Park South and is not subject to this Part. For development controls relating to the Edmondson Park Town Centre refer to the Edmondson Park South DCP 2012.

Village Centres (Zone R3)

- 1. The Village Centres will form a **node** within a walkable and cycling catchment of the majority of new and existing residents. The centres will provide for daily conveniences within a pedestrian friendly setting and have a maximum of 1,000sqm of retail space. The centres are located at the confluence of community facilitates to enhance the village experience and life of the centre. The Village Centre will contain small businesses at ground level that encourage a mix of small scale convenience retail uses with shop-top housing above. Medium density attached housing and apartments surrounding the village centres will reinforce the urban character.
- 2. The urban form of the villages will be compact with narrow shopfronts. Architecturally, the buildings will be urban in character reflecting the character of traditional village centres. Convenience retail uses are to front directly onto the footpath. It is envisaged that there will be a number of small shops of less than 80sqm gross floor area each. Total retail/commercial gross floor space will be 1,000sqm max. per village centre.
- 3. The Rynan Avenue village centre is characterised by 2 3 storey attached buildings. The village centre at the intersection of Camden Valley Way and the Bus Priority Corridor (Bernera Road) is characterised by 3 4 storey attached buildings, while the village centre at the intersection of the Bus Priority Corridor and Poziers Road is characterised by 4 6 storey attached buildings with a large component of shop-top housing.
- 4. The **public domain** of the centres is to be characterised by formal and well framed streetscapes containing formally and regularly spaced, 6 8m apart, large deciduous trees in hard verges and tree wells, street furniture and wide paved footpaths capable of holding outdoor café seating. Ease of pedestrian and cyclist movement and access is to be prioritised over vehicle movement, and the streetscape is to be designed to incorporate subtle urban design led traffic calming elements.



Figure 4: Artistic view of Village Centre - Neighbourhood park and community facilities

Enterprise Corridor (Zone B6)

 The Enterprise Corridor character area is located at the northern end of the locality along Camden Valley Way and at the northern end of Ardennes Avenue. It will service passing trade travelling along Camden Valley Way. A service road will run

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parallel to Camden Valley Way with 45 degree parking to provide access to all properties and businesses fronting Camden Valley Way. Rear lane access is to be provided to service these businesses. The area is characterised by up to 2 storey retail and commercial premises built to the street alignment. To maximise active frontages and to minimise the scale of individual buildings, each retail unit will have a maximum street frontage of 30m and a maximum gross floor area of 1,000 sqm.

Urban (Zone R1, 28dw/Ha)

- The Urban Character Area is a dense, urban, but predominately residential zone that provides a transition between the Town Centre and the medium to lower density residential areas. The character area helps define the main avenue, the Bus Priority Corridor, that leads into the Town Centre and helps frame the Urban Parkland and Maxwell's Creek Urban Park.
- Housing types that reinforce the urban character and need for well-located higher densities predominate including apartment buildings and small lot/attached housing. A minimum net residential density of 28 dwellings per hectare is required. Building setbacks are relatively shallow, and there is a close interaction of buildings to the surrounding streets.
- Taller buildings are encouraged to frame the Bus Priority Corridor and the Maxwells Creek Urban Park. Buildings are predominantly between 3 - 6 storeys and massed towards the public realm.
- 4. The public streetscape is formal in arrangement consisting of wide footpaths, large deciduous trees spaced evenly every 8m max., placed in a hard landscaped verge and forming a large street canopy. To minimise the visual and physical impact of vehicle access to properties on the public streetscape, including footpath crossovers and garages, vehicle access and servicing is via side/secondary streets or rear lanes.

Urban Transition (Zone R1, 17 & 21dw/Ha)

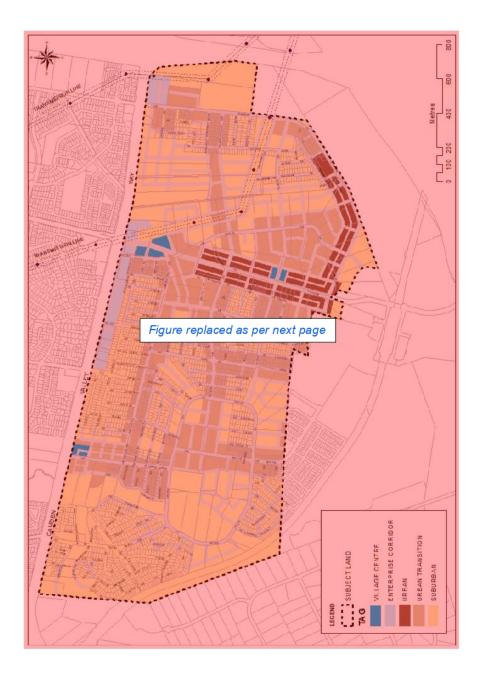
- The Urban Transition Character Area is a predominantly residential zone that
 provides a transition between the more urban higher density and the more
 suburban lower density character areas. Urban Transition reinforces the legibility
 and structure of Edmondson Park through the framing of the secondary routes,
 village centres and parkland.
- It comprises a range of housing to cater for varying household needs including low rise apartments, attached, semi-detached and detached housing. A minimum net residential density of 17 or 21 dwellings per hectare is required. Lots for detached residential dwellings are typically between 250 and 400sqm.
- Buildings are predominantly 2 storeys, with potential for 3 storeys along parks, adjacent to 'Urban' Character Area, and to reinforce corners. Buildings will contain medium setbacks and good landscaping.
- The public streetscape is formal in arrangement and transitional in character, containing large trees in soft verges spaced 8m apart.

Suburban (Zone R1, 14dw/Ha)

- This predominantly low density residential area is characterised by 1 2 storey detached and semi-detached homes in a rich landscaped setting. A minimum net residential density of 14 dwellings per hectare is required. Housing typically features verandahs fronting onto the street, overhanging eaves. Lots are typically between 400 and 700sqm.
- The public and private domain features informal native and non-native planting that requires little watering, and attracts native flora and fauna. Verges in the public streetscape are soft landscaped, containing low level ground cover and multiple tree species spaced 8 – 12m apart.

Residential Large Lot

 Residential Large Lot zoned land is situated on land in Edmondson Park South and is not subject to this Part. For development controls relating to the Residential Large Lot zoned land refer to the Edmondson Park South DCP 2012.



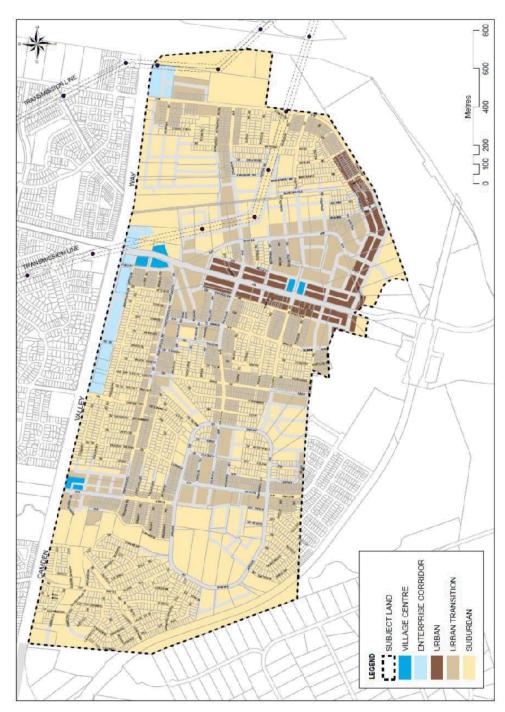


Figure 5: Locations of Character Areas This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park. The western part of no. 50 Croatia is now identified as being 'Urban Transition', instead of 'Suburban', to rationalise character areas in accordance with the revised road layout, as detailed within the Council report dated 26 June 2019.

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1.5 Public Transport

The construction of the train station and the bus priority corridor will provide an opportunity to integrate public transport with residential areas and the town centre in order to promote public transport usage.

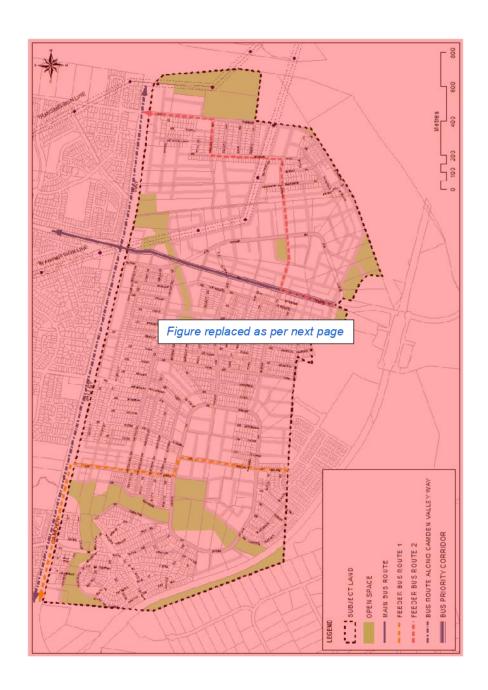
Placing bus stops and providing a frequent bus service where there is a concentration of retail, commercial activity, medium density residential development, schools and community centres will encourage people to use the public transport system.

Increased availability of public transport reduces car dependency. A convenient and safe pedestrian network and the provision of attractive facilities are central to encouraging public transport use.

Objectives

- To provide and promote public transport that is accessible to all residents and village or town centre users and visitors.
- b) To locate public transport stops close to retail, offices, community facilities, schools, community facilities and areas of medium density residential development.
- c) To ensure clear, safe pedestrian links to all public transport stops.

- Optimal distances between bus stops outside the town centre will be determined in consultation with the relevant bus service provider (stops in the order of every 400m).
- Ensure bus stops and mixed use activities are co-located to provide security and activity.
- Provide two local feeder bus routes through the release area as indicated in Figure
 The location of feeder bus stops will serve people's travel patterns and be located in consultation with the bus service provider.
- Public transport is to be easily accessible and located close to focal points (i.e. parks, schools, village centres etc).
- Bus shelters are to be located at every bus stop (except within the village centres where bus stops are incorporated into the built form of the buildings, by elements such as covered walkways and awnings).
- 6. All roads that are bus routes are to have a minimum carriageway width of 7m.



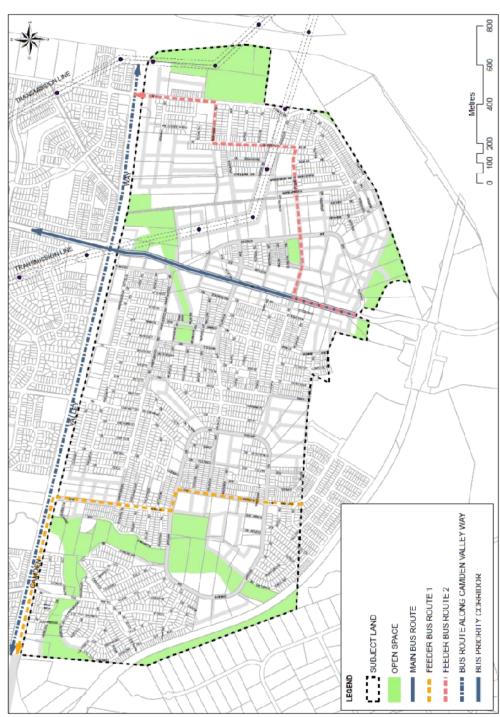


Figure 6: Possible Public Transport Routes This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park.

2. Controls for the Public Domain

The controls in this part relate to the subdivision of land. Controls on land within allotments created in this locality are located in Section 3 and 4 of this chapter.

The public domain is the part of the release area which is not privately owned and which is accessible to the public.

The design, management and safety of elements within the public domain such as public streets, parks and spaces, paving, street furniture, street trees, and gardens should be coordinated so that the character and image of the location is enhanced.

2.1 Street Network and Access

Objectives

- a) To provide an attractive residential street environment.
- b) To provide for the safe and efficient circulation of traffic.
- c) To provide for the safe and efficient movement of pedestrians with particular regard to the provision of clear and safe access routes for people who have a disability.
- d) To provide for efficient movement of local bus services and direct pedestrian access for all members of the community including those with disabilities
- e) To provide regional district and local transport access with clear vehicular, pedestrian and cycle connections to the surrounding areas.
- To integrate the development with bus priority corridor and the South-West Rail Link.
- g) To ensure safe efficient and direct access to retail and commercial areas.
- h) To improve air quality by reducing local vehicular trips.

Controls

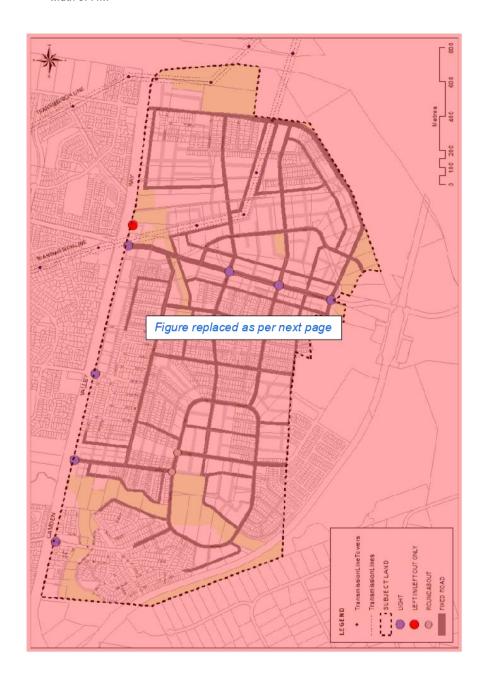
Regional Network Connections

- 1. Left and right in-out turns to and from Edmondson Park will be provided at the signalised intersections shown in Figure 7.
- In addition to these intersections, a left in-out turn is permitted from Edmondson Park onto Camden Valley Way as indicated in Figure 7.

Local Street Network

- 1. With applicable Development Applications, a subdivision plan is to be submitted highlighting the street network. All plans must indicate street types and intersection treatments.
- 2. Council may require additional traffic calming measures to be incorporated into four-way intersections where traffic volumes necessitate controls in addition to signage. Measures may include roundabouts, carriageway narrowing or realignment, pedestrian islands or raised platforms. In circumstances where traffic volumes require traffic calming measures in excess to that provided in the section 94 plan, these are to be provided by the developer.
- Subdivision plans are required to comply with the fixed roads identified in Figure
- 4. The proposed local street networks detailed within Figure 8 are to provide a clear hierarchy for roads in the form of a modified grid road pattern.
- 5. Retain and incorporate existing streets into the road network where possible and practical
- 6. Provide a grid-like street network pattern to facilitate walking and cycling and enable direct local vehicle trips within the neighbourhood. Cul-de-sacs will not be supported other than where alternative street patterns are not achievable.

- 7. Design safe pedestrian crossing points to the satisfaction of Council.
- 8. All intersections are to be designed in accordance with the RMS Austroads standards.
- 9. Street sections are to comply with Chapters 2.2 and 2.3 of this Part.
- Streets planned to accommodate bus routes are to have a minimum carriageway width of 7m.



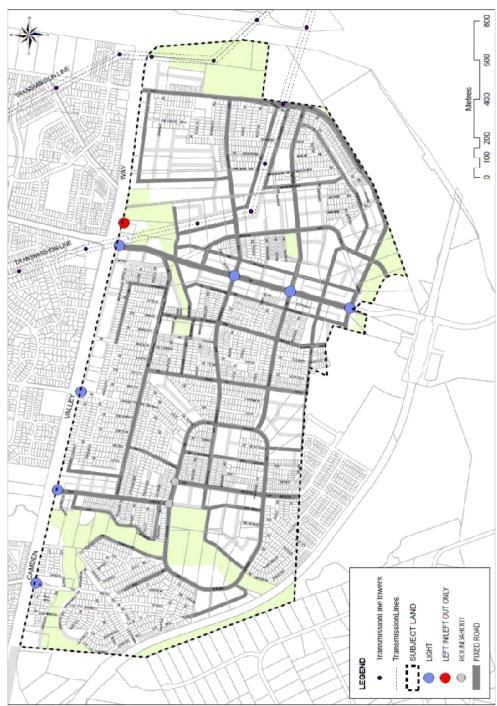


Figure 7: Fixed Roads This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park. A fixed road has been located adjacent to the southern boundary of the park. This will promote residential amenity and safety, as dwellings will not back onto the park.

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Street Types

Background

The proposed development comprises a network and hierarchy of streets that link the site with the surrounding urban fabric.

The location of the train line and the bus priority corridor connection to the Liverpool -Parramatta Bus Transit Way provides a good opportunity to increase the accessibility of the site through the public transport system.

A pedestrian and cycle network linking residential areas, villages and the town centre provides the opportunity to discourage the use of private vehicles and promotes exercise and enjoyment of the environment.

Objectives

- a) To encourage a low-speed traffic environment.
- b) To develop a comprehensive street network that links the site to the surrounding residential, commercial and employment areas.
- c) To provide a comprehensive pedestrian and cycle network linking residential areas with parks, recreation areas, and town and village centres.
- d) To create a high quality safe environment for walking and cycling
- e) To provide dignified and equitable disabled access to public places, streets, public / commercial buildings and residential areas.
- To enhance the existing landscape character of Campbelltown Road.
- g) To improve the landscape character of Camden Valley Way.
- h) To provide highly accessible neighbourhoods with clear linkages to employment, retail and recreation areas both within and external to the suburb.
- To provide access to bus and rail services from commercial, residential and neighbouring areas.

- Two main streets are to link the town centre with Camden Valley Way.
- The extension of Bernera Road generally along a realigned Croatia Avenue will provide the main road based public transport access. This road will have a bus priority corridor linking with the train station at an interchange in the south and the Liverpool - Parramatta Bus Transitway in the north; and
- 3. Buchan Avenue, a diagonal north-west spine road linking the western part of the site to the town centre.
- Edmondson Park must provide
 - A secondary system of north-south streets, linking Camden Valley Way with the villages and the town centre,
 - A secondary system of east-west streets, and
 - A former asset protection road following the northern boundary of the conservation area. Refer to Figure 8.
- 5. Curved roads are to be provided along the Maxwell's Creek Riparian Park.
- All central road medians are to be low maintenance
- The street network is to retain a predominantly grid-like form, facilitating walking and cycling and enabling direct local vehicle trips within the neighbourhood.
- 8. All streets are to be legibly signposted with streets names and property numbers.
- All intersections are to be designed in accordance with the RMS Austroads Road Design Guide
- 10. There is to be no vehicular access to properties directly from Camden Valley Way or Campbelltown Road. Access to these lots will be from a service road or alternative road.
- 11. Footpaths are to be provided on both sides of all streets.

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- 12. All Development Applications for subdivision are to detail the proposed kerb type.
- 13 Barrier kerbs are to be used:
 - On all streets within the B6 Enterprise Corridor or R3 Medium Density
 - Along The Bus Propriety Corridor, Rynan Avenue, and the Park Avenues.
 - In all areas with a density of 28 dw / ha.
 - On any street frontage to open space.
 - On any street that is a bus route
 - Along and adjacent to schools and community facilities.
 - At all intersections (between the potential driveway location on one frontage to the potential driveway location on the alternative street frontage). Driveways are not to be located within 6m of the tangent point of any intersection.
 - Barrier kerb shall be installed for the entire length of bus zones and for 10m on the approach of the bus stop.
- Roll kerbs may be used in other locations to the above.

Street Hierarchy

The following types of streets are provided in Edmondson Park.

Camden Valley Way

Access to businesses along Camden Valley Way on the Edmondson Park side is via a service road located parallel to Camden Valley Way within the development area. Refer to Figure 10.

Bus Priority Corridor (Bernera Road)

This road provides the main public transport access through Edmondson Park to the train station. The road will follow Bernera Road (formally known as Croatia Avenue) into the town centre. The width of this corridor gives definition to the high density larger scale development (potentially 3 to 6 storey buildings) located on both sides of the corridor. The Bus Priority Corridor has a 3m median strip allowing for tree planting and a dedicated bus lane at the intersections with Camden Valley Way and Campbelltown Road. Access to properties along the corridor should be primarily from side streets or rear laneways. Refer to Figure 11.

Buchan Avenue/Rynan Avenue

This is a main neighbourhood street that links the north-western access of Edmondson Park to the town centre. Medium density developments are encouraged along this street. Refer to Figure 12.

Collector Streets

These streets connect the outlying localities to the town centre. These streets will have a 19 / 20m wide road reserve. Some Collector Streets may have a 7m wide travel-way for buses with restricted parking and narrow verges. Refer to Figure 13.

Park Streets

This network of streets allows for pedestrian links to neighbourhood parks, schools, riparian and conservation areas. These streets have an off-road cycleway located at the edge of the verge. Refer to Figure 14.

Local Streets

These streets are designed for slow residential traffic. The road reserve is 15.2m wide. Refer to Figure 15.

Former Asset Protection Road

This road is situated between the proposed urban areas and adjoining conservation areas that may be prone to bush fires. Pedestrian and cycle paths will encourage EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

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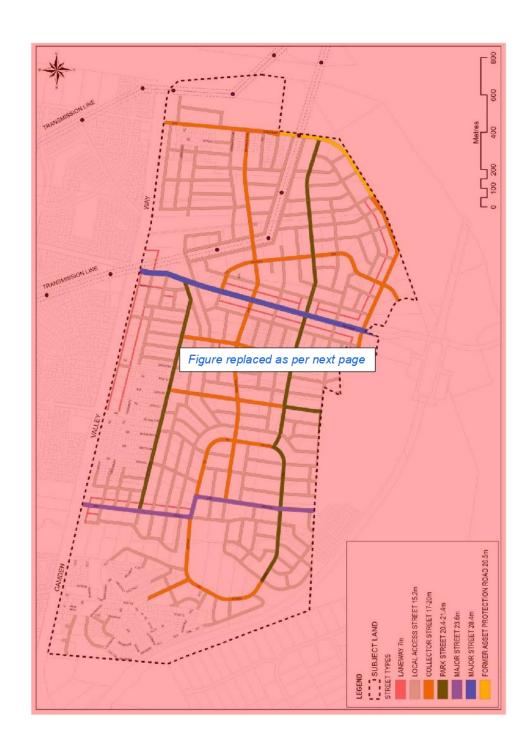
recreational use in what will be a scenic environment. The Former Asset protection roads will have a road reserve of 20.5m, 11.2m of which is taken by the carriageway. Refer to Figure 17.

Residential Laneways

Lanes assist in providing service vehicle access in residential areas. These are two-way carriageways 5.5m wide, with a 0.3m verge on one side and 1.2 m verge on the other side (to support street-lighting and services) with setbacks to rear garages. Small splays will be needed to cater for vehicle manoeuvring needs. Refer to Figure 16.

Pedestrian Access Way

All pedestrian access ways are to be designed in accordance with the 10m wide access way detailed in Figure 18. Any other through site links, pedestrian access paths or overland flow paths that continue the desire line of a road corridor are to be the same width of that corridor. Figure 8: Street Types has been amended to include two pedestrian access ways leading to Maxwells Creek North Riparian Park. These are to be designed in accordance with cross section at Figure 18.



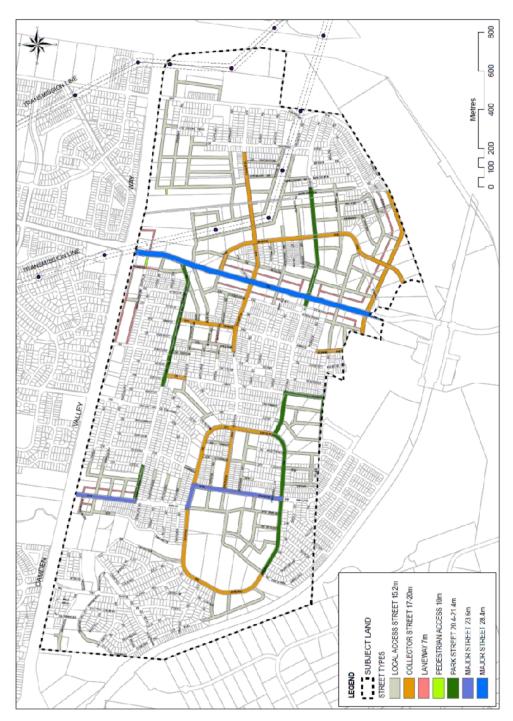


Figure 8: Street Types This figure has been amended to reflect the new road layout in the vicinity of Maxwells Creek North Riparian Park. This includes the addition of two 10m wide pedestrian access ways leading to the park, as detailed within Council report dated 26 June 2019.

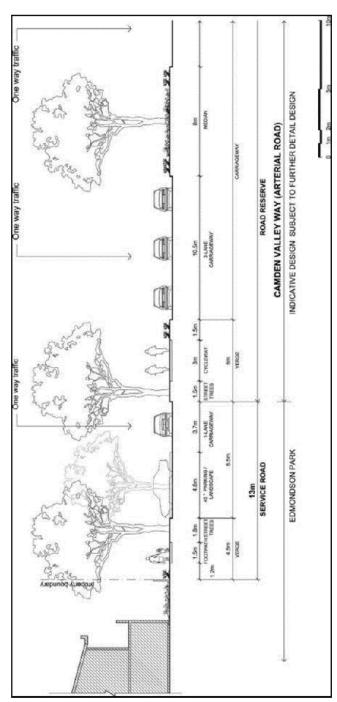


Figure 9: Camden Valley Way

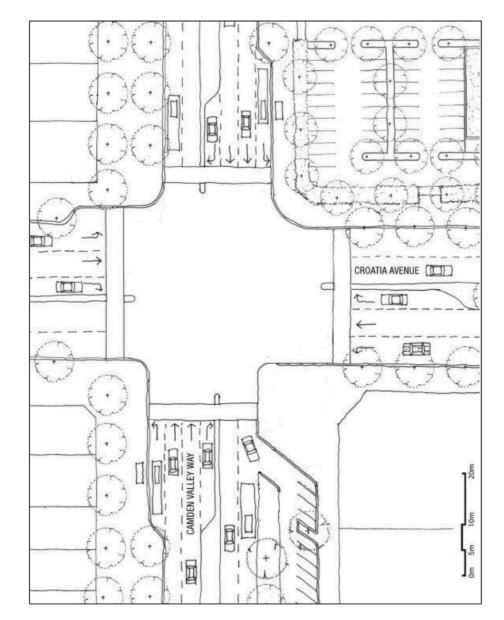


Figure 10: Camden Valley Way - Indicative Intersection and Service Road Treatment

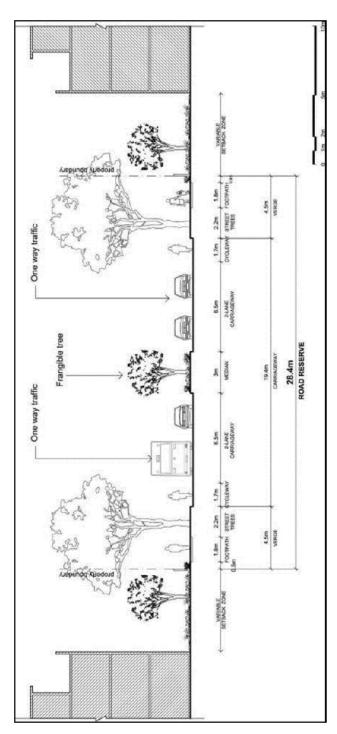


Figure 11: Bus Priority Corridor

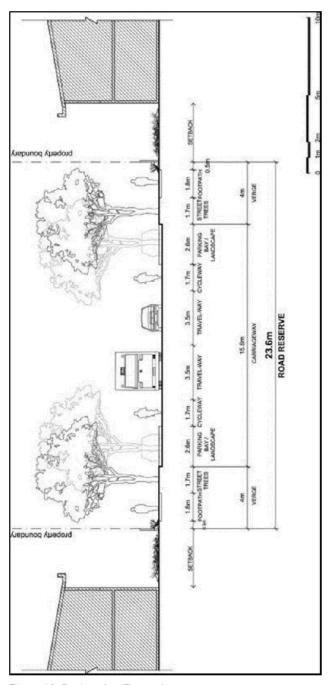


Figure 12: Buchan Ave/Rynan Ave

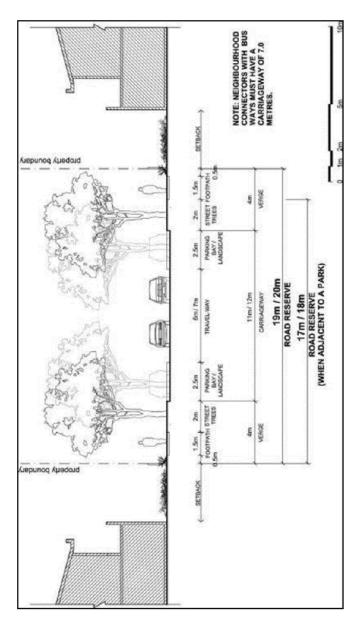


Figure 13: Collector Street

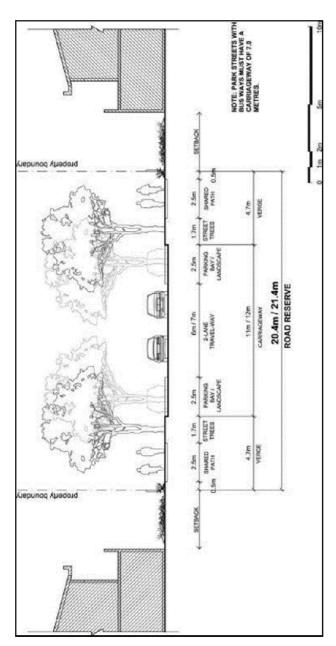


Figure 14: Park Street

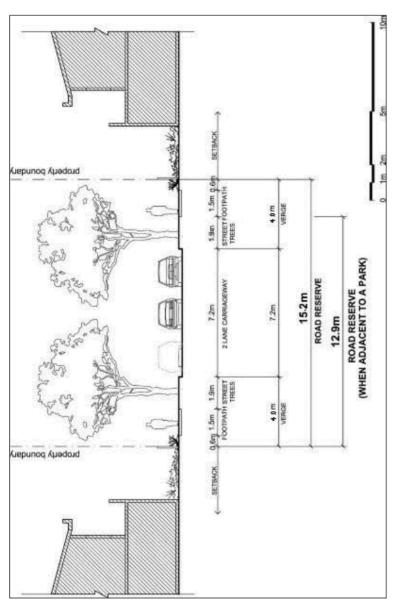
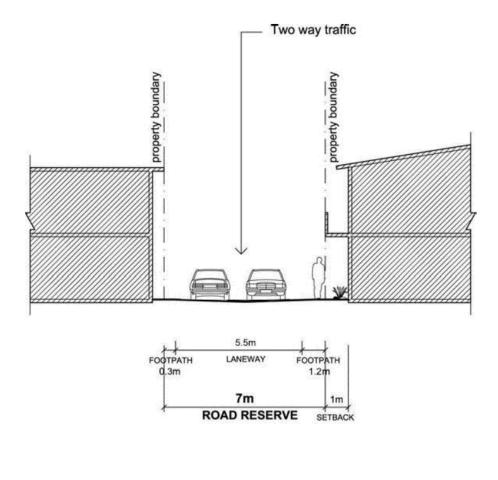


Figure 15: Local Street



1m 2m

5m

Figure 16: Residential Laneway

10m

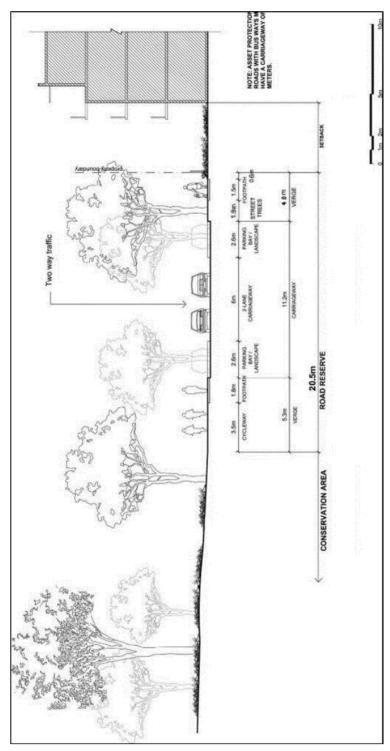


Figure 17: Former Asset Protection Road

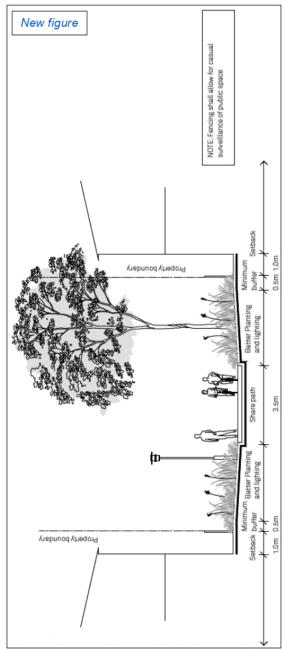


Figure 18: Pedestrian Access Way This cross section will be applicable to the pedestrian access ways leading to Maxwells Creek North Riparian Park, from the east and west, as marked within Figure 8: Street Types. These corridors will provide pedestrian access to public open space and also improve pedestrian permeability within Edmondson Park. Additionally, the corridor is sufficiently wide to prevent opportunities for concealment and other crime related activities.



Bus Priority Corridor



Former Asset Protection Street



Residential Street

Figure 48 19: Artistic views of street types

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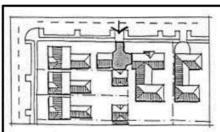
Laneways and Garage Connections

The location, type and design of vehicle access points to dwellings can have significant impacts on the streetscape, the site layout and the building façade design.

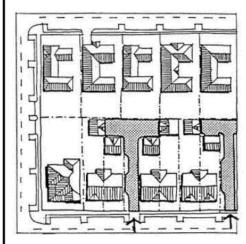
Objectives

- a) To minimise the impact of vehicle access points on the quality of the public domain
- To minimise the impact of driveway crossovers on pedestrian safety and streetscape amenity.
- To provide safe and convenient access to garages, carports and parking areas.
- To clearly define public and private spaces, such that driveways are for the sole use of residents
- To permit casual surveillance of private driveways from dwellings and from the
- To minimise conflict between pedestrians and vehicles at the junction of driveways and footpaths.

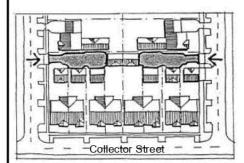
- 1. Where possible, vehicular access is be integrated with site planning from the earliest stages of the project to eliminate or to reduce potential conflicts with the streetscape requirements and traffic patterns and to minimise potential conflicts with pedestrians.
- The driveway crossing the verge between the property boundary and the kerb is to have a maximum width of 2.7m.
- Private driveways are to have the smallest configuration possible to serve the required parking facilities and vehicle turning movements
- Communal driveways are to be constructed as one of three general types, depending on block geometry and garages to be accessed. Refer to Figure 49 20.
- Access to allotments in the vicinity of roundabouts and associated splinter islands shall not be provided within 10m of the roundabout.
- On corner allotments, driveways are not to be within 6m of the tangent to the kerb
- Driveways are not to be within 0.5m of any drainage facilities on the kerb and 7. gutter.
- Where possible, medium and higher density developments fronting Buchan Avenue, Rynan Avenue, the Park Streets or the Collector Streets are to have vehicular access via the side streets, rear laneways, or communal driveways.
- Rear lane access is to be provided for dwellings as indicated on the Indicative Layout Plan, including dwellings in Character Area 'Urban' and adjacent to Village Centres
- 10. Where possible, rear lane access it to be provided to dwellings that front parks.
- 11. Corner lots on collector streets are to have access from the street perpendicular to the collector street
- 12. Planting and walls adjacent to driveways must not block lines of sight for pedestrians, cyclists and vehicles
- Driveways are to have soft landscaped areas on either side, suitable for infiltration.
- 14. Driveways must be in accordance with the relevant Australian Standards for vehicular turning circles, visibility distances and gradients.



Common Apron: Maximum 3 Properties



T- Shaped: Driveway must be from the frontage street of the narrow lot dwellings. Use where block geometry or available street frontage precludes use of a 'close'.



Close: When development fronts a collector street driveways may be accessed off side streets into a close.

Figure 49 20: Communal Driveways

Carports and Garages

The provision of on-site parking is required for all residential allotments. Carports and garages are to be visually recessive and must not compromise the appearance of the dwellings from the street.

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Objectives

- a) To provide sufficient and convenient parking for residents and visitors.
- b) To ensure that parked vehicles do not create traffic hazards.
- To reduce the visual impact of garages, carports and parking areas on the streetscape and improve dwelling presentation.

- Minimise the visual impact of garages, as illustrated in Figure 20 21.
- 2. Front access double garages (6m max. width) are generally only permitted on lots with a street frontage* of 15m and above. Front access double garages may be considered on lots 12m or above subject to meeting all of the following criteria in addition to the primary objectives and controls:
 - Garages are not to exceed 45% of the building frontage width.
 - Garage doors are to be visually recessive and made of high quality materials such as treated timber.
 - Garages are to be designed as an integral part of the architecture of the dwelling, and must be well articulated with features such overhanging verandahs and pergolas etc.
 - The dwelling frontage is to contain a front door and a window to a habitable room, in addition to the garage
 - No more than three dwellings in a row can have a double garage on the narrower lots (12 m+).
 - The total number of narrower lot dwellings (12.5 m+) with double garages are not to exceed 40% of any street / block frontage.
- The maximum width of a front access garage on lots with a street frontage below 15m is 3m (a single garage). Additional parking may be provided in carports or in hard stand areas. Stacked or tandem car parking spaces are acceptable, provided that at least one space is located 5.5m min. from the front property boundary.
- 4. Garages and carport entries are to be setback a min. of 1m from front setback.
- Garage design, form and materials must be compatible with the dwelling character. Garage dominance can be reduced by use of shadows, setbacks, coloured porticos or entry roof features.
- All parking spaces for adaptable housing units are to comply with AS 2890:1 for disabled parking.

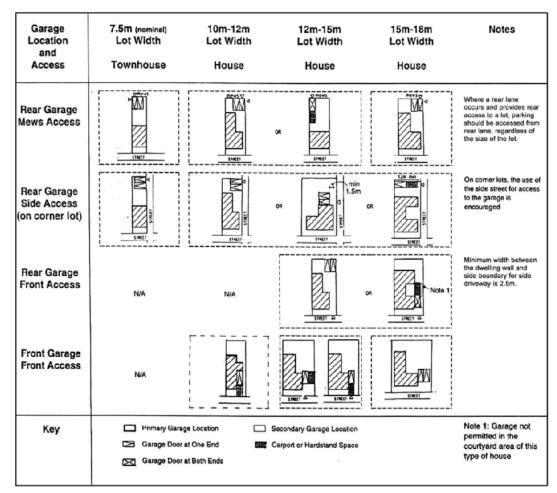


Figure 20 21: Garage Location and Access

Private Driveways

Objectives

- a) To provide safe and convenient access to garages, carports and parking areas.
- b) To clearly define public and private spaces, such that driveways are for the sole use of residents.

- Private driveways shall have the smallest configuration possible to serve the required parking facilities and vehicle turning movements.
- Private driveways shall be constructed as one of three general types, depending on block geometry and garages to be accessed, as in Figure 20 21.
- Higher density development fronting to collector streets shall have rear access through laneways, car courts and the like.
- Development on corner lots on collector streets shall have access from the street perpendicular to the collector street.

2.2 **Pedestrian and Cycleway Network**

The aim is to establish a non-vehicular (pedestrian and cyclist) system, which connects major activities and open spaces in a direct, safe and legible manner. Pedestrian and cycle ways should provide links from predominantly residential areas to social and cultural activities and educational facilities.

Objectives

- a) To provide a clear pedestrian and cycle way system that provides links between:
 - Residential areas,
 - Open spaces and conservation areas,
 - Educational facilities,
 - Social and cultural facilities, and
 - Town centre and the villages.
- b) To create an interconnected pedestrian and cycle network comprising streets and paths that are clear, safe, legible, and comfortable.

Controls

Location

- The pedestrian and cycle way circulation system must provide linkages between major activity areas and streets within as well as outside the release area, such as schools, the town centre, and the open space network.
- 2. Provide cycle ways as illustrated in Figure 24 22.
- Provide designated cycle lanes on streets in the form of on-street cycle lanes as illustrated in Figure 21 22.
- 4. Pedestrian and cycle paths must be provided as part of parks and recreation areas. However these should be provided outside the core riparian corridor areas where practical.

Safety

- 1. Ensure designated cycle lanes are clearly identified on streets by line-markings / surface treatment on the street surface and / or by signs beside the street.
- Design and locate vehicular access to all developments to minimise conflicts with pedestrians and cyclists.
- Ensure a high level of activities and surveillance is provided to off-street pathways.
- Ensure pedestrian and cycle facilities in public spaces are safe, well lit, clearly defined, functional and accessible to all users.
- Locate pedestrian paths and cycle ways in open spaces close to the streets to take advantage of street lighting to allow casual surveillance by residents and motorists. Where this is not practical, paths must be well lit and visible from the street.
- 6. Wherever practicable, provide single vehicle access to developments, perpendicular to the kerb alignment.
- Clearly and frequently signpost shared pedestrian / cycle links, as well as cycle lanes on public streets and lanes to indicate their shared status.

Design

- 1. Provide shared pedestrian paths and cycle ways to a minimum of 2.5m wide. Refer to Figure 21 22.
- 2. Provide designated pedestrian pathways with a minimum width of 1.5 m, or greater as indicated in relevant street sections, on both sides of all streets.
- 3. Design pedestrian and cycle ways, as well as pedestrian refuge islands so that they are fully accessible by all users in terms of access points and gradients, in accordance with AS 1428 (Part 1 to 4 Design for access and mobility).

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Edmondson Park

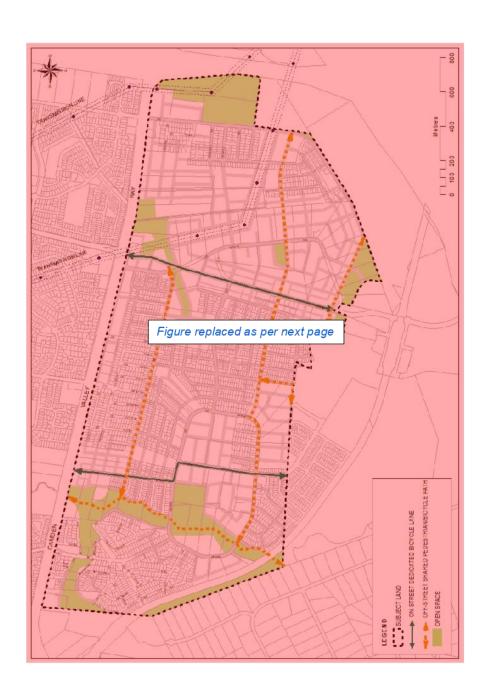
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- Pedestrian footpaths along the main school frontage are to be full verge width. Pedestrian footpaths along secondary school frontages are to be a minimum of 2.5m wide.
- Pedestrian footpaths within the village centres are to be full verge width and paved with a Council approved paver.
- 6. Pram ramps are to be provided at all street corners.

Provision

 Bicycle racks shall be provided in appropriate numbers at villages, sporting grounds, parks, community facilities and schools.



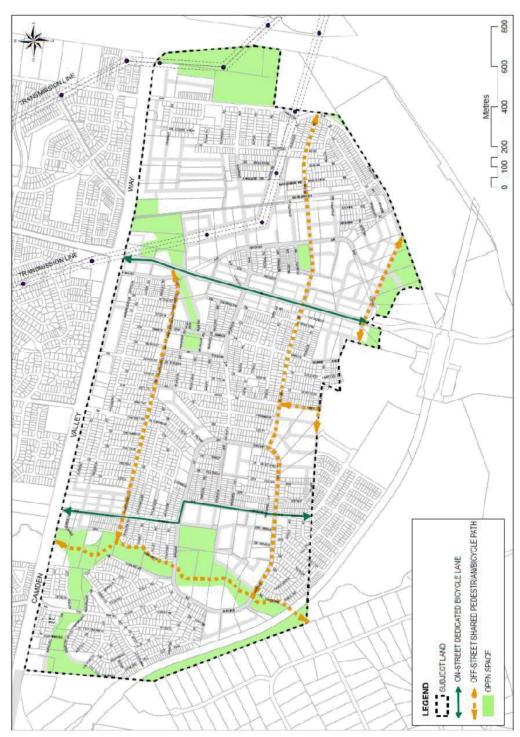


Figure 24 22: Bicycle Network This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park.

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2.3 Streetscape and Street Trees

Background

Street furniture should maximise pedestrian comfort, convenience and amenity, create visual harmony and be used to define spaces, streets, paths and gateways. Opportunities for public art in significant public domain locations should be explored as part of the development process.

Objectives

- a) To create a sense of identity for the area.
- b) To enhance public spaces so that they are vibrant, safe and welcoming.
- c) To facilitate cultural identity through art and design in public places.
- To create quality streetscapes that are visually attractive and integrate with surrounding street layout.

Controls

Street Furniture

- Street furniture is to be incorporated into the design of all public spaces and should be consistent in design and style.
- Street furniture is to be located so as not to impede mobility, generally in accordance with AS 1428:1 - 4.
- The location and detailing of all proposed street furniture is to be indicated on the Landscape Plan, to be submitted with the DA.

Street Tree Planting

- 1. Street trees shall be required to be planted in conjunction with the creation of a new street or the extension of an existing street.
- 2. A minimum of two trees is to be provided for every 6m of street frontage. These are to reach at least 4m at mature height.
- The street trees shall be planted prior to the release of the subdivision certificate.
- The trees shall be provided with protection to ensure their survival during the construction of buildings in the street. Refer to Figure 22 23 for details.
- Trees and shrubs on individual streets must be of a uniform species. On streets adjacent to bushland, species indigenous to the area must be planted.

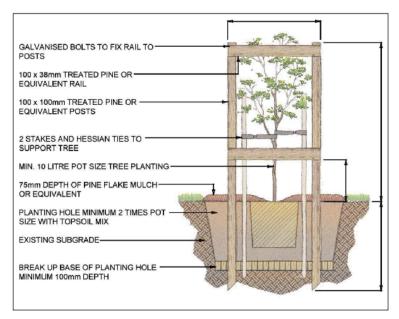


Figure 22 23: Tree Guard and Planting Details

2.4 **Open Space**

Background

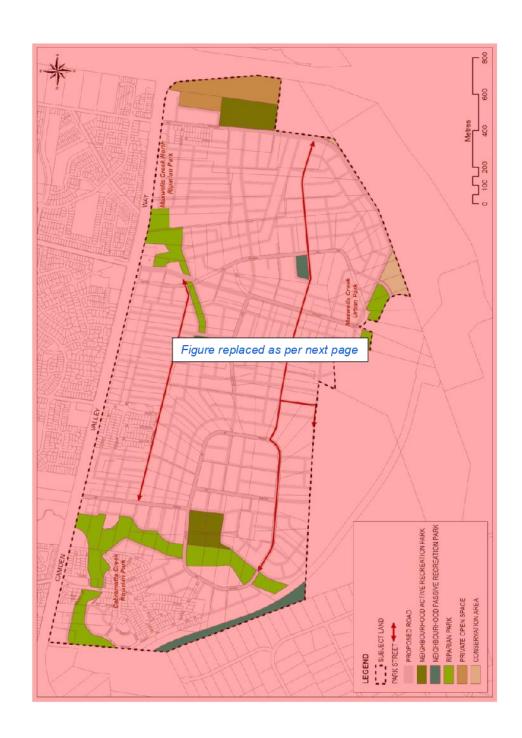
- 1. A key element of this Part is to ensure the provision of an open space system which caters for and supports the development of Edmondson Park. Edmondson Park provides for three levels of open space plus pocket parks and conservation areas. These include:
 - Level 1 District Park,
 - Level 2 Neighbourhood Parks (passive and active),
 - Level 3 Passive Parks (Riparian Parks and asset protection zones), and
 - Conservation Areas.
- 2. Each level of open space provides various recreational facilities for the community. Level 1 open space is centrally located and provides civic uses and active and passive recreation for the release area. Level 2 open space is neighbourhood orientated and facilitates active and passive recreation. Level 3 parks comprise Riparian Parks and asset protection zones and serve as passive recreational areas. Additionally, conservation areas of approximately 150 hectares contain areas of significant Cumberland Plain Woodland vegetation. Access to the conservation areas for passive recreational activities is an essential component of the strategy.
- 3. It is predicted that a higher proportion of small lot / attached housing is likely to attract first home buyers, young renters and older members of the community, hence an increased proportion of the population in the 0 - 4 year, 25 - 34 year age and in the over 50s groups is predicted.
- Recreation requirements for the 0 4 year age group is predominantly private garden area, which is familiar, safe and secure and either communal open space or small parks close to the home. For the 25 - 34 year olds and the over 50s age groups, involvement in organised sports becomes less important, and there is a greater emphasis on family orientated activities and watching sports.

The open space provision for Edmondson Park has therefore been designed to cater for these predicted demographics. Importantly, it is intended that the Edmondson Park Release Area be seen as a whole entity, and that people from both Campbelltown and Liverpool LGAs can share facilities. Furthermore, it is envisaged that there will be a co-use of the school playing fields, to maximise the use of these facilities and encourage a community feeling for the area.

Objectives

- a) To ensure adequate provision and distribution of public open space to meet the needs of the residents.
- b) To retain and integrate existing landscape elements, such as vegetation and topographic features, in the design of new development.
- c) To provide links between the open space areas and community and retail facilities.
- d) To establish open spaces as an interconnected network incorporating conservation areas, parks, squares and streets, rather than a series of unrelated, unconnected spaces.
- To provide centrally located open space with a range of uses and activities in each village, which will assist in casual surveillance and promote user safety
- To incorporate environmentally sensitive areas such as riparian land, bushland, and archeologically sensitive sites into the open space network and provide appropriate protection and management mechanisms.
- g) To ensure that open space is of a high quality and promotes local character and identity.
- h) To ensure that open space design is flexible and responds to changes in demand and opportunity
- To ensure that the location of open space promotes equality of access and opportunity and is readily accessible by a range of transport modes.

- The open space network for Edmondson Park must be provided in accordance with Figure 23 24.
- Link the open spaces using streets, riparian corridors, pedestrian paths and cycle ways.
- Parks within villages are to be a focal point for development and community activities.
- 4. Provide a street frontage on all sides of parks within the village centres.
- 5. Ensure the design of parks can accommodate the desired activities and that they can be adapted for a variety of potential future uses.
- 6. Ensure that development which surrounds open space is orientated towards the park to offer casual surveillance.
- Perimeter streets should be provided to all parks on at least three sides of the park. Where a street frontage is not provided the development must front the park to provide surveillance.



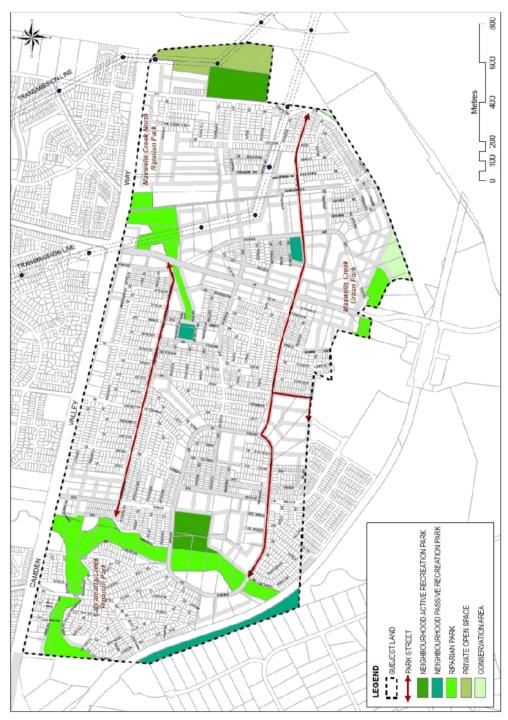


Figure 23 24: Open Space Network This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park.

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Conservation areas

There are 3 conservation areas within Edmondson Park, which are located within Edmondson Park South. These areas are not subject to this Part.

Riparian Parks

Riparian parks provide for stormwater drainage and flood storage areas. By being enhanced and retained in a natural state they also protect native vegetation and archaeological sites, and act as natural habitat corridors outside the conservation areas. Access to watercourses, patches of high quality vegetation and any archaeological sites will be controlled in these areas. Riparian parks will have water quality swales as part of their landscape design.

There are three riparian parks in the Edmondson Park (Refer to Figure 23 24):

- Cabramatta Creek Riparian Park: This comprises the corridor along Cabramatta Creek north of the rail line and the tributary that runs eastward and joins Cabramatta Creek. The riparian park joins with an active recreation neighbourhood park west of Rynan Avenue.
- Maxwells Creek North Riparian Park: This park is located in the northern area adjacent to Camden Valley Way along the tributary of Maxwells Creek. The riparian park joins with a passive recreation neighbourhood park west of the Bus Priority Corridor.
- Maxwells Creek Urban Park: This park is the main landscape feature at the northern end of the town centre. The park will be a more formally landscaped urban park reflecting its relationship with the town centre and higher density residential areas

Objectives

- a) To integrate stormwater detention basins and water quality detention basins as part of the landscape of the open space network.
- b) To manage, protect and enhance ecosystems and their biodiversity, including water quality, soil stability, fauna habitat and aquatic habitat.
- To ensure that important watercourses are integrated into the open space c) network
- To maintain and promote the regeneration of native vegetation adjacent to creek d) lines
- e) To protect and enhance native vegetation, archaeological and cultural values.
- f) To restore and enhance the degraded riparian remnant vegetation.
- g) To provide a landscaped passive open space area associated with riparian areas that improves amenity and provides a focus to surrounding development where appropriate
- To encourage a sense of ownership over the riparian parks.
- To encourage educational, social and cultural opportunities and interpretation within riparian corridors.

- Development, other than low impact recreational facilities and detention basins, is to be excluded from the CRC, including buildings, streets and car parks. Low impact recreational facilities include pathways, picnic shelters, seating, educational and interpretative features. Special attention is to be given to the location and type of facility in the core riparian corridor to minimise impact on existing vegetation and the ecological integrity.
- 2. Provide access to the water course at locations where the ecological integrity of the existing riparian vegetation and stream bed and bank stability will not be significantly compromised.

- 3. Provide educational and interpretative features and information in riparian corridors at key locations.
- Retain aquatic connectivity through use of crossing structures consistent with the NSW Department of Primary Industries - Fisheries guidelines.
- 5. Remnant vegetation along the creeks is to be protected and enhanced.
- Perimeter streets are to be provided between riparian parks and development.
- Outer asset protection areas may be located within riparian parks. Inner protection areas must be located fully outside of riparian parks. Refer to Figure 17.

Neighbourhood Parks

Neighbourhood parks have been designed for either passive or active recreational

Neighbourhood passive recreation parks are small in scale in order to create intimate spaces adjacent to residential areas. Edmondson Park has three neighbourhood passive recreation parks, two located in close proximity to the village centres, and one to the west of Maxwell's Creek North Riparian Park and Croatia Avenue.

Active recreation parks contain a mix of competition standard sporting fields and passive recreation spaces. Edmondson Park has two neighbourhood active recreation parks, one to the east of Ash Road adjacent to Maxwell's Creek North Conservation Area, and one to the west of Rynan Avenue adjacent to Cabramatta Creek Riparian Park.

Objectives

- a) To provide open space areas for the enjoyment of the local population.
- To ensure that open space is of a high quality and, where appropriate, promotes local character and identity
- To provide open space which can be used by a range of users, linked with other activities and services.

Controls

- Neighbourhood parks are to be provided as illustrated in Figure 23 24.
- 2. Neighbourhood active recreation parks are to have a mix of the following activities:
 - Car parking,
 - Collection of competition standard specialised playing fields,
 - Kick-about areas,
 - Informal recreation areas,
 - Play equipment,
 - Footpaths and cycle ways,
 - Electric or gas BBQ facilities,
 - Planting / formal gardens, and
- 3. Retain, wherever possible and practical, existing endemic vegetation.

District Park

The Edmondson Park Release Area includes a district park which is located in Edmondson Park South and not subject to this Part.

Safety and Security

For Edmondson Park to be a desirable place to live, work and visit, it will need to be perceived as a safe place. A safe and secure environment encourages activity, vitality and therefore viability. Two major principles are involved in achieving a secure environment, casual surveillance of public space and the avoidance of physical threats to safety.

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Objectives

- a) To provide personal and property security for residents and visitors in the public domain
- b) To enhance perceptions of community safety.
- c) To provide pedestrians with safe, clear and direct routes of travel.
- To provide clear views of the street by adjoining buildings and passing traffic, providing a high level of passive surveillance.

Controls

Design

- Landscape planting should not obscure visibility, and should avoid opportunities for concealment.
- 2. Appropriate evening and night-time lighting is to be provided in all streets, public spaces and parks, particularly along pedestrian and cyclist routes.
- 3. In parks, provide pedestrian pathways that are direct with clear sightlines. This will be particularly important to join the residential areas across Maxwell's Creek Urban Park to the town centre.
- 4. Provide adequate signage describing pathways and facilities.
- The design of streets and location of street furniture is to allow adequate sight
- The design and maintenance of paving and other ground plane treatments is to ensure the avoidance of trip hazards and be approved by Council.
- 7. Driveway entry-exits are to provide adequate sight lines to adjacent footpaths, streets and cycle ways. Shared driveways are to be used wherever possible.

Casual Surveillance

- 1. All public spaces including streets, parks, squares and plazas must be directly overlooked by adjacent development.
- 2. Active uses must be orientated to streets in commercial or mixed-use areas. In residential areas, living rooms, verandahs and / or kitchens are encouraged to be orientated to the street.
- 3. Locate perimeter streets to each neighbourhood park. Where a street frontage is not provided the development is to front the park to provide surveillance.

2.5 **Environmental Management**

Vegetation within Riparian Corridors

- 1. Provide for the protection of the riparian environment, including water quality, soil stability and creek bed habitat.
- Regenerate vegetation using local provenance Alluvial Woodland and Shale Plains Woodland species.
- 3. Bush fire asset protection zones to be incorporated into boundary street design and outside the conservation areas and riparian zones. Refer to Figure 17.
- Maximise opportunities for the public to experience remnant native bushland.

Vegetation in Developable Areas

- 1. Require that canopy trees where possible and some saplings are retained through the Development Application process.
- Avoid tree root damage to retained trees throughout development.
- 3. Avoid the removal of existing trees in the following zones:
 - R5 Large Lot Residential
 - RE1 Recreation Public,
 - RE2 Recreation Private,
 - W1 Natural Waterways

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- E1 National Parks and Nature Reserves, and
- E2 Environmental Conservation.

Core Riparian Corridors

Core Riparian Corridors (CRCs) are areas of protected land along both sides of a creek that allows for the protection of riparian vegetation, water quality and bed and bank stability

To create an interface between the CRCs and developable areas, it is necessary to provide an additional buffer area which forms the outer protection zone part of the Asset Protection Zone.

Objectives

The objectives of this Part with regard to Core Riparian Corridor (CRC) management

- a) To maximise opportunities for stream / creek restoration and enhancement that mimics natural stream processes.
- b) To conserve, protect and enhance riparian corridors and biological connectivity through the provision of continuous, vegetated riparian protection zones along either side of the creeks.
- c) To enable existing watercourses to contribute to and be enhanced by a coordinated approach to development within the area.
- d) To provide for appropriate traffic cycle and pedestrian circulation throughout the release area while providing for the protection of the riparian zone and its environmental functions.
- To ensure the rehabilitation of creek corridors is integrated into floodplain management planning
- To encourage a sense of ownership over riparian corridors.
- To encourage educational, social and cultural opportunities and interpretation within riparian corridors.

Controls

Stream and Riparian Management Plan

- A Stream and Riparian Management Plan (SRMP) is to be prepared as part of the Water Cycle Management Plan and submitted with the subdivision Development Application for the full extent of each creek corridor within the subdivision being developed. These SRMPs are to be prepared in consultation with Council and Department of Natural Resources, and require the approval of Council
- The SRMPs are to include the following:
 - Plans showing, in detail, the existing creek channels, riparian vegetation (including remnant native vegetation), geomorphic features and aquatic habitats (reed beds, snags etc).
 - Detailed plans of any channel modification and stabilisation works.
 - A longitudinal stream survey section (if stream works are proposed) of the existing and proposed creek channel bed in sufficient detail to identify changes in bed level and hydraulic features (i.e. pools and riffles)
 - Details on the staging and sequencing of any works within the riparian zone.
 - Recommendations on how to address the modified drainage system and
 - A vegetation management plan is to be incorporated into the SRMP for the establishment of riparian corridors. It must use natural and assisted regeneration and planting of locally native vegetation (trees, shrubs and groundcover species).

- Proposed crossings to creeks must be designed to facilitate the movement of aquatic and terrestrial species, and are to incorporate features that allow for light penetration beneath the structure.
- The design of the 3 structures crossing Cabramatta Creek and Maxwell's Creek are to ensure the following:
 - 1% AEP flood conveyance.
 - Flora and fauna connectivity.
 - Scour protection.

Core Riparian Corridors in Edmondson Park Creeks

Controls

1. The following describes the Core Riparian Corridor (CRC) and inner protection zone to be provided for each creek. The CRC will be measured from the top of the existing creek's embankment as identified by appropriate survey plans. The minimum requirements to be provided adjacent to each creek.

Cabramatta Creek:

- Provide an average 20m wide CRC on each side of the creek (measured from the top of the bank)
- Provide a minimum 10m wide buffer from the CRC to developable land. This area can include the outer protection zone.

North western tributary to Cabramatta Creek:

- Provide an average 20m wide CRC on each side of the creek (measured from the top of the bank).
- Provide a minimum 10m wide Inner Protection Zone from the CRC to developable land.

Maxwell's Creek:

- Provide a 20m wide CRC on each side of the western tributary of Maxwell's Creek (measured from the top of the embankment).
- Provide a 10m wide buffer zone from the CRC to developable land.
- Develop a formal urban park open space for passive and active recreational use by the adjacent residents and workers from the town centre.
- Drainage channel to be re-engineered. Soft engineering solutions are preferred. Stream bed and bank stabilisation to be utilised as appropriate. Permanent water bodies to be "off stream" where possible.

Northern tributary of Maxwell's Creek

- Establish an urban drainage corridor within the zoned open space,
- Re-engineer the entire corridor to Camden Valley Way. Soft engineering solutions are preferred. Stream bed and bank stabilisation to be utilised as appropriate, and
- Locate water quality treatment facilities "off stream" but within the open space zoned corridor.
- 2. All remnant vegetation along the CRC must be protected and enhanced unless required to be removed as part of the re-engineering works to improve the system.
- Development, other than low impact recreational facilities and detention basins. is to be excluded from the CRC, including buildings, streets and car parks. Low impact recreational facilities include pathways, picnic shelters, seating, educational and interpretative features. Special attention is to be given to the location and type of facility in the core riparian corridor to minimise impact on existing vegetation and the ecological integrity.
- Provide access to the water course at locations where the ecological integrity of the existing riparian vegetation and stream bed and bank stability will not be significantly compromised.

- Provide educational and interpretative features and information in riparian corridors at key locations.
- Any bank stabilisation measures are to use soft engineering techniques that promote sustainability and naturalness.
- Perimeter streets are to be provided between the riparian corridor and residential / commercial development
- 8. Any assessment of flood impacts and flood modelling must take into account the establishment of a fully structured vegetated riparian corridor along the CRCs. The Manning "n" roughness coefficients are to be such that they represent a diverse and fully structured riparian corridor (trees, shrubs and groundcover) for discharge determinations.
- Any hydraulic assessment must consider not only the initial vegetation density in CRCs but also the final growth, with due allowance for debris build up before and durina floodina
- 10. Service utilities can only be provided within CRC's if no other practical or feasible opportunity exists to cross the corridor at designated crossing points, such as streets and pedestrian crossings.

2.6 Water Cycle Management

The stormwater quantity and quality management seeks to reduce the impact of rapid stormwater conveyance on streams and wetlands, remove pollutants to improve water quality, retain habitats, conserve water, integrate landscape and recreational opportunities and protect downstream development from inundation. Water quality detention / bio-retention basins will be an integral part of stormwater management.

Objectives

- a) To integrate water management measures with innovative urban design.
- b) To ensure that there are no adverse impact on existing flood regimes in the surrounding areas, as a result of the proposed development.
- To provide an urban water management system for both stormwater quantity and
- d) To minimise hydrological impacts on the environment.
- e) To protect and enhance the natural water systems and water quality.
- To ensure no net increase in peak discharges.
- g) To mitigate flood damage to the built environment, inundation of dwellings and stormwater damage to properties.
- h) To provide for urban water management through multiple use systems where feasible and where efficient use of urban land and structuring principles are met.
- i) To ensure that the quality of stormwater discharge from the site complies with the Georges River Stormwater Management Plan and the Growth Centres Commission Development Code.
- To provide an urban water management system that will be economically maintained and to ensure that arrangements are in place for on-going maintenance.

- Provide off line water quality control bio-retention systems to trap pollutants and fine sediment
- Provide structural water quality management devices, including, gross pollutant and sediment traps and litter management devices.
- Provide bio-retention systems in accordance with the Water Sensitive Urban Design Strategy. Provision of swales, buffer strips, storage tanks, and rooftop planting is also encouraged where appropriate.

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- Encourage areas of deep soil planting in the design of external areas and landscaping.
- Create water efficient landscape design through the selection of tolerant plant species and efficient irrigation technology.
- 6. Where any construction adjacent to a creek, natural watercourse, drainage depression, or an enclosed drainage system is proposed, the DA should be consistent with the SRMP and is to be accompanied by a full hydrologic and hydraulic assessment. The assessment is to include:
 - External and internal catchment hydrology for rainfall events including the 1.5, 5, 20 and 100 year ARI (Average Recurrence Interval) design event.
 - An estimation of the capacity of the existing drainage system.
 - Predicted extents of flood inundation, depths, and velocities of predicted flood flows to allow effective hazard categorisation.
- 7. The trunk drainage system shall be designed to convey the 1% AEP flood. Streets adjacent to trunk drains or utilised as part of the drainage system shall meet the safety requirements of the current flood plain development manual for vehicles and pedestrians (normally depth x velocity < 0.4). Where the street system is used as part of the drainage system a minimum of 3.5m of the width of the street shall be above the 1% flood level.
- 8. Native vegetation is preferred, particularly in saline areas where deep-rooted vegetation can assist with salinity hazard reduction.
- Where drainage routes pass through a property, adequate provision must be made for the passage of stormwater runoff with adequate freeboard to building floor levels. In the event of Council being requested to approve the location of a piece of infrastructure on its land, it will require:
 - Documentation that such an activity will not prejudice the use of the land for the purpose for which it exists.
 - A possible preparation or amendment to the Plan of Management for the land, and if this action is necessary a fee may be required.
- 10. Fill is permitted with Council consent in flood plains in the areas shown in Figure 24 25.

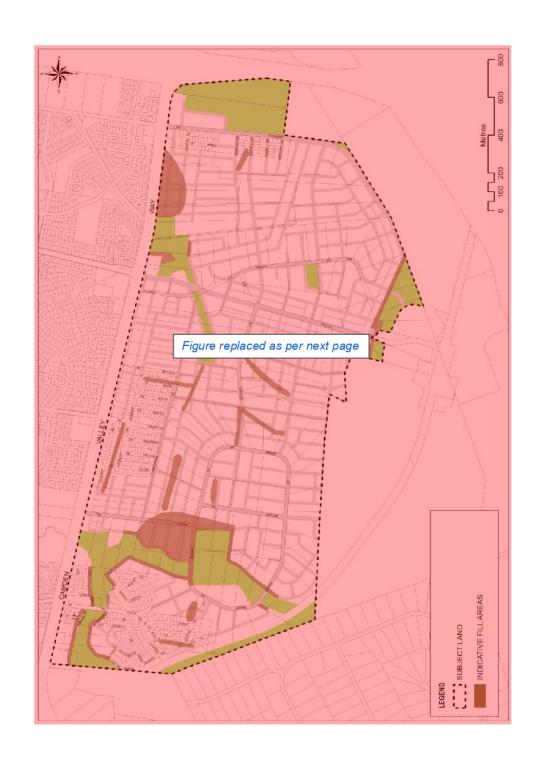




Figure 24 <u>25</u>: Areas which may be filled with Council Consent *This figure has been amended to reflect the revised footprint of Maxwells Creek North Riparian Park and the new road layout in the vicinity of this park. The indicative fill area at no. 2072 and no. 2082 Camden Valley Way has been removed it is no longer required, due to the revised road layout.*

2.7 Contamination

In the consideration of any Development Application, Council must consider whether the land is likely to be contaminated. Refer to Contaminated Land Risk in Part 1 for controls. Refer to Figure 25 26.

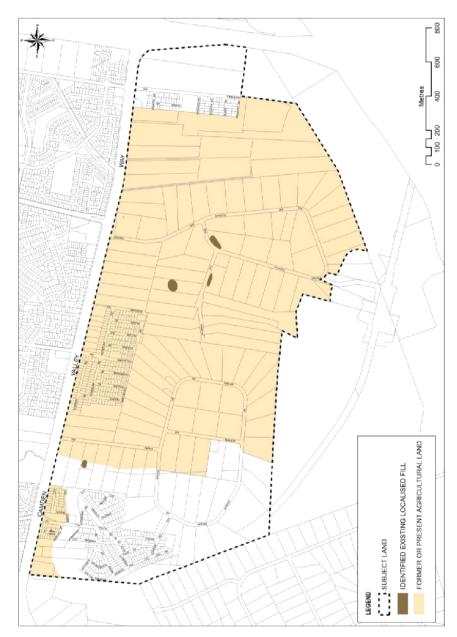


Figure 25 26: Contamination

Controls for Residential Development in Urban areas (28 Dwellings/Hectare) and Residential Flat Buildings

3.1 Preliminary

Applies to

This section applies to land identified in Liverpool LEP 2008 Dwelling Density Map as having a minimum density of 28 Dwellings / Hectare.

Background

Development within the 28 dwellings/hectare area is primarily intended for the Residential Flat Buildings and Multi Dwelling Housing. Development for detached dwellings is strongly discouraged within this area. However detached dwellings are permitted if desired on lots that do not front or back onto the bus priority corridor, any parks or parkland (the E1, E2, E3, RE1 or RE2 zones).

3.2 Site Planning

Objectives

- a) To ensure that the residential flat buildings or dwellings(s) are sensitive to site attributes, such as streetscape character, natural landform, drainage, existing vegetation, land capability, slope, solar access and if relevant, heritage items.
- b) To ensure privacy for residents and neighbours.

- The dwelling layout must be designed around the site attributes such as slope, existing vegetation, land capability and/or solar access (See Figure 26 27 for a site analysis plan).
- Basement car parking (if applicable) should be unobtrusive and blend into the general façade of the building.
- 3. There must be a direct link from at least one living area to the principal private open space, which for residential flat buildings is the balcony or terrace.
- 4. The siting of windows of habitable rooms on the first floor shall minimise overlooking to the principal private open space of neighbouring properties.
- 5. Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1.

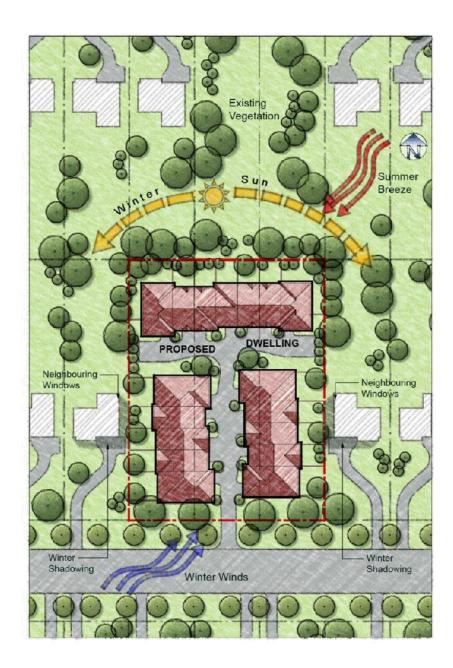


Figure 26 27: Example of a Site Analysis Plan

3.3 Setbacks

Objectives

- To set dwellings back from the street and adjacent properties to provide reasonable space for landscaping, private open space and solar access.
- b) To set dwellings back from each other to provide visual and acoustic privacy.
- c) To create a streetscape that provides a desirable and safe environment.
- d) To establish a streetscape of a scale and sense of enclosure appropriate to the locality.
- To maximise the amount of area capable of allowing the growth of trees and shrubs.

Controls

Front and Secondary Setbacks

1. Buildings shall be setback in accordance with Table 1.

Table 1: Setbacks within the 28 dw / ha area

Front	Secondary	
Setback	Setback	
4.5 m	2.5 m	

- For lots containing a dwelling house, the secondary setback is generally along the longest length boundary. For multi-dwelling housing or residential flat buildings, the secondary setback faces the secondary road, which is likely to be the shorter boundary(s).
- Garages shall be setback 5.5m from any street frontage, or 1.0m from a secondary boundary when consistent with a typology shown in Figure 20 21.
- 4. Articulation features such as verandahs, eaves and other sun control devices may encroach on the front and secondary setback by up to 1m.
- Corner sites shall provide a frontage to both streets and should articulate their corner location with an architectural feature such as a wraparound verandah, bay window, corner entry or roof feature. The maximum distance for articulation is 1m.

Side and Rear Setbacks

 Buildings shall be setback from the side and rear boundaries in accordance with Table 2.

Table 2: Side and Rear setbacks within the 28 dw / ha area

Item	Side Setback			Rear Setback		
	Residential Flat Building	Multi Dwelling Housing	Dwelling house Attached dwelling Semi- detached dwelling	Residential Flat Building	Multi Dwelling Housing	Dwelling house Attached dwelling Semi- detached dwelling
Party Wall	0m	0 m	0 m	n/a	n/a	n/a
1 storey	3 m	0.9 m	0.9 m	6 m	4 m	4 m

2 storey	3 m	1.2 m	1.2 m	6 m	6 m	6 m
3 storeys and above	Refer to Apartment Design Guide (or equivalent)	1.4 m	1.4 m	Refer to Apartment Design Guide (or equivalent)	7 m	6 m

Note: In a terrace style attached dwelling development the upper storey setbacks do not apply to the terraces unless by having the zero lot line will create unreasonable solar shading - (that the adjacent lot's dwelling will not receive the minimum 3 hours sunlight to 50% between 9am and 3pm on the 21st June)

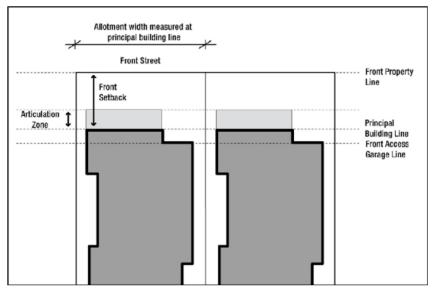


Figure 27 28: Front Setback Line

Zero lot lines for attached and semi-detached dwellings

This zero lot line control only applies to the end dwellings, in a multi-zero lot line multi dwelling development, such as terraces. It also applies to dwellings that have a zero lot lines. It does not apply to Residential flat buildings.

- Walls are generally to be 180 mm clear of the side boundary to allow for gutter and eaves overhang.
- 2. The length of a zero lot line wall is limited to 50% of the lot length.
- 3. No windows are permitted in a zero lot line wall.
- 4. A maintenance easement of at least 0.9m shall be provided on the adjoining boundary. This is shown in Figure 28 29.

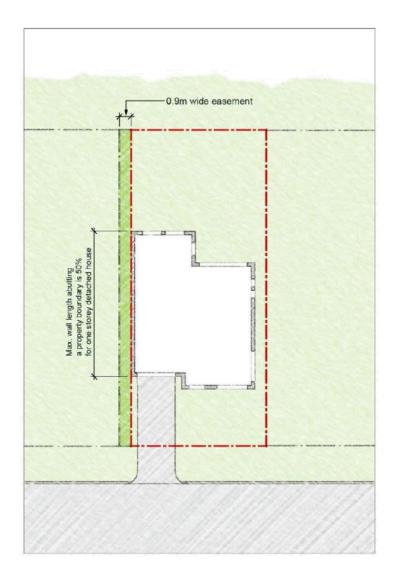


Figure 28 29: Zero Lot Lines

3.4 Landscaped Area and Private Open Space

Landscaped area is defined in Liverpool LEP 2008.

Landscaped Area (deep soil area)

Objectives

- a) To provide an area to allow vegetation to mature.
- b) To assist with management of the water table.
- c) To assist with management of water quality.
- d) To enhance the existing streetscape and soften the visual appearance of the buildings.

Controls

- 1. A minimum of 20% of the site area shall be landscaped area.
- 2. Optimise the provision of consolidated landscaped area within a site by:
 - The design of basement and sub-basement car parking, so as not to fully cover the site.
 - The use of side and rear setbacks.
 - Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped area of adjacent properties.
- Promote landscape health by supporting for a rich variety of vegetation type and size.
- Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials.

Open Space

Open space includes Landscaped Areas and hard paved areas such as footpaths and barbeque areas. It does not include driveways, drying areas or waste storage areas.

Objectives

- a) To provide residents with passive and active recreational opportunities.
- b) To provide an area on site that enables soft landscaping and deep soil planting.
- c) To ensure that communal open space is consolidated, configured and designed to be useable and attractive.
- d) To provide a pleasant outlook.

- Provide communal open space, which is appropriate and relevant to the context and the building's setting.
- Where communal open space is provided, facilitate its use for the desired range of activities by:
 - Locating it in relation to buildings to optimise solar access to dwellings.
 - Consolidating open space on the site into recognisable areas with reasonable space, facilities and landscape.
 - Designing its size and dimensions to allow for the range of uses it will contain.
 - Minimising overshadowing.
 - Carefully locating ventilation duct outlets from basement car parking.
- 3. Locate open space to increase the potential for residential amenity.

Private Open Space

Objective

- a) To ensure that private open space is clearly defined, usable and meets user requirements for privacy, solar access, outdoor activities, accessibility and landscaping.
- b) To provide all dwellings with private open space.

Controls

- Private open space for residential flat buildings shall be consistent with the Apartment Design Guide (or equivalent document).
- Private open space shall be provided for in accordance with Table 3 for Multi Dwelling Housing, Attached dwellings, Semi-detached dwellings and Dwelling houses.

Table 3: Private open space in the 28 dw / ha area for all other dwellings

Dwelling Size	Private Open Space Area	Minimum Width
Less than 65 m ²	30sqm	3m
Between 65 and 100	40sqm	3m
Between 101 and 150	50sqm	4m
Between 151 and 200	60sqm	4m
Greater than 200 m ²	70sqm	4.5m

- Private open space may be provided as a courtyard for ground floor dwellings or as balconies for dwellings above the ground floor.
- Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
- 5. Private open space should be clearly defined for private use.

For balconies refer to Building Design, Streetscape and Layout for controls on their design.

Drying areas

Objective

To provide adequate clothes drying areas for residents.

Controls

 Clothes drying facilities must be provided. Clothes drying areas should not be visible from a public place.

3.5 Building Design and Streetscape

Dwelling Houses and Dual Occupancies

Building Envelopes

- A Dwelling House, Semi-detached dwelling or attached dwelling shall have a maximum of three storeys plus an attic.
- Attics do not constitute a storey if they are included in a roof space and having a roof slope not greater than 36 degrees pitched from the ceiling level of the uppermost floor; provided that:

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- All windows face the street.
- Access to the attic must be via permanent stairs.
- Attics are to be provided with skylights, or a dormer window. A dormer window shall be a maximum of 1.5m wide and must maintain the privacy of the adjoining residents.

Building Design

The built form must be uniform in bulk and scale but seek some variety in terms of building elements such as balconies, entrances, carports and roof forms.

The controls aim to ensure that a level of consistency is maintained in those building elements.

Objectives

- a) To promote an architectural style that is contemporary and innovative
- b) To encourage designs that will enhance the character of the neighbourhood.
- c) To promote variation of building facade and design.
- d) That the building enhances the streetscape through the use of suitable built form design and landscaping.
- e) To ensure buildings address all street frontages.
- f) To discourage garages and in particular garage doors, from visually dominating the streetscape.
- g) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- h) To ensure habitable rooms address the street.
- To encourage balconies over garages on two storey dwellings.

Controls

Building Appearance

- 1. Simply articulated building forms are preferred
- 2. Dwellings must address the street frontage
- 3. Mirror imaging of a Semi-detached dwelling is not permitted
- One building must be set back a minimum of 1m behind the other building in Semi-detached dwellings.
- Attached dwellings or Semi-detached dwellings are not permitted to zero lot line, except to the other dwelling.
- 6. Dwellings corner sites must address both street frontages.
- 7. Use of verandas and balconies are encouraged.
- 8. Vertically proportioned windows are encouraged.
- Abutting dwellings within the 28 dwellings / hectare area should provide for a high variety of different building designs, making an eclectic yet coherent streetscape with examples shown in Figure 29 30.

Building Materials

1. External walls of dwellings can be constructed with the following materials:

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- Face brickwork,
- Rendered brickwork,
- Stone.
- Concrete wall,

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- Glass, and
- Lightweight materials such as, weatherboards, timber boarding or fibre cement.
- 2. External walls are to display a mix of materials.
- 3. Lightweight materials are only permitted on upper storey external walls.

Retaining Walls

1. Retaining walls can be either built of masonry or sandstone.

Roofs

- 1. Simple use of gables and pitched and hipped roofs is encouraged.
- Pitched and hipped roofs are to have a minimum of 450mm eaves unless the dwelling has zero metre side setbacks.
- 3. Roof pitch must not be lower than 22.5 degrees or higher than 45 degrees.
- 4. Skillion and vaulted roofs are permitted.
- Flat roofs must not dominate the built form.
- 6. Flat roofs must not occupy more than 50% of the total roof area.

Balconies

- 1. Decks and balconies can be built to form framed porticos or entrances.
- 2. Balconies should incorporate simple railing and balustrade detailing.

Levels

1. Dwellings are to follow the slope of the land.

Building Depth

Objectives

To achieve the development of working and living environments with good internal amenity and that minimise the need for artificial heating, cooling and lighting.

Controls

Maximum building depths for houses are 16m, unless internal courtyards are provided.

Internal Design of Dwellings

Objectives

- The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.
- b) To provide passive surveillance from rooms addressing the street or any adjoining open space.
- To encourage the internal design of the dwelling to take advantage of cross ventilation.
- d) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.
- e) To ensure that each dwelling shall provide a sufficient amount of storage for elements such as garden and sports equipment.

- All dwellings shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
- 2. Living rooms should take advantage of northern aspects.

EGROW 04

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

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- 3. Access to private open space must be from at least one living room.
- 4. The internal layout of the dwelling must incorporate cross ventilation.
- Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side or rear of the dwelling.
- Each dwelling must provide a minimum storage area of 8m³.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).
- 8. Dwelling entries must be oriented to the street.

EGROW 04

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

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Figure 29 30: Examples of variable attached building design

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Multi Dwelling Housing

Building Design

Objectives

- a) To encourage designs that will enhance the character of the neighbourhood.
- b) To promote variation of building facade and design.
- That the building enhances the streetscape through the use of suitable built form design and landscaping.
- d) To ensure buildings address all street frontages.
- To discourage garages and in particular garage doors, from visually dominating the streetscape.
- f) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- g) To ensure habitable rooms address the street
- h) To encourage balconies over garages in two storey dwellings.
- i) To encourage steep or sloping site to build split level or stepped development.

- Unit/s with a street frontage shall orientate the main entrance and where possible at least one living area towards the street.
- Entry points shall be enhanced/emphasised to all dwellings especially those facing the street.
- The first floor of the townhouse developments must be no greater than two thirds of the ground floor area.
- Building facades shall be articulated and roof form is to be varied to provide visual variety.
- Walls shall be a mix of masonry, rendered and or bagged, and painted, lightweight clad and painted and/or flush face brick. Justification will be required for 100% face brick facades or 100% rendered and painted brick and will be assessed on merit
- 6. Facades can be articulated by:
 - The use of different materials and detailing.
 - The inclusion of balconies, verandahs, pergolas and landscaped beds.
- 7. A sidewall must be articulated if the wall has a continuous length of over 10m.
- 8. The entrance of each dwelling shall be emphasised
- 9. Units built at the rear of the allotment must be single storey.
- Driveways should avoid a 'gun barrel' effect by curving and siting of buildings, which create a driveway form with the divided carriageway separated by soft landscaping.
- 11. Attic floor space may be used when it is contained wholly within the roof pitch and will not be counted as a storey provided that the attic space is part of the dwelling unit
- 12. Space used for car parking shall be included as a storey if the ceiling of the car parking level exceeds more than 1m above the natural ground level.
- 13. The maximum roof pitch shall be 36 degrees
- Townhouses built on steep or sloping lots should be built of split-level construction

15. Row housing dwellings within the 28 dwellings / hectare area should provide for a high variety of different building designs, making an eclectic yet coherent streetscape with examples shown in Figure 29 30.

Internal Design

Objectives

- a) The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.
- b) To provide natural surveillance from a room addressing the street.
- To encourage the internal design of the dwelling to take advantage of cross ventilation
- d) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.
- To ensure that each unit provides a sufficient amount of storage for elements such as garden and sports equipment.

Controls

- Townhouses and villa's located on street boundaries shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
- 2. Living rooms should take advantage of northern aspects where possible.
- 3. Access to private open space must be from at least one living room.
- 4. The internal layout of the dwelling must incorporate cross ventilation.
- Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side and the rear of the development.
- Each dwelling must provide a minimum storage area of 8m³.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).

Residential Flat Buildings

Building Design

Objectives

- To ensure an attractive streetscape that is consistent with the environment of residential flat buildings.
- b) To promote high architectural quality in residential flat buildings.
- c) To ensure that new developments have facades which define and enhance the public domain and desired street character.
- d) To ensure that building elements are integrated into the overall building form and facade design.

- Residential Flat Buildings shall comply with State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development, and should consider the Apartment Design Guide (ADG) or equivalent.
- Building facades shall be articulated and roof form is to be varied to provide visual variety.
- The pedestrian entrance to the building shall be emphasised.
- 4. A sidewall must be articulated if the wall has a continuous length of over 14m.

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- Driveway walls adjacent to the entrance of a basement car park are to be treated so that their appearance is consistent with the basement or podium walls.
- Sensitive design of basement car parking areas can assist in ensuring that podiums and vehicle entry areas do not dominate the overall design of the building or the streetscape and optimise areas for deep soil planting.
- The integration of podium design should be an integral part of the design of the development, and as far as possible should not visibly encroach beyond the building footprint.
- A master antenna shall be provided for any development of more than three dwellings and be located so that it is not visible from the street or any public open space
- 9. Consider the relationship between the whole building form and the facade and / or building elements. The number and distribution of elements across a façade determine simplicity or complexity. Columns, beams, floor slabs, balconies, window openings and fenestrations, doors, balustrades, roof forms and parapets are elements, which can be revealed or concealed and organised into simple or complex patterns.
- 10. Compose facades with an appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character. This may include but are not limited to:
 - Defining a base, middle and top related to the overall proportion of the building
 - Expressing key datum lines in the context using cornices, a change in materials or building set back.
 - Expressing the internal layout of the building, for example, vertical bays or its structure, such as party wall-divisions.
 - Expressing the variation in floor-to-floor height, particularly at the lower levels.
 - Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays.
 - Selecting balcony types which respond to the street context, building orientation and residential amenity.
 - Cantilevered, partially recessed, wholly recessed, or Juliet balconies will all create different facade profiles.
 - Detailing balustrades to reflect the type and location of the balcony and its relationship to the facade detail and materials.
- 11. Design facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls, depending on the facade orientation.
- Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material or colour, roof expression or increased height.
- 13. Co-ordinate and integrate building services, such as drainage pipes, with overall facade and balcony design.
- Co-ordinate security grills/screens, ventilation louvres and car park entry doors with the overall facade design

Internal design

Objective

To ensure that the internal design of buildings provide a pleasant environment for the occupants and residents of adjoining properties.

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Controls

- 1. All staircases should be internal.
- 2. Minimise the length of common walls between dwellings.
- 3. Basement car parking shall be located beneath the building footprint.
- 4. Where possible natural ventilation shall be provided to basement car parking.
- Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings
- Minimise the location of noise sensitive rooms such as bedrooms adjoining noisier rooms such as bathrooms or kitchens or common corridors and stairwells.
- Where a site has boundary to a Classified Road, locate bedrooms away from that boundary.
- Where common walls are provided they must be carried to the underside of the roof and be constructed in accordance with Part F5 of the Building Code of Australia
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).

Ground Floor Dwellings

Objectives

- To contribute to the desired streetscape of an area and to create active safe streets.
- b) To increase the housing and lifestyle choices available in dwelling buildings.

- Design front gardens or terraces, which contribute to the spatial and visual structure of the street while maintaining adequate privacy for dwelling occupants. This can be achieved by animating the street edge, for example, by promoting individual entries for ground floor dwellings.
- 2. Create more pedestrian activity along the street and articulate the street edge by:
 - Balancing privacy requirements and pedestrian accessibility.
 - Providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape.
 - Utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the dwelling for some dwellings.
 - Increasing street surveillance with doors and windows facing onto the street.
- 3. Planting along the terrace edge contributes to a quality streetscape.
- 4. Ground floor dwellings are special because they offer the potential for direct access from the street and on-grade private landscape areas. They also provide opportunities for the dwelling building and its landscape to respond to the streetscape and the public domain at the pedestrian scale. Ground floor dwellings also support housing choice by providing accessibility to the elderly and/or disabled and support families with small children.
- Optimise the number of ground floor dwellings with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.
- Provide ground floor dwellings with access to private open space, preferably as a courtyard.

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Natural Ventilation

Objectives

- To ensure that dwellings are designed to provide all habitable rooms with direct access to fresh air and to assist in promoting thermal comfort for occupants.
- b) To provide natural ventilation in non-habitable rooms, where possible
- To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

Controls

- Utilise the building layout and section to increase the potential for natural ventilation. Design solutions may include:
 - Facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings, for example, cross through dwellings and corner dwellings.
 - Facilitating convective currents by designing units, which draw cool air in at lower levels and allow warm air to escape at higher levels, for example, maisonette dwellings and two-storey dwellings.
- Select doors and windows (that open) to maximise natural ventilation opportunities established by the dwelling layout.
- 3. Provide narrow building depths to support cross ventilation.
- 4. Avoid single-aspect dwellings with a southerly aspect.
- 5. Design the internal dwelling layout to promote natural ventilation by:
 - Minimising interruptions in air flow through an dwelling.
 - Grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together. This allows the dwelling to be compartmentalised for efficient summer cooling or winter heating.
 - Select doors and operable windows to maximise natural ventilation opportunities established by the dwelling layout.



Figure 30 31: Cross Ventilation

Storage Areas

Objective

To provide for the need of residents to be able to store personal items adjacent to the car parking area.

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Controls

- A secure storage space is to be provided for each dwelling with a minimum volume 8m3 (minimum dimension 2m). This must be set aside exclusively for storage as part of the basement or garage.
- Storage areas must be adequately lit and secure. Particular attention must be given to security of basement and garage storage areas.

All Residential Development

Roof Design

Objectives

- To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings.
- b) To integrate the design of the roof into the overall facade, building composition and desired contextual response.
- c) To increase the longevity of the building through weather protection.

Controls

- 1. Relate roof design to the desired built form. This may include:
 - Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.
 - Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas.
 - Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line.
 - Using special roof features, which relate to the desired character of an area, to express important corners.
- Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. This includes the design of any parapet or terminating elements and the selection of roof materials.
- Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.
- Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. These elements include lift over-runs, service plants, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage.
- Where habitable space is provided within the roof, optimise residential amenity in the form of attics or penthouse dwellings.

Building Entry

Objectives

- a) To create entrances which provide a desirable residential identity for the development.
- b) To orient the visitor.
- c) To contribute positively to the streetscape and building facade design.

Controls

- 1. Improve the presentation of the development to the street by:
 - Locating entries so that they relate to the existing street and subdivision pattern, street tree planting and pedestrian access network.
 - Designing the entry as a clearly identifiable element of the building in the street.
 - Utilising multiple entries-main entry plus private ground floor dwelling entrieswhere it is desirable to activate the street edge or reinforce a rhythm of entries along a street.
- Provide as direct a physical and visual connection as possible between the street and the entry.
- Achieve clear lines of transition between the public street, the shared private, circulation spaces and the dwelling unit.
- 4. Ensure equal access for all.
- 5. Provide safe and secure access by:
 - Avoiding ambiguous and publicly accessible small spaces in entry areas.
 - Providing a clear line of sight between one circulation space and the next.
 - Providing sheltered well-lit and highly visible spaces to enter the building, meet and collect mail.
- 6. Generally provide separate entries from the street for:
 - Pedestrians and cars.
 - Different uses, for example, for residential and commercial users in a mixeduse development.
 - Ground floor dwellings, where applicable.
- Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces.
- 8. Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by:
 - Locating them adjacent to the major entrance and integrated into a wall, where
 possible.
 - Setting them at 90 degrees to the street, rather than along the front boundary.

Daylight Access

Objectives

- To ensure that daylight access is provided to all habitable rooms and encouraged in all other areas of residential flat development.
- b) To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.
- To provide residents with the ability to adjust the quantity of daylight to suit their needs.

- 1. Plan the site so that new dwellings are oriented to optimise northern aspect.
- Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.
- Optimise the number of dwellings receiving daylight access to habitable rooms and principal windows.

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- Ensure daylight access to habitable rooms and private open space, particularly in winter - use skylights, clerestory windows and fanlights to supplement daylight access.
- Promote two-storey and mezzanine, ground floor dwellings or locations where daylight is limited to facilitate daylight access to living rooms and private open spaces.
- Ensure single aspect, single-storey dwellings have a northerly or easterly aspect - locate living areas to the north and service areas to the south and west of the development.
- 7. Avoid south facing dwellings.
- 8. Design for shading and glare control, particularly in summer, by:
 - Using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.
 - Optimising the number of north-facing living spaces.
 - Providing external horizontal shading to north-facing windows.
 - Providing vertical shading to east or west windows.
- Consider higher ceilings and higher window heads to allow deeper sunlight penetration.
- On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun.
- On north facing windows, projecting horizontal louvres admit winter sun while shading summer sun.
- 12. Use high performance glass but minimise external glare off windows, by:
 - Avoiding reflective films.
 - Using a glass reflectance below 20%.
 - Considering reduced tint glass.
- 13. Limit the use of lightwells as a source of daylight by limiting their use as the primary source of daylight in habitable rooms. Where they are used:
 - Relate lightwell dimensions to building separation, for example, if nonhabitable rooms face into a light well less than 12m high, the lightwell should measure 6 x 6m.
 - Conceal building services and provide appropriate detail and materials to visible walls.
 - Ensure light wells are fully open to the sky.
 - A combination of louvres provides shading for different times of the day.

3.6 Car Parking and Access

Residential Flat Buildings

Objectives

- To provide convenient, accessible and safe on site car parking for residents and visitors
- To minimise driveway crossings to maximise on street parking and landscaped nature strips.
- c) To integrate the location and design of car parking with the design of the site and building without compromising street character, landscape or pedestrian amenity and safety.
- d) To integrate the location and design of car parking with the design of the site and the building.

- Visitor car parking shall be clearly identified and may not be stacked or tandem car parking.
- Visitor car parking shall be located between any roller shutter door and the front boundary.
- 3. Pedestrian entries and driveways shall be separated.
- 4. Driveways shall be designed to accommodate removalist vehicles.
- Where possible vehicular entrances to the basement car parking shall be from the side of the building. As an alternative a curved driveway to an entrance at the front of the building may be considered if the entrance is not readily visible from the street.
- 6. Give preference to underground parking, whenever possible by:
 - Retaining and optimising the consolidated areas of deep soil zones.
 - Facilitating natural ventilation to basement and sub-basement car parking areas, where possible.
 - Integrating ventilation grills or screening devices of car park openings into the facade design and landscape design.
 - Providing safe and secure access for building users, including direct access to residential dwellings, where possible.
 - Providing a logical and efficient structural grid. There may be a larger floor area for basement car parking than for upper floors above ground. Upper floors, particularly in slender residential buildings, do not have to replicate basement car parking widths.
- Where above ground enclosed parking cannot be avoided, ensure the design of the development mitigates any negative impact on streetscape and street amenity by:
 - Avoid exposed parking on the street frontage.
 - Hiding car parking behind the building facade. Where wall openings (windows, fenestrations) occur, ensure they are integrated into the overall facade scale, proportions and detail.



Figure 34 32: Car parking at ground level

Pedestrian Access

Objectives

- a) To promote residential flat development and multi dwelling housing that is well connected to the street and contributes to the accessibility of the public domain.
- b) To ensure that residents, including users of strollers and wheelchairs and people with bicycles, are able to reach and enter their dwelling and use communal areas via minimum grade ramps, paths, access ways or lifts.

- 1. Utilise the site and it's planning to optimise accessibility to the development.
- Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets and internal streets.
- 3. Promote equity by:
 - Ensuring the main building entrance is accessible for all from the street and from car parking areas.
 - Integrating ramps into the overall building and landscape design.
 - Design ground floor dwellings to be accessible from the street, where applicable, and to their associated private open space.
- 4. Maximise the number of accessible and adaptable dwellings in a building by:
 - Providing more than one accessible entrance where a development contains clusters of buildings.
 - Separating and clearly distinguish between pedestrian accessways and vehicle accessways.
 - Locating vehicle entries away from main pedestrian entries and on secondary frontages.

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Dwelling Houses, Attached dwellings or Semi-detached dwellings

Objectives

- To provide car parking facilities on site that are convenient, safe and have sufficient space for vehicular manoeuvrability, whilst being visually unobtrusive.
- b) To minimise the need for on street car parking from new dwellings.

Controls

- 1. Two car parking spaces shall be provided for each dwelling.
- 2. At least one car parking must be provided behind the front setback.
- 3. A car parking space is to have a minimum dimension of 2.5 x 5.5m.
- 4. A single garage is to be a minimum of 3m wide internally and unobstructed.

3.7 Amenity and Environmental Impact

Overshadowing

Objective

To minimise overshadowing of neighbouring dwellings and their private open space.

Controls

Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least:

- One living, rumpus room or the like; and
- 50% of the private open space.

Privacy

Objectives

- To locate and design buildings to meet projected user requirements for visual and acoustic privacy and to protect privacy of nearby residents.
- b) To avoid any external impacts of a development, such as overlooking of adjoining sites
- To provide reasonable levels of visual privacy externally and internally, during the day and at night.
- d) To maximise outlook and views from principal rooms and private open space.

- Building siting, window location, balconies and fencing should take account of the importance of the privacy of on site and adjoining buildings and outdoor spaces.
- Windows to habitable rooms should be located so they do not overlook such windows in adjoining properties, other dwellings within the development or areas of private open space.
- Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties.
- Where possible the ground floor dwellings should be located above ground level to ensure privacy for occupants of the dwellings.

- Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings by:
 - Balconies to screen other balconies and any ground level private open space.
 - Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms.
 - Changing the level between ground floor dwellings with their associated private open space, and the public domain or communal open space.
- Use detailed site and building design elements to increase privacy without compromising access to light and air by:
 - Offsetting windows of dwellings in new development and adjacent development windows.
 - Recessed balconies and/or vertical fins between adjacent balconies.
 - Solid or semi-solid balustrades to balconies louvres or screen panels to windows and/or balconies.
 - Fencing
 - Vegetation as a screen between spaces.
 - Incorporating planter boxes into walls or balustrades to increase the visual separation between areas.
 - Utilising pergolas or shading devises to limit overlooking of lower dwellings or private open space.

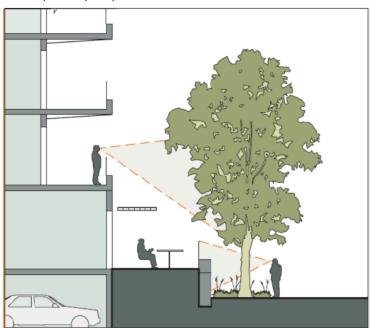


Figure 32 33: Screening and lower level balconies

Attachment 5

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Acoustic Impact

Objective

To ensure a high level of amenity by protecting the privacy of residents within residential flat buildings.

Controls

- Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings.
- Buildings having frontage to a Classified Road or a railway and impacted upon by rail or traffic related noises must incorporate the appropriate noise and vibration mitigation measures into the design in terms of the site layout, building materials and design, orientation of the buildings and location of sleeping and recreation areas.
- The proposed buildings must comply with the Environment Protection Authority criteria and the current relevant Australian Standards for noise and vibration and quality assurance.
- Arrange dwellings within a development to minimise noise transition between dwellings by:
 - Locating busy, noisy areas next to each other and quieter areas next to other quiet areas, for example, living rooms with living rooms, bedrooms with bedrooms.
 - Using storage or circulation zones within an dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas.
 - Minimising the amount of common walls with other dwellings.
 - Design the internal dwelling layout to separate noisier spaces from quieter spaces by grouping uses within an dwelling - bedrooms with bedrooms and service areas like kitchen, bathroom, and laundry together.

3.8 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes

- Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.
- Freestanding letterbox structures should be designed and constructed of materials that relate to the main building.
- Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material.

Waste management

- Waste disposal facilities shall be provided for development. These shall be located adjacent to the driveway entrance to the site.
- 2. Any structure involving waste disposal facilities shall be located as follows:
 - Setback 1m from the front boundary to the street
 - Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape.
 - Not be located adjacent to an adjoining residential property.
 - Details of the design of waste disposal facilities are shown in Part 1 of the DCP.

Frontage works and damage to Council infrastructure

- Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.
- Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.
- Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site.

Electricity Sub Station

In some cases it may be necessary to provide an electricity substation at the front
of the development adjacent to the street frontage. This will involve dedication of
the area as a public street to allow access by the electricity provider. The front
boundary treatment used elsewhere on the street frontage.

3.9 Residential Choice and Mix for Apartment Buildings

A mix of apartment types and sizes is proposed to cater for a variety of socio-economic groups. A range of dwelling sizes and types creates a housing mix that will cater for a diverse population, as well as provide for changing use over time.

Objectives

- To ensure development provides a mix of apartment types and sizes to accommodate a range of household types and needs.
- b) To ensure apartment sizes and room proportions are adequate to meet the needs of the occupants and to afford a range of changing activities over time.
- Ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents.
- d) Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.

In addition to the provisions for apartment mix as per Part 4 of the Apartment Design Guide (ADG) or equivalent, the following additional controls apply.

- Provide a variety of residential unit mix, sizes, and layouts within each residential development, particularly in larger buildings. It is recognised that the dwelling mixes may not be possible in smaller developments of less than six dwellings.
- 2. To achieve a mix of living styles, sizes and layouts within each residential development, comply with the following:

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- Provide a mix of studio, 1 bedroom, 2 bedroom and 3 bedroom units
- Studios and 1 bedroom units are not to be greater than 25% and not less than 5% of the total mix of apartments within each development.
- Two bedroom units are not to be more than 75% of the total mix of apartments within each development.
- Provide apartments that are flexible enough to support a change in their use. The applicant will be required to demonstrate that a studio unit can be combined with other units to enable this to occur.
- 4. 10% of all apartments are to be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes 'pre-adaptation' design details to ensure visit ability is achieved.
- 5. Where possible, adaptable dwellings are to be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities.
- The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian adaptable Housing Standard (AS 4299-1995).
- Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disable parking spaces.

3.10 Studio dwellings

Studio dwelling means a small self-contained dwelling that is erected above a garage facing a rear lane or a secondary road.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 1 studio dwelling is a secondary dwelling.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 2 studio dwelling is a dual occupancy or multi-dwelling housing.

Objectives

- To provide an alternate form of housing in master planned neighbourhoods that include community facilities.
- To provide for a variety of housing types to cater for varied socio-demographic households.
- c) To provide for passive surveillance to laneways and private accessways.

Controls

Type 1 Studio

Type 1 Studios are a room or rooms constructed above a detached garage associated with the main dwelling on the lot. The studio is primarily designed to be used by the occupants of the main dwelling. The studio shall comply with the following:

- The studio shall be located on corner blocks or addressing secondary streets and on laneway entries and bends to improve surveillance.
- Located on lots with a minimum size of 300sam.
- Must be detached from other studios.
- 4. Maximum gross floor area: 45sqm.

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- 5. No additional car parking space is required
- The studio shall be located above the garage, carport or like structure for the principal dwelling on the land.
- 7. There may be no subdivision of the studio from the principal dwelling on the land.
- Windows are not permitted on elevations which directly face the adjoining lots private open space.
- Garages with studios above are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 11. Studios shall not reduce the minimum required amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 3.5 of this Part.

Type 2 Studio

Type 2 Studios are a room or rooms constructed above a detached garage that is intended to be separately strata titled to allow for independent living from the principal dwelling on the lot. The studio shall comply with the following:

- 1. The studio shall be located on comer blocks with laneway vehicle access.
- 2. Located on lots with a minimum size of 350sqm.
- 3. Maximum gross floor area: 75sgm.
- Studio to be located above the garage, carport or like structure for the principal dwelling on the land and are to be detached from other studios.
- One additional dedicated on-site car parking space is required to be associated with the Type 2 studio.
- Car parking space is not to be located in front building setback of the principal dwelling.
- 7. Car parking space is not to be in a stacked configuration.
- The studio must include provision of a balcony accessed directly off living space having minimum size of 6sqm, plus a minimum 10sqm ground level service yard with space for clothes drying facilities. The balcony shall not protrude over any property boundary.
- Type 2 studios may be strata subdivided from the principal dwelling, or dwellings on the land.
- Garages with studios are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- 11. A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 12. Pedestrian access to studios is to be from the street frontage and not the laneway.
- Provision for separate services and an on-site garbage storage area e.g. separate letter box.
- 14. Studios shall not reduce the minimum amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 3.5 of this Part.
- 15. Windows are not permitted on elevations which directly face the adjoining lots private open space. Windows may be permitted on the elevation facing the principal dwelling on the lot where they have a minimum sill height of 1.7m.
- 16. Screened access ways (e.g. staircases) for studios to prevent viewing into adjoining private open space areas.

4. Controls for Residential Development Urban Transition areas (17&21 Dwellings/Hectare)

4.1 Preliminary

Applies to

This section applies to land identified in Liverpool LEP 2008 Dwelling Density Map as having a minimum density of 17 or 21 Dwellings / Hectare.

Background

Development within the 17 and 21 dwellings/hectare areas are primarily intended for Multi Dwelling Housing, Semi-detached dwellings and Detached dwellings. Residential Flat Buildings are not preferred in the 17 or 21 dwellings/hectare areas (however, if proposed, they are subject to objectives and controls for the urban 28 dwellings/hectare area).

4.2 Site Planning

Objectives

- a) To ensure that the dwelling(s) are sensitive to site attributes, such as streetscape character, natural landform, drainage, existing vegetation, land capability, slope, solar access and if relevant, heritage items.
- b) To ensure privacy for residents and neighbours.

- The dwelling layout must be designed around the site attributes such as slope, existing vegetation, land capability and/or solar access (See Figure 33 34 for a site analysis plan).
- Basement car parking (if applicable) should be unobtrusive and blend into the general façade of the building.
- There must be a direct link from at least one living area to the principal private open space.
- The siting of windows of habitable rooms on the first floor shall minimise overlooking to the principal private open space of neighbouring properties.
- 5. Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1.

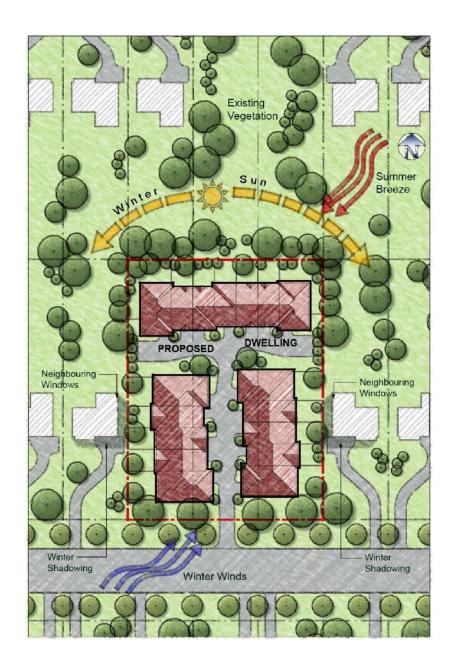


Figure 33 34: Example of a Site Analysis Plan

4.3 Setbacks

Objectives

- To set dwellings back from the street and adjacent properties to provide reasonable space for landscaping, private open space and solar access.
- b) To set dwellings back from each other to provide visual and acoustic privacy.
- c) To create a streetscape that provides a desirable and safe environment.
- d) To establish a streetscape of a scale and sense of enclosure appropriate to the locality.
- To maximise the amount of area capable of allowing the growth of trees and shrubs.

Controls

Front and Secondary Setbacks

1. Buildings shall be setback in accordance with Table 4.

Table 4: Setbacks within the 17 dw/ha area

Front	Secondary	
Setback	Setback	
4.5 m	2.5 m	

- For lots containing a dwelling house, the secondary setback is generally along the longest length boundary. For multi-dwelling housing, the secondary setback faces the secondary road, which may be the shorter boundary(s).
- 3. Garages shall be setback 5.5m from the street frontage, or 1.0m from a secondary boundary when consistent with a typology shown in Figure 20 21.
- Articulation features such as verandahs, eaves and other sun control devices may encroach on the front and secondary setback by up to 1m.
- Corner sites shall provide a frontage to both streets and should articulate their corner location with an architectural feature such as a wraparound verandah, bay window, corner entry or roof feature.



Figure 34 35: Small lot housing corner lot articulation

Side and Rear Setbacks

 Buildings shall be setback from the side and rear boundaries in accordance with Table 5.

Table 5: Side and rear setbacks within the 17 & 21 dw/ha areas

Item	Item Side Setback		Rear Setback	
_	Multi Dwelling Housing	Dwelling House, Attached dwelling and Semi-detached dwelling	Multi Dwelling Housing	Dwelling House, Attached dwelling and Semi-detached dwelling
Party Wall	0 m	0 m	n/a	n/a
1 storey	0.9 m	0.9 m	5 m	4 m
2 storey	1.2 m	1.2 m	8 m	8 m
3 storeys and above	1.4 m	1.4 m	8 m	8 m

Note: In a terrace style attached dwelling development the upper storey setbacks do not apply to the terraces unless by having the zero lot line will create unreasonable solar shading - (that the adjacent lot's dwelling will not receive the minimum 3 hours sunlight to 50% between 9am and 3pm on the 21st June)

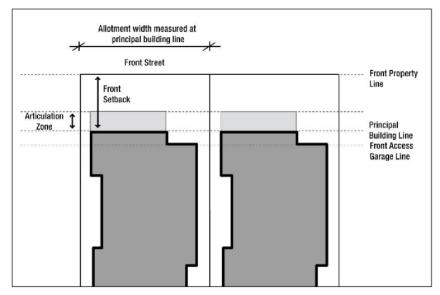


Figure 35 36: Front Setback

Zero lot lines for attached and semi-detached dwellings

This zero lot line control only applies to the end dwellings, in a multi-zero lot line multi dwelling development, such as terraces. It also applies to dwellings that have a zero lot line.

- Walls are generally to be 180mm clear of the side boundary to allow for gutter and eaves overhang.
- 2. The length of a zero lot line wall is limited to 50% of the lot length.

- 3. No windows are permitted in a zero lot line wall.
- A maintenance easement of at least 900mm shall be provided on the adjoining boundary.
- 5. This is shown in Figure 37 38.

Zero Lot Lines

Objectives

- To allow flexibility in the distribution of side setbacks in residential areas in order to achieve varying dwelling types and to maximise solar access.
- b) To create attractive and cohesive streetscapes and the efficient use of land.
- c) To maintain appropriate amenity between dwellings.

- Zero lot line dwellings are not permitted on an ad-hoc basis. They must form part
 of a subdivision plan for at least one complete block/street frontage so that a
 consistent streetscape is achieved and that the privacy and solar access of
 adjoining dwellings are not adversely impacted upon.
- Zero lot line dwellings are to provide a side setback on the non zero lot line side that equals to at least twice the minimum side setback requirement in Table 5 Side Setbacks.
- Zero lot line development is to follow the lot orientation principles as shown in Figure 36 37 to maximise solar access.
- 4. Zero lot line development is not permitted on lots that are 15m wide or greater.
- 5. An easement for maintenance of the zero lot line walls (and any services along the side of the dwelling) is to be provided on the adjoining property. No overhanging eaves or services will be permitted within the easement. The S88b instrument supporting the maintenance easement is to be worded so that Council is removed from any dispute resolution process.

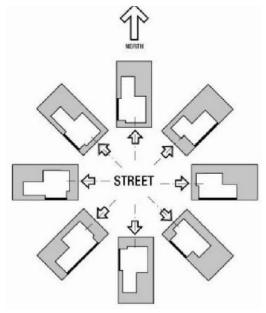


Figure 36 37: Lot orientation principles

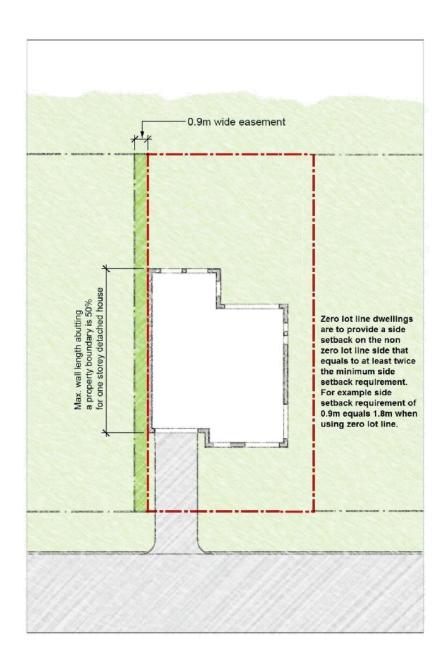


Figure 37 38: Zero Lot Line

4.4 Landscaped Area and Private Open Space

Landscaped area is defined in Liverpool LEP 2008.

Landscaped Area (deep soil area)

Objectives

- a) To provide an area to allow vegetation to mature.
- b) To assist with management of the water table.
- c) To assist with management of water quality.
- d) To enhance the existing streetscape and soften the visual appearance of the buildings.

Controls

- 1. A minimum of 20% of the site area shall be landscaped area.
- 2. Optimise the provision of consolidated landscaped area within a site by:
 - The design of basement and sub-basement car parking, so as not to fully cover the site.
 - The use of side and rear setbacks.
 - Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped area of adjacent properties.
- Promote landscape health by supporting for a rich variety of vegetation type and size.
- Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials.

Open Space

Open space includes Landscaped Areas and hard paved areas such as footpaths and barbeque areas. It does not include driveways, drying areas or waste storage areas.

Objectives

- a) To provide residents with passive and active recreational opportunities.
- b) To provide an area on site that enables soft landscaping and deep soil planting.
- To ensure that communal open space is consolidated, configured and designed to be useable and attractive.
- d) To provide a pleasant outlook.

- Provide communal open space, which is appropriate and relevant to the context and the building's setting.
- Where communal open space is provided, facilitate its use for the desired range of activities by:
 - Locating it in relation to buildings to optimise solar access to dwellings.
 - Consolidating open space on the site into recognisable areas with reasonable space, facilities and landscape.
 - Designing its size and dimensions to allow for the range of uses it will contain.
 - Minimising overshadowing.
 - Carefully locating ventilation duct outlets from basement car parking.
- 3. Locate open space to increase the potential for residential amenity.

Private Open Space

Objective

- a) To ensure that private open space is clearly defined, usable and meets user requirements for privacy, solar access, outdoor activities, accessibility and landscaping.
- b) To provide all dwellings with private open space.

Controls

 Private open space shall be provided for in accordance with Table 6for Multi Dwelling Housing, Attached dwellings and Semi-detached dwellings and Dwelling houses.

Table 6: Private open space in the 17 & 21 dw/ha area

Dwelling Size	Private Open Space Area	Minimum Width
Less than 65 m ²	30sqm	3m
Between 65 and 100m ²	40sqm	3m
Between 101 and 150m	50sqm	4m
Between 151 and 200m	60sqm	4m
Greater than 200m ²	70sqm	4.5m

- 2. Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
- 3. Private open space should be clearly defined for private use.

Drying areas

Objective

To provide adequate clothes drying area for residents.

Controls

 Clothes drying facilities must be provided. Clothes drying areas should not be visible from a public place.

4.5 Cut and Fill, Building Design and Streetscape

Cut and Fill of Land

Objectives

- a) To reduce the incidence of change in natural ground levels.
- To encourage the architectural designs of dwellings which suit the contours of the land.
- To provide controls for cut and fill of land designed to minimise the incidence of soil erosion and subsequent sedimentation of waterways.
- d) To ensure that development on adjoining properties is not threatened or prejudiced by proposed cut and fill practices.
- To discourage and eliminate, where possible, the construction of retaining walls on allotment boundaries.
- f) To minimise overshadowing of neighbouring dwellings, their private open space or any solar panelling.

Controls

- 1. The maximum cut on a site must not exceed 600mm.
- All retaining wall structures shall be masonry construction and designed by a suitably qualified person, or constructed as specified by the manufacturer of the product. The retaining wall shall be constructed wholly inside (within) the boundary of the site
- All slab constructions for dwellings that are above natural ground level are to be constructed using dropped edge beams to retain fill. The maximum fill within the confines of the slab must not exceed 1m. All fill must be contained within the dwelling footprint.
- 4. Contaminated fill, either imported or found on site is not permitted.

Note: In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut, Council will require the completion of such retaining wall(s) PRIOR TO the release of the occupation certificate.

- 5. Where an applicant considers that an allotment has characteristics which warrant exemption from this policy, an application for exemption may be made by the submission of a development application to Council for consideration. In addition to normal requirements the submission should include:
 - A plan showing existing contours (at 0.5m intervals) of the subject site and all adjoining sites.
 - A plan showing future contours (after proposed cut and fill) of the subject site and all adjoining sites.
 - Full details of any proposed retaining wall(s).

Note: In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut and fill, Council will require the completion of such retaining wall(s) PRIOR TO the commencement of any building works.

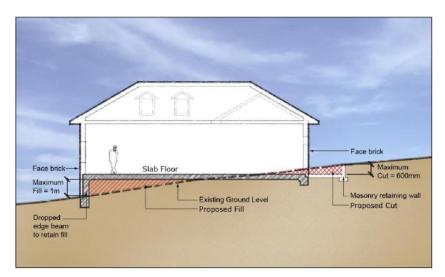


Figure 38 39: An example of Cut and Fill

Dwelling Houses and Semi-detached dwellings and Detached dwellings

Building Envelopes

- A Dwelling House, Semi-detached dwellings and attached dwellings may have a maximum of three storeys plus an attic, where building height limits permit.
- Attics do not constitute a storey if they are included in a roof space and having a roof slope not greater than 36 degrees pitched from the ceiling level of the uppermost floor; provided that:
 - All windows face the street.
 - Access to the attic must be via permanent stairs.
 - Attics are to be provided with skylights, or a dormer window. A dormer window shall be a maximum of 1.5m wide and must maintain the privacy of the adjoining residents.

Building Design

The built form must be uniform in bulk and scale but seek some variety in terms of building elements such as balconies, entrances, carports and roof forms.

The controls aim to ensure that a level of consistency is maintained in those building elements.

Objectives

- a) To promote an architectural style that is contemporary and innovative
- a) To encourage designs that will enhance the character of the neighbourhood.
- b) To promote variation of building facade and design.
- That the building enhances the streetscape through the use of suitable built form design and landscaping.
- d) To ensure buildings address all street frontages.
- To discourage garages and in particular garage doors, from visually dominating the streetscape.
- f) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- g) To ensure habitable rooms address the street.
- h) To encourage balconies over garages on two storey dwellings.

Controls

Building Appearance

- 1. Simply articulated building forms are preferred
- 2. Dwellings must address the street frontage
- 3. Mirror imaging of Attached dwellings is not permitted
- One building must be set back a minimum of 1m behind the other building in an Attached dwelling.
- 5. Attached dwellings must only be attached to one other dwelling.
- 6. Dwellings corner sites must address both street frontages.
- Use of verandas and balconies are encouraged.
- 8. Vertically proportioned windows are encouraged.

Building Materials

- 1. External walls of dwellings can be constructed with the following materials:
 - Face brickwork,

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- Rendered brickwork,
- Stone.
- Concrete wall,
- Glass, and
- Lightweight materials such as, weatherboards, timber boarding or fibre cement.
- 2. External walls are to display a mix of materials.
- 3. Lightweight materials are only permitted on upper storey external walls.

Retaining Walls

Retaining walls can be either built of masonry or sandstone.

Roofs

- 1. Simple use of gables and pitched and hipped roofs is encouraged.
- Pitched and hipped roofs are to have a minimum of 450mm eaves unless the dwelling has zero metre side setbacks.
- 3. Roof pitch must not be lower than 22.5 degrees or higher than 45 degrees.
- 4. Skillion and vaulted roofs are permitted.
- 5. Flat roofs must not dominate the built form.
- 6. Flat roofs must not occupy more than 50% of the total roof area.

Balconies

- 1. Decks and balconies can be built to form framed porticos or entrances.
- 2. Balconies should incorporate simple railing and balustrade detailing.

Levels

Dwellings are to follow the slope of the land.

Building Depth

Objectives

To achieve the development of working and living environments with good internal amenity and that minimise the need for artificial heating, cooling and lighting.

Controls

Maximum building depths for houses are 16m, unless internal courtyards are provided.

Internal Design of Dwellings

Objectives

- The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.
- To provide passive surveillance from rooms addressing the street or any adjoining open space.
- To encourage the internal design of the dwelling to take advantage of cross ventilation
- d) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.
- e) To ensure that each dwelling shall provide a sufficient amount of storage for elements such as garden and sports equipment.

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Controls

- All dwellings shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
- 2. Living rooms should take advantage of northern aspects.
- 3. Access to private open space must be from at least one living room.
- 4. The internal layout of the dwelling must incorporate cross ventilation.
- Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side or rear of the dwelling.
- Each dwelling must provide a minimum storage area of 8m³.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).
- Dwelling entries must be oriented to the street.

Multi Dwelling Housing

Building Design

Objectives

- a) To encourage designs that will enhance the character of the neighbourhood.
- b) To promote variation of building facade and design.
- That the building enhances the streetscape through the use of suitable built form design and landscaping.
- d) To ensure buildings address all street frontages.
- To discourage garages and in particular garage doors, from visually dominating the streetscape.
- f) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- g) To ensure habitable rooms address the street.
- h) To encourage balconies over garages in two storey dwellings.
- i) To encourage steep or sloping site to build split level or stepped development.

- Dwellings with a street frontage shall orientate the main entrance and where possible at least one living area towards the street.
- 2. Entry points shall be enhanced/emphasised to all dwellings especially those facing the street
- The first floor of the townhouse developments must be no greater than two thirds of the ground floor area.
- Building facades shall be articulated and roof form is to be varied to provide visual variety.
- Walls shall be a mix of masonry, rendered and or bagged, and painted, lightweight clad and painted and/or flush face brick. Justification will be required for 100% face brick facades or 100% rendered and painted brick and will be assessed on merit.
- 6. Facades can be articulated by:
 - The use of different materials and detailing and / or.
 - The inclusion of balconies, verandahs, pergolas and landscaped beds.
- 7. A sidewall must be articulated if the wall has a continuous length of over 10m.

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- 8. The entrance of each dwelling shall be emphasised
- 9. Dwellings built at the rear of the allotment must be single storey.
- Driveways should avoid a 'gun barrel' effect by curving and siting of buildings, which create a driveway form with the divided carriageway separated by soft landscaping.
- 11. Attic floor space may be used when it is contained wholly within the roof pitch and will not be counted as a storey provided that the attic space is part of the dwelling.
- Space used for car parking shall be included as a storey if the ceiling of the car parking level exceeds more than 1m above the natural ground level.
- The maximum roof pitch shall be 36 degrees.
- Multi dwelling housing built on steep or sloping lots should be built of split-level construction.

Internal Design

Objectives

- The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.
- b) To provide natural surveillance from a room addressing the street.
- To encourage the internal design of the dwelling to take advantage of cross ventilation.
- d) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.
- e) To ensure that each dwelling provides a sufficient amount of storage for elements such as garden and sports equipment.

Controls

- Townhouses and villa's located on street boundaries shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
- 2. Living rooms should take advantage of northern aspects where possible.
- 3. Access to private open space must be from at least one living room.
- The internal layout of the dwelling must incorporate cross ventilation.
- Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side and the rear of the development.
- Each dwelling must provide a minimum storage area of 8 m³.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).

All Residential Development

Roof Design

Objectives

- To provide quality roof designs, which contribute to the overall design and quality of the subdivision;
- To integrate the design of the roof into the overall facade, building composition and desired contextual response;
- c) To increase the longevity of the building through weather protection.

Controls

1. Relate roof design to the desired built form. This may include:

- Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.
- Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas.
- Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line.
- Using special roof features, which relate to the desired character of an area, to express important corners.
- Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. This includes the design of any parapet or terminating elements and the selection of roof materials.
- Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.
- Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. These elements include lift over-runs, service plants, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage.
- Where habitable space is provided within the roof, optimise residential amenity in the form of attics or penthouse dwellings

Building Entry

Objectives

- To create entrances which provide a desirable residential identity for the development.
- b) To orient the visitor.
- c) To contribute positively to the streetscape and building facade design.

- 1. Improve the presentation of the development to the street by:
 - Locating entries so that they relate to the existing street and subdivision pattern, street tree planting and pedestrian access network.
 - Designing the entry as a clearly identifiable element of the building in the street
 - Utilising multiple entries-main entry plus private ground floor dwelling entrieswhere it is desirable to activate the street edge or reinforce a rhythm of entries along a street.
- Provide as direct a physical and visual connection as possible between the street and the entry.
- Achieve clear lines of transition between the public street, the shared private circulation spaces and the dwelling.
- 4. Ensure equal access for all.
- 5. Provide safe and secure access by:
 - Avoiding ambiguous and publicly accessible small spaces in entry areas.
 - Providing a clear line of sight between one circulation space and the next.
 - Providing sheltered well-lit and highly visible spaces to enter the building, meet and collect mail.
- 6. Generally provide separate entries from the street for:
 - Pedestrians and cars.

- Different uses, for example, for residential and commercial users in a mixeduse development.
- Ground floor dwellings, where applicable.
- Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces.
- 8. Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by:
 - Locating them adjacent to the major entrance and integrated into a wall, where possible.
 - Setting them at 90 degrees to the street, rather than along the front boundary.

Daylight Access

Objectives

- To ensure that daylight access is provided to all habitable rooms and encouraged in all other areas of the dwelling(s).
- To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.
- To provide residents with the ability to adjust the quantity of daylight to suit their needs.

<u>Controls</u>

- 1. Plan the site so that new dwellings are oriented to optimise northern aspect.
- Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.
- Optimise the number of dwellings receiving daylight access to habitable rooms and principal windows.
- Ensure daylight access to habitable rooms and private open space, particularly in winter - use skylights, clerestory windows and fanlights to supplement daylight access.
- Ensure single aspect, single-storey dwellings have a northerly or easterly aspect

 locate living areas to the north and service areas to the south and west of the development.
- 6. Avoid south facing dwellings.
- 7. Design for shading and glare control, particularly in summer, by:
 - Using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.
 - Optimising the number of north-facing living spaces.
 - Providing external horizontal shading to north-facing windows.
 - Providing vertical shading to east or west windows.
- Consider higher ceilings and higher window heads to allow deeper sunlight penetration.
- On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun.

- On north facing windows, projecting horizontal louvres admit winter sun while shading summer sun.
- 11. Use high performance glass but minimise external glare off windows, by;
 - Avoiding reflective films.
 - Using a glass reflectance below 20%.
 - Considering reduced tint glass.
- 12. Limit the use of lightwells as a source of daylight by prohibiting their use as the primary source of daylight in habitable rooms. Where they are used:
 - Relate lightwell dimensions to building separation, for example, if nonhabitable rooms face into a light well less than 12m high, the lightwell should measure 6 x 6m.
 - Conceal building services and provide appropriate detail and materials to visible walls.
 - Ensure light wells are fully open to the sky.
 - A combination of louvres provides shading for different times of the day.

4.6 Car Parking and Access

Multi Dwelling Housing

Objectives

- To provide convenient, accessible and safe on site car parking for residents and visitors.
- To minimise driveway crossings to maximise on street parking and landscaped nature strips.
- c) To integrate the location and design of car parking with the design of the site and building without compromising street character, landscape or pedestrian amenity and safety.
- d) To integrate the location and design of car parking with the design of the site and the building.

- Visitor car parking shall be clearly identified and may not be stacked or tandem car parking.
- Visitor car parking shall be located between any roller shutter door and the front boundary.
- The extent of paved area for driveways shall be kept to a minimum. Driveways abutting dwellings shall be kept to a minimum.
- Avoid large expanses of driveways, including concentrating double garages adjacent to each other.
- Land that is unlikely to be used for manoeuvring shall be used for landscaping or for pedestrian areas and be distinguished by different materials and levels.
- Refer to Figure 39 40.

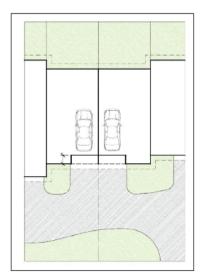


Figure 39 40: Garage and Driveway design

Basement Car parking

- Basement car parking is permitted but will be included as a storey if the ceiling is located more than 1m above the natural ground level.
- 2. On sites that slope away from the street, underground car parking structures that protrude more than 1m above the natural ground level towards the rear will not be included as a storey where topographical features warrant and the streetscape is not adversely affected. The car parking area should be adequately obscured from visible sight by the screen planting.

Access Driveways

- 1. Driveways to the street shall be kept to a minimum.
- 2. Driveways may be permitted to individual dwellings provided that the streetscape is not adversely affected and the application complies elsewhere with the DCP.
- Kerbs shall be provided along the edge of all internal driveways. All traffic must be able to enter and exit the site in a forward direction. Refer to Part 1 for other controls on Access Driveways

Pedestrian Access

Objectives

- a) To promote multi dwelling housing that is well connected to the street and contributes to the accessibility of the public domain.
- b) To ensure that residents, including users of strollers and wheelchairs and people with bicycles, are able to reach and enter their dwelling and use communal areas via minimum grade ramps, paths, access ways or lifts.

- 1. Utilise the site and it's planning to optimise accessibility to the development.
- Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets and internal streets.

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3. Promote equity by:

- Ensuring the main building entrance is accessible for all from the street and from car parking areas.
- Integrating ramps into the overall building and landscape design.
- 4. Maximise the number of accessible and adaptable dwellings in a building by:
 - Providing more than one accessible entrance where a development contains clusters of buildings.
 - Separating and clearly distinguish between pedestrian accessways and vehicle accessways.
 - Locating vehicle entries away from main pedestrian entries and on secondary frontages.

Dwelling Houses, Attached dwellings and Semi-detached dwellings

Objectives

- To provide car parking facilities on site that are convenient, safe and have sufficient space for vehicular manoeuvrability, whilst being visually unobtrusive.
- b) To minimise the need for on street car parking from new dwellings.

Controls

- 1. Two car parking spaces shall be provided for each dwelling.
- 2. At least one car parking must be provided behind the front setback.
- 3. A car parking space is to have a minimum dimension of 2.5 x 5.5m.
- 4. A single garage is to be a minimum of 3m wide internally and unobstructed.

4.7 Landscaping and Fencing

Landscaping

Objectives

- To retain existing mature trees within the site in a way which ensures their ongoing health and vitality.
- b) To provide privacy, summer shade and allow winter sun.
- c) To enhance the existing streetscape and visual appearance of dwellings.
- d) To encourage landscaping that is appropriate to the natural, cultural and heritage characteristics of its locality.
- To ensure the visual impact of development is minimised and integrated into the streetscape.

- The front and rear setback areas of development are to be utilised for canopy tree
 planting. The landscape design for all development must include canopy trees
 that will achieve a minimum 8m height at maturity within the front and rear setback
 areas.
- At least one tree shall be planted in the landscaped areas. The tree must reach a mature height of over 8m.
- Landscape planting should be principally comprised of native species to maintain
 the character of Liverpool and provide an integrated streetscape appearance.
 However, Council will consider the use of deciduous trees in small private open
 space areas such as courtyards for control of local microclimate and to improve
 solar access.

 Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.

Note: It is important to retain significant vegetation to maintain an existing streetscape and enhance the visual appearance of new dwellings.

Fencing

Objectives

- a) To provide a clear transition between public and private areas.
- b) To provide a visual element within the streetscape.
- c) To ensure fencing enhances the streetscape.

Controls

- 1. Wall finishes must have low reflectivity.
- Where noise insulation is required, consider the installation of double-glazing or other noise attenuation measures at the front of the building rather than construction of a high solid form fence.

Primary Frontage

- 1. The maximum height of a front fence is 1.2m.
- The front fence may be built to a maximum height of 1.5m if the fence is setback 1m from the front boundary with suitable landscaping in front of the proposed fence
- Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas.
- 4. The front fence must be 30% transparent.
- Front fences shall be constructed in masonry, timber, metal pickets and/or vegetation and must be compatible with the proposed design of the dwelling.
- 6. The front fence may be built to a maximum of 1.8m only if:
 - The primary frontage is situated on a Classified Road.
 - The fence is articulated by 1m for 50% of its length and has landscaping in front of the articulated portion.
 - The fence does not impede safe sight lines from the street and from vehicles entering and exiting the site.

Secondary Frontage

- Side fences and walls must be a maximum of 1.8m in height, and constructed of masonry, timber and/or landscaped (See Figure 40 41).
- For side walls or fences along the secondary frontage, a maximum height of 1.2m is required for the first 9m measured from the front boundary, the remaining fence / wall may then be raised to a maximum of 1.8m (See Figure 40 41). The secondary setback is generally the longest length boundary for detached dwelling houses.
- Side fencing facing a public street or open space must not be constructed of sheet metal.

Boundary Fences

- The maximum height of side boundary fencing within the setback to the street is 1.2m
- Internal boundary fences shall be lapped and capped timber, masonry or metal sheeting

Edmondson Park

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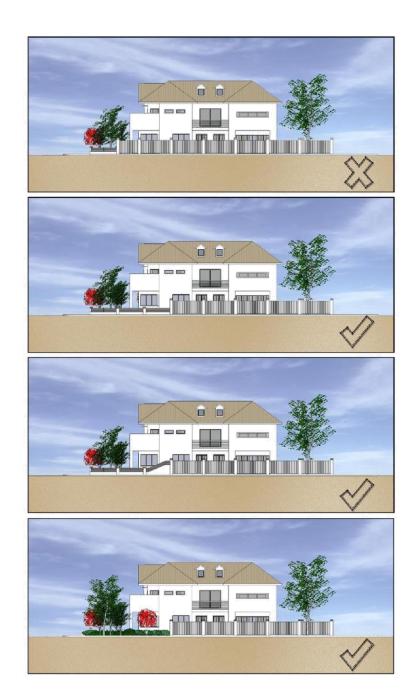


Figure 40 41: Fence treatments on secondary frontage

Attachment 5

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4.8 Amenity and Environmental Impact

Overshadowing

Objective

To minimise overshadowing of neighbouring dwellings and their private open space.

Controls

Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least:

- One living, rumpus room or the like; and
- 50% of the private open space.

Privacy

Objectives

- To locate and design buildings to meet projected user requirements for visual and acoustic privacy and to protect privacy of nearby residents.
- To avoid any external impacts of a development, such as overlooking of adjoining sites
- To provide reasonable levels of visual privacy externally and internally, during the day and at night.
- d) To maximise outlook and views from principal rooms and private open space.

- Building siting, window location, balconies and fencing should take account of the importance of the privacy of on site and adjoining buildings and outdoor spaces.
- Windows to habitable rooms should be located so they do not overlook such windows in adjoining properties, other dwellings within the development or areas of private open space.
- Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties.
- 4. Where possible the ground floor dwellings should be located above ground level to ensure privacy for occupants of the dwellings.
- Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings by:
 - Balconies to screen other balconies and any ground level private open space.
 - Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms.
 - Changing the level between ground floor dwellings with their associated private open space, and the public domain or communal open space.
- Use detailed site and building design elements to increase privacy without compromising access to light and air by:
 - Offsetting windows of dwellings in new development and adjacent development windows.
 - Recessed balconies and/or vertical fins between adjacent balconies.
 - Solid or semi-solid balustrades to balconies louvres or screen panels to windows and/or balconies.
 - Fencing
 - Vegetation as a screen between spaces.

- Incorporating planter boxes into walls or balustrades to increase the visual separation between areas.
- Utilising pergolas or shading devises to limit overlooking of private open space.

4.9 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes

- Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.
- Freestanding letterbox structures should be designed and constructed of materials that relate to the main building.
- Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material.

Waste management

- Waste disposal facilities shall be provided for development. These shall be located adjacent to the driveway entrance to the site.
- 2. Any structure involving waste disposal facilities shall be located as follows:
 - Setback 1m from the front boundary to the street.
 - Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape.
 - Not be located adjacent to an adjoining residential property.
 - Details of the design of waste disposal facilities are shown in Part 1 of the DCP

Frontage works and damage to Council infrastructure

- Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.
- Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.
- Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site.

Electricity Sub Station

In some cases it may be necessary to provide an electricity substation at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public street to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage.

4.10 Studio dwellings

Studio dwelling means a small self-contained dwelling that is erected above a garage facing a rear lane or a secondary road.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 1 studio dwelling is a secondary dwelling.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 2 studio dwelling is a dual occupancy or multi-dwelling housing.

Objectives

- To provide an alternate form of housing in master planned neighbourhoods that include community facilities.
- To provide for a variety of housing types to cater for varied socio-demographic households.
- c) To provide for passive surveillance to laneways and private accessways.

Controls

Type 1 Studio

Type 1 Studios are a room or rooms constructed above a detached garage associated with the main dwelling on the lot. The studio is primarily designed to be used by the occupants of the main dwelling. The studio shall comply with the following:

- The studio shall be located on corner blocks or addressing secondary streets and on laneway entries and bends to improve surveillance.
- 2. Located on lots with a minimum size of 300sqm.
- 3. Must be detached from other studios.
- 4. Maximum gross floor area: 45sqm.
- 5. No additional car parking space is required.
- 6. The studio shall be located above the garage, carport or like structure for the principal dwelling on the land.
- 7. There may be no subdivision of the studio from the principal dwelling on the land.
- Windows are not permitted on elevations which directly face the adjoining lots private open space.
- Garages with studios above are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 11. Studios shall not reduce the minimum required amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 4.4 of this Part.

Type 2 Studio

Type 2 Studios are a room or rooms constructed above a detached garage that is intended to be separately strata titled to allow for independent living from the principal dwelling on the lot. The studio shall comply with the following:

- 1. The studio shall be located on corner blocks with laneway vehicle access.
- Located on lots with a minimum size of 350sqm.
- 3. Maximum gross floor area: 75sqm.
- Studio to be located above the garage, carport or like structure for the principal dwelling on the land and are to be detached from other studios.

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- One additional dedicated on-site car parking space is required to be associated with the Type 2 studio.
- Car parking space is not to be located in front building setback of the principal dwelling.
- 7. Car parking space is not to be in a stacked configuration.
- The studio must include provision of a balcony accessed directly off living space having minimum size of 6sqm, plus a minimum 10sqm ground level service yard with space for clothes drying facilities. The balcony shall not protrude over any property boundary.
- Type 2 studios may be strata subdivided from the principal dwelling, or dwellings on the land.
- Garages with studios are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- 11. A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 12. Pedestrian access to studios is to be from the street frontage and not the laneway.
- Provision for separate services and an on-site garbage storage area e.g. separate letter box.
- 14. Studios shall not reduce the minimum amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 3.5 of this Part.
- 15. Windows are not permitted on elevations which directly face the adjoining lots private open space. Windows may be permitted on the elevation facing the principal dwelling on the lot where they have a minimum sill height of 1.7m.
- Screened access ways (e.g. staircases) for studios to prevent viewing into adjoining private open space areas.

5. Controls for Residential Development in Suburban areas (14 Dwellings/Hectare)

5.1 Preliminary

Applies to

This section applies to land identified in Liverpool LEP 2008 Dwelling Density Map as having a minimum density of 14 Dwellings / Hectare.

Background

Development within the 14 Dwellings / Hectare area is primarily intended for Dwelling houses, Semi detached dwellings and Attached dwellings. Whilst multi-dwelling housing and residential flat buildings are permitted in the R1 zone, they ae not favoured in the 14 dwellings/Hectare area. Refer to controls in the Urban (28dw/Ha) section for multi-dwelling housing and residential flat buildings

5.2 Site Planning

Objectives

- a) To ensure that the dwelling is sensitive to site attributes, such as streetscape character, natural landform, drainage, existing vegetation, land capability, slope, solar access and if relevant, heritage items.
- b) To ensure privacy for residents and neighbours.

- The dwelling layout must be designed around the site attributes such as slope, existing vegetation, land capability and/or solar access (See Figure 44 42 for a site analysis plan).
- Basement car parking (if applicable) should be unobtrusive and blend into the general façade of the building.
- There must be a direct link from at least one living area to the principal private open space.
- 4. The siting of windows of habitable rooms on the first floor shall minimise overlooking to the principal private open space of neighbouring properties.
- 5. Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate onsite detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1.

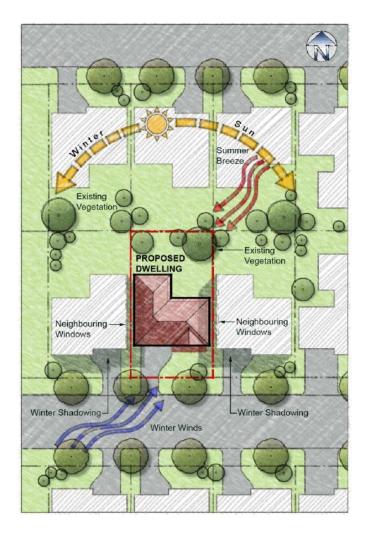


Figure 44 42: Example of a Site Analysis Plan

5.3 Setbacks

Setbacks

Objectives

- To set dwellings back from the street and adjacent properties to provide reasonable space for landscaping, private open space and solar access.
- b) To set dwellings back from each other to provide visual and acoustic privacy.
- To create a streetscape that provides a desirable and safe environment.
- To establish a streetscape of a scale and sense of enclosure appropriate to the locality.
- e) To maximise the amount of area capable of allowing the growth of trees and shrubs.

Controls

Front Setbacks

1. Buildings shall be setback in accordance with Table 7.

Table 7: Setbacks within the 14 dw/ha area

Front	Secondary
Setback	Setback
4.5m	2.5m

- 2. The secondary setback is along the longest length boundary.
- Garages shall be setback 5.5m from any frontage, or 1.0m from a secondary boundary when consistent with a typology shown in Figure 20 21.
- Articulation features such as verandahs, eaves and other sun control devices may encroach on the front and secondary setback by up to 1m.
- Corner sites shall provide a frontage to both streets and should articulate their corner location with an architectural feature such as a wraparound verandah, bay window, comer entry or roof feature.

Side and Rear Setbacks

Buildings shall be setback from the side and rear boundaries in accordance with the Table 8.

Table 8: Side and rear setbacks within the 14 dw/ha area

Item	Side Setback	Rear Setback	
1 storey	0.9m	4m	
2 storey	1.2m	8m	

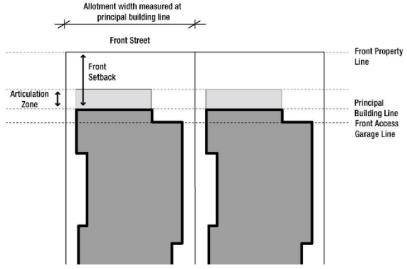


Figure 42 43: Front Setback

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Zero Lot Lines

Objectives

- a) To allow flexibility in the distribution of side setbacks in residential areas in order to achieve varying dwelling types and to maximise solar access.
- To create attractive and cohesive streetscapes and the efficient use of land.
- To maintain appropriate amenity between dwellings.

Controls

- 1. Zero lot line dwellings are not permitted on an ad-hoc basis. They must form part of a subdivision plan for at least one complete block/street frontage so that a consistent streetscape is achieved and that the privacy and solar access of adjoining dwellings are not adversely impacted upon.
- 2. Zero lot line dwellings are to provide a side setback on the non zero lot line side that equals to at least twice the minimum side setback requirement in Table 8 Side Setbacks
- 3. Zero lot line development is to follow the lot orientation principles as shown in Figure 36 37 to maximise solar access.
- 4. Zero lot line development is not permitted on lots that are 15m wide or greater.
- An easement for maintenance of the zero lot line walls (and any services along the side of the dwelling) is to be provided on the adjoining property. No overhanging eaves or services will be permitted within the easement. The S88b instrument supporting the maintenance easement is to be worded so that Council is removed from any dispute resolution process.

5.4 Landscaped Area and Private Open Space

Landscaped area is defined in Liverpool LEP 2008.

Landscaped Area (deep soil area)

Objectives

- a) To provide an area to allow vegetation to mature.
- b) To assist with management of the water table.
- c) To assist with management of water quality.
- To enhance the existing streetscape and soften the visual appearance of the

Controls

- 1. A minimum of 20% of the site area shall be landscaped area.
- 2. Optimise the provision of consolidated landscaped area within a site by:
 - The use of side and rear setbacks.
 - Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped area of adjacent properties.
- 3. Promote landscape health by supporting for a rich variety of vegetation type and size.
- Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials.

Open Space

Open space includes Landscaped Areas and hard paved areas such as footpaths and barbeque areas. It does not include driveways, drying areas or waste storage areas.

Objectives

- a) To provide residents with passive and active recreational opportunities.
- b) To provide an area on site that enables soft landscaping and deep soil planting.
- c) To ensure that communal open space is consolidated, configured and designed to be useable and attractive.
- d) To provide a pleasant outlook.

Controls

- Provide communal open space, which is appropriate and relevant to the context and the building's setting.
- Where communal open space is provided, facilitate its use for the desired range of activities by:
 - Locating it in relation to buildings to optimise solar access to dwellings.
 - Consolidating open space on the site into recognisable areas with reasonable space, facilities and landscape.
 - Designing its size and dimensions to allow for the range of uses it will contain.
 - Minimising overshadowing.
 - Carefully locating ventilation duct outlets from basement car parking.
- 3. Locate open space to increase the potential for residential amenity.

Private Open Space

Objective

- a) To ensure that private open space is clearly defined, usable and meets user requirements for privacy, solar access, outdoor activities, accessibility and landscaping.
- b) To provide all dwellings with private open space.

Controls

 Private open space shall be provided for in accordance with Table 9for Multi Dwelling Housing, Attached dwellings, Semi detached dwellings and Dwelling houses.

Table 9: Private open space in the 14 dw / ha area

Dwelling Size	Private Open Space Area	Minimum Width
Less than 65m ²	30sqm	3m
Between 65 and 100m ²	40sqm	3m
Between 101 and 150m ²	50sqm	4m
Between 151 and 200m ²	60sqm	4m
Greater than 200m ²	70sqm	4.5m

- Private open space may be provided as a courtyard for ground floor dwellings or as balconies for dwellings above the ground floor.
- Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
- 4. Private open space should be clearly defined for private use.

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For balconies refer to Building Design, Streetscape and Layout for controls on their design.

Drying areas

Objective

To provide adequate clothes drying area for residents.

Controls

 Clothes drying facilities must be provided. Clothes drying areas should not be visible from a public place.

5.5 Cut and Fill, Building Design, Streetscape and Layout

Cut and Fill of Land

Objectives

- a) To reduce the incidence of change in natural ground levels.
- To encourage the architectural designs of dwellings which suit the contours of the land.
- To provide controls for cut and fill of land designed to minimise the incidence of soil erosion and subsequent sedimentation of waterways.
- d) To ensure that development on adjoining properties is not threatened or prejudiced by proposed cut and fill practices.
- To discourage and eliminate, where possible, the construction of retaining walls on allotment boundaries.
- To minimise overshadowing of neighbouring dwellings, their private open space or any solar panelling.

Controls

- 1. The maximum cut on a site must not exceed 600mm.
- All retaining wall structures shall be masonry construction and designed by a suitably qualified person, or constructed as specified by the manufacturer of the product. The retaining wall shall be constructed wholly inside (within) the boundary of the site.
- All slab constructions for dwellings that are above natural ground level are to be constructed using dropped edge beams to retain fill. The maximum fill within the confines of the slab must not exceed 1m. All fill must be contained within the dwelling footprint.
- 4. Contaminated fill, either imported or found on site is not permitted.
 - Note: In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut, Council will require the completion of such retaining wall(s) PRIOR TO the release of the occupation certificate.
- 5. Where an applicant considers that an allotment has characteristics which warrant exemption from this policy, an application for exemption may be made by the submission of a development application to Council for consideration. In addition to normal requirements the submission should include:
 - A plan showing existing contours (at 0.5m intervals) of the subject site and all adjoining sites.
 - A plan showing future contours (after proposed cut and fill) of the subject site and all adjoining sites.
 - Full details of any proposed retaining wall(s).

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Note: In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut and fill, Council will require the completion of such retaining wall(s) PRIOR TO the commencement of any building works.

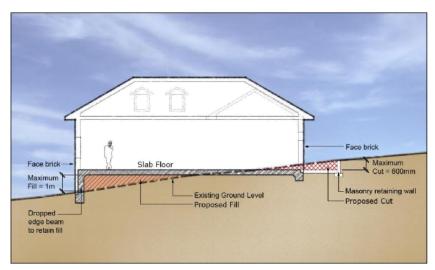


Figure 43 44: An example of Cut and Fill

Building Envelopes

Background

The orientation and site cover of a building has significant implications for residential amenity. Building envelopes determine the orientation and footprint of a dwelling, as well as the total volume of the dwelling.

Objectives

- a) To facilitate the efficient use of the site area.
- b) To maximise private amenity within the building.
- To minimise the impacts of development on neighbouring properties in regard to views, privacy and overshadowing.
- d) To ensure that buildings are sited so as to provide for solar access and both visual and acoustic privacy.

Controls

- The building footprint for detached dwelling houses is not to occupy more than 55% of the site and the total impervious area is not to exceed 70% of the total site area. A minimum of 30% of the site area must be pervious surfaces.
- The building footprint for denser development is not to occupy more than 60% of the site and the total impervious area is not to exceed 80% of the total site area. A minimum of 20% of the total site area must be pervious surfaces.

Building Height

Objectives

- To ensure that development minimises the impact on neighbouring properties in terms of building bulk, overshadowing and privacy.
- b) To maintain a scale of development, which is compatible with the existing or likely future character of the locality.

Controls

- A Dwelling House, Attached dwelling or Semi detached dwelling may have a maximum of two storeys plus an attic.
- Attics do not constitute a storey if they are included in a roof space and having a roof slope not greater than 36 degrees pitched from the ceiling level of the uppermost floor; provided that:
 - All windows face the street.
 - Access to the attic must be via permanent stairs
 - Attics are to be provided with skylights, or a dormer window. A dormer window shall be a maximum of 1.5m wide and must maintain the privacy of the adjoining residents.
- 3. For sloping sites the height of a dwelling house must follow the slope of the land.

Building Depth

Objectives

To ensure working and living environments have good internal amenity that minimises the need for artificial heating, cooling and lighting.

Controls

 Maximum building depths for houses are 16m, unless internal courtyards are provided.

Building Design and Appearance

Objectives

- a) To encourage designs that will enhance the character of the neighbourhood.
- b) To promote variation of building facade and design.
- c) That the building enhances the streetscape through the use of suitable built form design and landscaping.
- d) To ensure buildings address all street frontages.
- To discourage garages and in particular garage doors, from visually dominating the streetscape.
- f) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- g) To ensure habitable rooms address the street.
- h) To encourage balconies over garages on two storey dwellings.

Controls

- All dwelling houses, Attached dwellings and Semi detached dwellings are to be orientated to the street (See Figure 44 45).
- The front pedestrian entrance must be visible from the street.
- The front Building facades shall be articulated, this articulation may include front porches, entries, wall indents, changes in finishes, balconies and/or verandahs.

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- For two storey or greater height developments, the side walls shall be articulated if the wall has a continuous length of over 10m.
- Eave overhang must provide for sun shading and protect windows and doors. Eaves should have a minimum overhang of 400mm and be provided to a minimum of 70% of the dwelling.
- Dwelling houses, Attached dwellings or Semi detached dwellings that face two street frontages or a street and public space shall address both frontages by the use of verandahs, balconies, windows or similar modulating elements.
- 7. Balconies facing the street on two or more storey dwellings are encouraged.

Two storey detached or attached dwellings

To break up the bulk of two or more storey dwellings balconies, built above garages are encouraged (See Figure $\frac{44}{5}$).

Garages and Carports

- The maximum width of garage doors or carports must be no greater than 45% of the building frontage width.
- 2. Garages and carports must be designed to be the minor element of the façade
- Garage roofs shall be incorporated into the roof design of the house. Separate roofs for garages are discouraged, unless actually separated from the dwelling.
- Garages and carports are to be compatible with the building design in terms of height, roof form, detail, materials and colours.
- 5. Carports may be built in front of the garage only if the carport:
 - Is no larger than 5.5 x 6m.
 - Is built of a similar colour and materials of the house.
 - Is setback 2m from the front property boundary.
 - Is compatible with the local streetscape.
- 6. The conversion of garages to living space may only be permitted if:
 - At least one car parking space is provided behind the front setback.
 - The additional living area does not result in the building exceeding the maximum permitted floor space ratio.



Figure 44 45: Example of Building Appearance

Internal Design

Objectives

- The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.
- b) To provide natural surveillance from a room addressing the street.
- To encourage the internal design of the dwelling to take advantage of cross ventilation.
- d) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.
- e) To ensure that each dwelling provides a sufficient amount of storage for elements such as garden and sports equipment.

Controls

- Townhouses and villa's located on street boundaries shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
- 2. Living rooms should take advantage of northern aspects where possible.
- 3. Access to private open space must be from at least one living room.
- 4. The internal layout of the dwelling must incorporate cross ventilation.
- Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side and the rear of the development.
- 6. Each dwelling must provide a minimum storage area of 8m3.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).

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Roof Design

Objectives

- a) To provide quality roof designs, which contribute to the overall design and performance of the dwelling(s);
- b) To integrate the design of the roof into the overall facade, building composition and desired contextual response:
- To increase the longevity of the building through weather protection.

Controls

- 1. Relate roof design to the desired built form. This may include:
 - Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.
 - Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas.
 - Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line.
 - Using special roof features, which relate to the desired character of an area, to express important corners.
- Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. This includes the design of any parapet or terminating elements and the selection of roof materials.
- Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.
- Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. These elements include lift over-runs, service plants, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage.
- Where habitable space is provided within the roof, optimise residential amenity in the form of attics or penthouse dwellings

Storage Areas

Objective

To provide for the need of residents to be able to store personal items adjacent to the car parking area.

Controls

- 1. A secure storage space is to be provided for each dwelling with a minimum volume 8m3 (minimum dimension 1sqm). This must be set aside exclusively for storage as part of the basement or garage.
- Storage areas must be adequately lit and secure. Particular attention must be given to security of basement and garage storage areas.

5.6 Car Parking and Access

Objectives

- a) To provide car parking facilities on site that are convenient, safe and have sufficient space for vehicular manoeuvrability, whilst being visually unobtrusive.
- b) To minimise the need for on street parking from new dwellings.

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Controls

- 1. Two car parking spaces shall be provided for each dwelling.
- 2. At least one car parking must be provided behind the front setback.
- 3. A parking space is to be a minimum of 2.5 x 5.5m.
- 4. A single garage is to be a minimum of 3m wide internally and unobstructed.
- 5. Kerbs shall be provided along the edge of all internal driveways.

5.7 Landscaping and Fencing

Landscaping

Objectives

- To retain existing mature trees within the site in a way which ensures their ongoing health and vitality.
- b) To provide privacy, summer shade and allow winter sun.
- c) To enhance the existing streetscape and visual appearance of dwellings.
- d) To encourage landscaping that is appropriate to the natural, cultural and heritage characteristics of its locality.
- To ensure the visual impact of development is minimised and integrated into the streetscape.

Controls

- The front and rear setback areas of development are to be utilised for canopy tree
 planting. The landscape design for all development must include canopy trees that
 will achieve a minimum 8m height at maturity within the front and rear setback areas.
- At least one tree shall be planted in the landscaped areas. The tree must reach a mature height of over 8m.
- Landscape planting should be principally comprised of native species to maintain the character of Liverpool and provide an integrated streetscape appearance. However, Council will consider the use of deciduous trees in small private open space areas such as courtyards for control of local microclimate and to improve solar access.
- 4. Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.

Note: It is important to retain significant vegetation to maintain an existing streetscape and enhance the visual appearance of new dwellings.

Fencing

Objectives

- a) To provide a clear transition between public and private areas.
- b) To provide a visual element within the streetscape.
- c) To ensure fencing enhances the streetscape

Controls

- 1. Wall finishes must have low reflectivity.
- Where noise insulation is required, consider the installation of double-glazing or other noise attenuation measures at the front of the building rather than construction of a high solid form fence.

Primary Frontage

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- 1. The maximum height of a front fence is 1.2m.
- The front fence may be built to a maximum height of 1.5m if the fence is setback 1m from the front boundary with suitable landscaping in front of the proposed fence.
- Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas.
- 4. The front fence must be 30% transparent.
- Front fences shall be constructed in masonry, timber, metal pickets and/or vegetation and must be compatible with the proposed design of the dwelling.
- 6. The front fence may be built to a maximum of 1.8m only if:
 - The primary frontage is situated on a Classified Road.
 - The fence is articulated by 1m for 50% of its length and has landscaping in front of the articulated portion.
 - The fence does not impede safe sight lines from the street and from vehicles entering and exiting the site.

Secondary Frontage

- Side fences and walls must be a maximum of 1.8m in height, and constructed of masonry, timber and/or landscaped (See Figure 45 46).
- For side walls or fences along the secondary frontage, a maximum height of 1.2m is required for the first 9m measured from the front boundary, the remaining fence / wall may then be raised to a maximum of 1.8m (See Figure 45 46). The secondary setback is the longest length boundary.
- Side fencing facing a public street or open space must not be constructed of sheet metal.

Boundary Fences

- 1. The maximum height of side boundary fencing within the setback to the street is 1.2m.
- Internal boundary fences shall be lapped and capped timber, masonry or metal sheeting.

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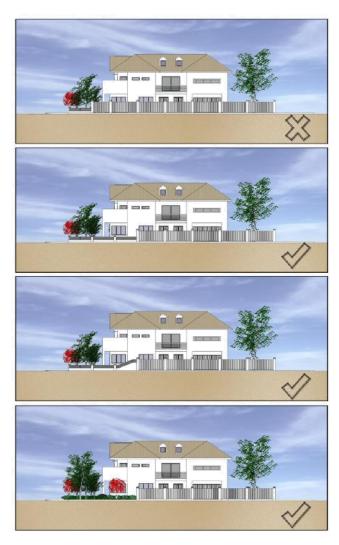


Figure 45 46: Fence treatments on secondary frontage

5.8 Amenity and Environmental Impact

Overshadowing

Objectives

To minimise overshadowing of neighbouring dwellings and their private open space.

EGROW 04

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

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Controls

- Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least:
 - One living, rumpus room or the like; and
 - 50 % of the private open space.

Privacy and Amenity Privacy

Objective

To site and design buildings to meet projected user requirements for visual and acoustic privacy and to protect privacy of nearby residents.

Controls

- Building siting, window location and balconies should take account of the importance of the privacy of on site and adjoining buildings and outdoor spaces.
- Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties.
- Windows of habitable rooms facing side boundaries are to be offset by at least 1m from any adjoining facing window.
- Except where they face a street or public open space, habitable room windows to the side are to avoid unreasonable overlooking by having a minimum sill height of 1.5m.

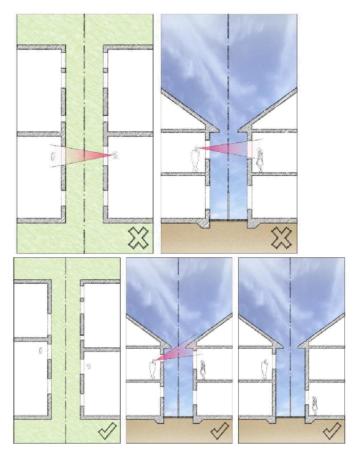


Figure 46 47: Privacy and Amenity Privacy

Acoustic Privacy

Objective

To ensure appropriate noise and vibration attention measures are incorporated into residential development.

Controls

- 1. Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings.
- Developments in areas adversely impacted upon by rail or traffic related noises must incorporate the appropriate noise and vibration mitigation measures into the design in terms of the site layout, building materials and design, orientation of the buildings and location of sleeping and recreation areas.
- Where party walls are provided they must be carried to the underside of the roof and be constructed in accordance with Part F5 of the Building Code of Australia.
- The proposed buildings must comply with the Environment Protection Authority criteria and the current relevant Australian Standards for noise and vibration and quality assurance.

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5.9 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes

- Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.
- Freestanding letterbox structures should be designed and constructed of materials that relate to the main building.
- Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material.

Frontage works and damage to Council infrastructure

- Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.
- Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.
- Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site.

5.10 Studio Dwellings

Studio dwelling means a small self-contained dwelling that is erected above a garage facing a rear lane or a secondary road.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 1 studio dwelling is a secondary dwelling.

For the purpose of definition under the Liverpool Local Environmental Plan 2008, a Type 2 studio dwelling is a dual occupancy or multi-dwelling housing.

Objectives

- To provide an alternate form of housing in master planned neighbourhoods that include community facilities.
- To provide for a variety of housing types to cater for varied socio-demographic households.
- c) To provide for passive surveillance to laneways and private accessways.

Controls

Type 1 Studio

Type 1 Studios are a room or rooms constructed above a detached garage associated with the main dwelling on the lot. The studio is primarily designed to be used by the occupants of the main dwelling. The studio shall comply with the following:

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- The studio shall be located on comer blocks or addressing secondary streets and on laneway entries and bends to improve surveillance.
- 2. Located on lots with a minimum size of 300sqm.
- 3. Must be detached from other studios.
- 4. Maximum gross floor area: 45sqm.
- 5. No additional car parking space is required.
- The studio shall be located above the garage, carport or like structure for the principal dwelling on the land.
- There may be no subdivision of the studio from the principal dwelling on the land.
- Windows are not permitted on elevations which directly face the adjoining lots private open space.
- Garages with studios above are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 11. Studios shall not reduce the minimum required amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 5.4 of this Part.

Type 2 Studio

Type 2 Studios are a room or rooms constructed above a detached garage that is intended to be separately strata titled to allow for independent living from the principal dwelling on the lot. The studio shall comply with the following:

- 1. The studio shall be located on corner blocks with laneway vehicle access.
- 2. Located on lots with a minimum size of 350sqm.
- 3. Maximum gross floor area: 75sqm.
- Studio to be located above the garage, carport or like structure for the principal dwelling on the land and are to be detached from other studios.
- One additional dedicated on-site car parking space is required to be associated with the Type 2 studio.
- Car parking space is not to be located in front building setback of the principal dwelling.
- Car parking space is not to be in a stacked configuration.
- The studio must include provision of a balcony accessed directly off living space having minimum size of 6sqm, plus a minimum 10sqm ground level service yard with space for clothes drying facilities. The balcony shall not protrude over any property boundary.
- Type 2 studios may be strata subdivided from the principal dwelling, or dwellings on the land
- Garages with studios are to be constructed 1.5m from the rear boundary and may have a zero lot setback to one side boundary.
- 11. A studio must have a minimum separation of 4m from the first floor of the principal dwelling on the lot.
- 12. Pedestrian access to studios is to be from the street frontage and not the laneway.
- Provision for separate services and an on-site garbage storage area e.g. separate letter box.

EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

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14. Studios shall not reduce the minimum amount of solar access to any dwelling's (adjoining or on the principal dwelling) private open space as stipulated in Section 3.5 of this Part.

- 15. Windows are not permitted on elevations which directly face the adjoining lots private open space. Windows may be permitted on the elevation facing the principal dwelling on the lot where they have a minimum sill height of 1.7m.
- Screened access ways (e.g. staircases) for studios to prevent viewing into adjoining private open space areas.

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6. Controls on Land in the R3 Zone "The Village Centres"

6.1 Preliminary

Applies to

This section applies to land in the R3 zone.

Background

The creation of a vibrant centre is essential for the sustainability of the community. The neighbourhood centre shall be a key social focal point and public transport node within the locality. It serves local retail demand without detracting from large nearby centres. The neighbourhood centre incorporates other community facilities such as a primary school, community centre and family and children centre.

The incorporation of appropriate residential uses in commercial/retail developments is desirable.

Objectives

- To create a lively focal point for the community, which is economically and socially viable
- b) To encourage a mix of uses residential, retail, commercial and community.
- To encourage architectural features that creates a distinctive identity and sense of place for the locality.
- d) To create an area that by its scale, street relationship, built form, detailed design and materials, contrasts with the surrounding residential area to create an urban focus.
- To encourage upper floor uses in the form of commercial offices, suites and shop-top apartments.
- f) To ensure a uniform approach to signage and street furniture throughout the neighbourhood centre.
- g) To encourage the development of active street frontages to provide a pedestrian friendly environment.

6.2 Subdivision, Frontage and Allotment Size

Background

Development in the village centres may also incorporate shop top housing. A site will need to be wide enough to provide for window space for the occupants of the dwellings. The site will also need to be sufficient size to provide an adequate internal layout and private open space for the dwellings.

Objectives

- To ensure that land in village centres can accommodate the use including the car parking and loading provisions.
- b) To ensure that there is sufficient frontage and area for any dwellings in conjunction with the business use.

Controls

Sites must have a minimum street frontage of 20m.

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6.3 Site Planning

Objectives

- To ensure that the development is compatible with amenity to nearby residential areas and open space.
- b) To ensure that the development is compatible with the adjoining business development.
- c) To ensure that the development reflects the character of the locality and environment.
- d) To ensure that the development contributes to the public domain and attractiveness of the centre for its users.

Controls

The siting of buildings and the development should:

- 1. Provide safe pedestrian, cycle and vehicle access to and from the public street.
- Be compatible with nearby residential development in terms of appearance, overshadowing, privacy, views, setbacks and height.
- 3. Address the street and consider its presentation to the public domain.
- Consider the impact on existing and potential pedestrian links.
- Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Refer to Water Cycle Management in Part 1.

6.4 Setbacks

Objectives

- a) To ensure the height and scale of a development complements neighbouring development, and/or the desired character of a commercial centre.
- To ensure a development does not detrimentally affect the amenity of adjoining residential development.

Controls

Street Frontage

Buildings should be built to the front boundary.

Rear Setbacks

- Where the site has rear lane access the building may be built to the rear boundary, at ground and first floor level. Any floors above the first floor shall be setback equal to the height of the additional floors.
- Where there is no rear lane access and the site adjoins land that is in a residential zone, the building shall be setback from the rear boundary as follows:
 - 5m for non-residential component of building up to 10m high.
 - 8m otherwise for components of building up to 15m high.

Side Setbacks

- Where the site adjoins land that is also in a village centres there is no setback requirement.
- Where the side boundary of the site adjoins land that is in a residential zone, the building may be required to be setback from the side boundary or limited to one storey

near the boundary. Any floors above the ground floor shall be setback equal to the height of the additional floors.

6.5 Landscaped Areas and Pedestrian Areas

Background

Active street and building frontages provide safety and security to a street or shopping centre by enabling casual surveillance. Having access from the street or public areas to as many uses as possible provides active and lively streets and public areas.

Pedestrian areas within the Neighbourhood Centre can provide an attractive meeting place for residents and shoppers. It also has the potential to generate additional business for retailers by providing areas for outdoor eating, display of retailers merchandise and a place for local community group promotions. Public footpaths can also provide a place for outdoor eating.

Objectives

- a) To ensure active street frontages on public streets.
- b) To encourage provision of attractive pedestrian areas
- To encourage linkages between centres and any adjacent public areas such as open space.

Controls

- Pedestrian areas should minimise any changes in levels and allow wheelchair access to the shops from the car parking area and public footpaths.
- 2. Pedestrian areas should be separate from loading areas.
- Sufficient area shall be provided to permit landscaping and tree planting within pedestrian areas and car parking areas.
- Outdoor Eating Areas may be permitted in public footpath areas. Refer to the section on Outdoor Eating Areas

6.6 Building Form, Streetscape and Layout

Objectives

- To ensure the height and scale of a development complements neighbouring development, and/or the desired character of a village centre.
- b) To provide adequate amenity to the occupants and residents of a development in terms of solar access, visual and acoustic privacy, and natural ventilation.
- To ensure a development does not detrimentally affect the amenity of nearby residential development.
- d) To ensure a development is integrated with the public domain and contribute to an active pedestrian-orientated environment.
- e) To maximise natural surveillance so that people feel safe at all times.
- f) To ensure pedestrian entrances and exits are clearly visible from the street.
- g) To promote high quality architectural design.
- h) To ensure comer sites are developed as visually significant elements in order to promote a strong and legible character.
- To ensure weather protection to pedestrians.
- To ensure roof forms contribute to the proposed character of the centre and residential areas.

To ensure working and living environments have good internal amenity that minimises the need for artificial heating, cooling and lighting.

Controls

Layout of Village Centres

- Streets are to be public, and organised and designed in order of descending priority for people, bikes and cars.
- Streets are to be located on the ground and not above car parking.
- Streets are to be a suitable width for traffic and pedestrians and are to have pavements of sufficient width for awnings and street tree planting.
- The street network is to:
 - Form a regular grid with dimension related to the proposed densities and building typologies.
 - Be organised to form a street and block pattern that creates:
 - Regular orthogonal patterns for lots and/or building sites (where the existing street pattern allows).
 - Street blocks, lots and/or building sites that relate to the selected building typologies.
 - Be connected and provide a choice of movement for people and cars.
 - Reveal the topography, have clear sight lines and aid legibility.
 - Connect to the existing street pattern in a seamless transition.
 - Provide views and view corridors where possible to open space, special places and/or significant trees.
 - Provide a street frontage for every building and unobtrusive parking for cars, service vehicles, bikes and scooters.
- 5. The street network is to be designed so as to enable buildings to be located and sited so that:
 - Positive spaces are created with adjacent and neighbouring buildings.
 - Fronts of buildings can face fronts of buildings (usually across a street).
 - Backs of buildings can face backs of buildings (usually at the rear of a street
 - Buildings address open spaces and streets both within the site and adjoining the
 - Buildings align with the streets.
- Any variations should be fully justified and will be assessed on merit against the objectives of the precinct.

Building Appearance and Streetscape

- 1. Buildings shall be modulated to create a vertical rhythm to the street facade. Modules of around 6m are expected which allow for typical construction techniques. No long, unbroken facades will be permitted.
- 2. Development adjoining open space shall address the open space and avoid blank
- All buildings to be designed and built to have upper floors. Buildings shall be a minimum of two storeys in height. Single storey buildings are not permitted.

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- Floor to ceiling heights of the ground floor shall be a minimum of 3.5m to allow for adaptive re-use.
- All residential and mixed use developments shall be at least two storeys with the lowest habitable floor level at least 500mm above the crown of the road. Alternatively, the ground floor shall be above under croft parking or garages with rear lane or car court access.
- Shop top housing and Residential Flat Buildings shall comply with State Environmental Planning Policy No 65 <u>Design Quality of Residential Apartment</u> <u>Development</u> and the Apartment Design Guide (ADG) or equivalent..
- Building facades shall be articulated and roof form is to be varied to provide visual variety.
- 8. The pedestrian entrance to shop top housing shall be from the front of the site.
- 9. Driveway walls adjacent to the entrance of a basement car park are to be treated so that their appearance is consistent with the basement or podium walls.
- 10. A master antenna shall be provided for any development of more than three dwellings and be located so that it is not visible from the street or any public open space.
- 11. Consider the relationship between the whole building form and the facade and / or building elements. The number and distribution of elements across a façade determine simplicity or complexity. Columns, beams, floor slabs, balconies, window openings and fenestrations, doors, balustrades, roof forms and parapets are elements, which can be revealed or concealed and organised into simple or complex patterns.
- 12. Compose facades with an appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character. This may include but are not limited to:
 - Defining a base, middle and top related to the overall proportion of the building.
 - Expressing key datum lines in the context using cornices, a change in materials or building set back.
 - Expressing the internal layout of the building, for example, vertical bays or its structure, such as party wall-divisions.
 - Expressing the variation in floor-to-floor height, particularly at the lower levels.
 - Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays.
 - Selecting balcony types which respond to the street context, building orientation and residential amenity.
 - Cantilevered, partially recessed, wholly recessed, or Juliet balconies will all create different facade profiles.
 - Detailing balustrades to reflect the type and location of the balcony and its relationship to the façade detail and materials.
- 13. Design facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls, depending on the facade orientation.
- 14. Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material or colour, roof expression or increased height.
- Co-ordinate and integrate building services, such as drainage pipes, with overall facade and balcony design.

16. Co-ordinate security grills/screens, ventilation louvres and car park entry doors with the overall facade design.

Entrances

- 1. Orientate entrances to buildings towards the public street and provide clear lines of sight between entrances, foyers and the street.
- 2. The common lobby to shop top housing should face the street.
- 3. Where the ground floor of a business development, mixed-use development, and shop-top housing faces the street, the ground floor must incorporate shopfront style windows with clear glazing so that pedestrians can see into the premises and vice
- Provide as direct a physical and visual connection as possible between the street and the entry.
- Achieve clear lines of transition between the public street, the shared private circulation spaces and the dwelling unit.

Street Frontage

- All developments must address the street and provide a quality street frontage. Retail and commercial developments must have active street frontages and entries fronting the street
- Ground floor uses are to be at the same general level as the footpath and be accessible directly from the street.
- Provide predominately glazed shop fronts to all ground floor retail areas.
- Developments on comer sites shall address the corner and the secondary street
- 5. Avoid blank or solid walls and the use of dark or obscured glass on street frontages.
- Roller shutters that obscure windows are not permitted.
- Provide opportunities for table seating along shop frontages. 7.
- Any Automatic Teller Machine (ATM) must be located at a highly visible location at street level, and must be well lit at night and incorporate mirrors or reflective materials so that users can observe people behind them.
- The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency vehicles to easily identify the location of the building.

Awnings

- 1. Provide continuous street frontage awnings to all new developments.
- 2. Wrap awnings around corners on street corner buildings.
- Awnings must be complementary to each other.
- 4. Canvas blinds along the street edge are permitted.

Roof Forms

- 1. Minimise the bulk and mass of roofs and the potential for overshadowing from roofs.
- Provide eaves with a minimum length of 400mm in dwellings with pitched roofs.
- Where flat roofs are proposed, lift overruns and rooftop plant and machinery are to be obscured from view by parapets or designed to be incorporated within rooftop activities/features.

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- 4. Incorporate lift overruns and service plant etc into the design of the roof.
- Wherever possible provide landscaped and shaded areas on roofs to serve as communal private open space for residents of the building.

Building Material and Finishes

- Avoid expanses of any single material.
- Utilise high quality and durable materials and finishes, such as face brick with / without coloured render, and plain glass windows.
- Avoid large wall tiles, rough textured render, polished metal and curtain walls or reflective glass.
- 4. Highly reflective finishes are not permitted above the ground floor.
- Colour & materials of the buildings shall be consistent with the existing adjoining development.

Balconies

- A minimum of 12sqm of open space in the form of a balcony shall be provided for each dwelling. Primary balconies for all dwellings shall have a minimum depth of 2m.
- Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
- 3. Balustrades must be compatible with the façade of the building.
- Ensure balconies are not so deep that they prevent sunlight entering the dwelling below
- 5. Design balustrades to allow views and casual surveillance of the street.
- 6. Balustrades on balconies at lower levels shall be of solid construction.
- Balconies should where possible should be located above ground level to maximise privacy for occupants, particularly from the street.
- 8. Solid or semi solid louvres are permitted.
- 9. Primary balconies should be:
 - Located adjacent to the main living areas, such as living room, dining room or kitchen to extend the dwelling living space.
 - Sufficiently large and well-proportioned to be functional and promote indoor/outdoor living. A dining table and two chairs (smaller dwelling) and four chairs (larger dwelling) should fit on the majority of balconies in any development.
- 10. Consider secondary balconies, including Juliet balconies or operable walls with balustrades, for additional amenity and choice in larger dwellings, adjacent to bedrooms or for clothes drying, site balconies off laundries or bathrooms.
- 11. Design and detail balconies in response to the local climate and context thereby increasing the usefulness of balconies. This may be achieved by:
 - Locating balconies facing predominantly north, east or west to provide solar access.
 - Utilising sunscreens, pergolas, shutters and operable walls to control sunlight and wind.
- 12. Design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include:
 - Detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development. Full

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- glass balustrades do not provide privacy for the balcony or the dwelling's interior, especially at night.
- Detailing balustrades and providing screening from the public, for example, for a person seated looking at a view, clothes drying areas, bicycle storage or air conditioning units.
- 13. Operable screens increase the usefulness of balconies by providing weather protection, daylight control and privacy screening.

Daylight Access

- 1. Plan the site so that new shop top housing is oriented to optimise northern aspect.
- Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.
- Optimise the number of dwellings receiving daylight access to habitable rooms and principal windows.
- Ensure daylight access to habitable rooms and private open space, particularly in winter use skylights, clerestory windows and fanlights to supplement daylight access.
- Avoid south facing dwellings.
- 6. Design for shading and glare control, particularly in summer, by:
 - Using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.
 - Optimising the number of north-facing living spaces.
 - Providing external horizontal shading to north-facing windows.
 - Providing vertical shading to east or west windows.
- 7. Consider higher ceilings and higher window heads to allow deeper sunlight penetration
- On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun
- On north facing windows, projecting horizontal louvres admit winter sun while shading summer sun.
- 10. Use high performance glass but minimise external glare off windows, by;.
 - Avoiding reflective films.
 - Using a glass reflectance below 20%.
 - Considering reduced tint glass.
- 11. Limit the use of lightwells as a source of daylight by prohibiting their use as the primary source of daylight in habitable rooms. Where they are used:
 - Relate lightwell dimensions to building separation, for example, if non-habitable rooms face into a light well less than 12m high, the lightwell should measure 6 x
 - Conceal building services and provide appropriate detail and materials to visible
 - Ensure that light wells are fully open to the sky.
 - A combination of louvres provides shading for different times of the day.

Internal design

- 1. All staircases should be internal.
- 2. Minimise the length of common walls between dwellings.

- 3. Basement car parking shall be located beneath the building footprint.
- 4. Where possible natural ventilation shall be provided to basement car parking.
- Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings.
- Minimise the location of noise sensitive rooms such as bedrooms adjoining noisier rooms such as bathrooms or kitchens or common corridors and stairwells.
- Where common walls are provided they must be carried to the underside of the roof and be constructed in accordance with Part F5 of the Building Code of Australia.
- Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).

Ground Floor Dwellings

- Design front gardens or terraces, which contribute to the spatial and visual structure
 of the street while maintaining adequate privacy for dwelling occupants. This can be
 achieved by animating the street edge, for example, by promoting individual entries
 for ground floor dwellings.
- 2. Create more pedestrian activity along the street and articulate the street edge by:
 - Balancing privacy requirements and pedestrian accessibility.
 - Providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape.
 - Utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the dwellings.
 - Increasing street surveillance with doors and windows facing onto the street.

Security

- Entrances to buildings should be orientated towards the front of the site and facing the street.
- The main entrance to dwellings or other premises should not be from rear lanes and should be designed with clear directions and signage.
- 3. Reinforce the development boundary to strengthen the distinction between public and private space by:
 - Employing a level change at the site and/or building threshold (subject to accessibility requirements).
 - Signage.
 - Entry awnings.
 - Fences, walls and gates.
 - Change of material in paving between the street and the development.
- 4. Improve the opportunities for casual surveillance by
 - Orienting living areas with views over public or communal open spaces, where possible.
 - Using bay windows and balconies, which protrude beyond the main facade and enable a wider angle of vision to the street.
 - Using corner windows, which provide oblique views of the street.
 - Providing casual views of common internal areas, such as lobbies and foyers, hallways, recreation areas and car parks.
- 5. Minimise opportunities for concealment by:

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- Avoiding blind or dark alcoves near lifts and stairwells, at the entrance and within indoor car parks, along corridors and walkways.
- Providing well-lit routes throughout the development.
- Providing appropriate levels of illumination for all common areas.
- Providing graded illumination to car parks and illuminating entrances higher than the minimum acceptable standard.
- Control access to the development by:
 - Making dwellings inaccessible from the balconies, roofs and windows of neighbouring buildings.
 - Separating the residential component of a development's car parking from any other building use and controlling car park access from public and common areas.
 - Providing direct access from car parks to dwelling lobbies for residents.

Natural Ventilation

- Utilise the building layout and section to increase the potential for natural ventilation. Design solutions may include:
 - Facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings, for example, cross through dwellings and corner dwellings.
 - Facilitating convective currents by designing units, which draw cool air in at lower levels and allow warm air to escape at higher levels, for example, maisonette dwellings and two-storey dwellings.
- Select doors and windows (that open) to maximise natural ventilation opportunities established by the dwelling layout.
- 3. Provide narrow building depths to support cross ventilation.
- 4. Avoid single-aspect dwellings with a southerly aspect.
- 5. Design the internal dwelling layout to promote natural ventilation by:
 - Minimising interruptions in air flow through a dwelling.
 - Grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together. This allows the dwelling to be compartmentalised for efficient summer cooling or winter heating.
 - Selecting doors and openable windows to maximise natural ventilation opportunities established by the dwelling layout.

Building Depth

- Maximum building depths for ground floor uses is 20m in the neighbourhood centres.
 Speciality retail shops should not exceed 15m in depth from the street frontage.
- All points on an office floor should be no more than 12.5m from a source of daylight (e.g. window, atria or light wells).
- Maximum building depths for houses are 16m, unless internal courtyards are provided.
- For apartment development, see Apartment Design Guide (ADG) or equivalent for building depth guidance.

Storage Areas

 A secure storage space is to be provided for each dwelling with a minimum volume 8m3 (minimum dimension 1sqm). This must be set aside exclusively for storage as part of the basement or garage. Storage areas must be adequately lit and secure. Particular attention must be given to security of basement and garage storage areas.

Adjoining Residential Areas

- Development should minimise impact of the privacy of adjoining and nearby dwellings.
- 2. Development should be compatible with any adjoining and nearby dwellings.

6.7 Landscaping and Fencing

Objectives

- a) To ensure appropriate landscaping in village centres.
- b) To ensure the protection of existing trees on neighbouring residential zoned land.
- To ensure the visual impact of development is minimised and integrated into the streetscape.
- d) To improve the amenity of commercial centres.

Controls

- Where trees are planted around high use facilities such as car park areas, children's play areas and walkways, they should have clean trunks to height of 1.8m.
- Landscaping on any podium level or planter box shall be appropriately designed and irrigated.
- Where landscaping is to be provided a detailed landscape plan shall accompany a
 development application. A suitably qualified Landscape architect must prepare all
 Landscape Plans submitted with the development application. Refer to Part 1 for
 requirements for Detailed Landscape Plans.
- 4. Landscaped areas within the Village Centres shall generally involve the provision of trees and shrubs in mulched garden beds around car parking areas and where pedestrian areas are provided. In particular the landscaping shall involve the following:
 - Mulched garden beds shall incorporate ground covers that will cover the ground area.
 - Large shrubs shall be used as screen planting where there is a need to screen certain areas such as outside storage.
 - Shrubs shall only be planted in mulched garden beds.

6.8 Car Parking and Access

Objectives

- a) To ensure the provision of appropriate off-street parking for village centres.
- b) To ensure car parking and loading facilities are in the most appropriate location given the urban design needs for the centre.
- c) To ensure that car parking areas are attractive and don't dominate the streetscape.
- d) To locate loading in appropriate locations.
- To provide convenient, accessible and safe on-site car parking for residents and visitors
- To minimise driveway crossings to maximise on street parking and landscaped nature strips.

- g) To integrate the location and design of car parking with the design of the site and building without compromising street character, landscape or pedestrian amenity and safety.
- To integrate the location and design of car parking with the design of the site and the building.

Controls

- Car parking and loading areas shall be located at the rear of buildings or in laneways.
- Visitor car parking shall be clearly identified and may not be stacked or tandem car parking.
- Visitor car parking shall be located between any roller shutter door and the front boundary.
- 4. Pedestrian ways and driveways shall be separated.
- 5. Driveways shall be designed to accommodate removalist vehicles.
- 6. Give preference to underground parking, whenever possible by:
 - Facilitating natural ventilation to basement and sub-basement car parking areas, where possible.
 - Integrating ventilation grills or screening devices of car park openings into the facade design and landscape design.
 - Providing safe and secure access for building users, including direct access to residential dwellings, where possible.
- Where above ground enclosed parking cannot be avoided, ensure the design of the development mitigates any negative impact on streetscape and street amenity by:
 - Avoiding exposed parking on the street frontage.
 - Hiding car parking behind the building facade. Where wall openings (windows, fenestrations) occur, ensure they are integrated into the overall facade scale, proportions and detail.

6.9 Amenity and Environmental Impact

Objectives

- To provide adequate amenity to the occupants of buildings and to neighbouring residential development in terms of solar access, and visual and acoustic privacy.
- b) To ensure buildings and businesses provide safe and easy access for people.

Controls

Lighting

External lighting to a development must give consideration to the impact of glare on the amenity of adjoining and nearby residents.

Safety

- Where the hours of operation are after sunset, the car parking areas and any other
 public areas shall be provided with lighting to provide a safe environment for users of
 the premises after hours.
- A Noise Impact Assessment Statement prepared by a qualified Acoustics Engineer may be required to be submitted with the application depending on the scale and location of the proposed use to show that the use can operate satisfactorily in the neighbourhood centre.

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6.10 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes and House Numbering

- A common letterbox structure must be located close to the main pedestrian entrance of a building.
- The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency vehicles to easily identify the location of the building.

Frontage works and damage to Council assets

 All verges within the neighbourhood centre shall be paved by the developer for the full verge width.

Electricity Sub Station

In some cases it may be necessary to provide an electricity substation at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public street to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage shall be used at the side and rear of the area.

Waste management

- Development involving dwellings shall provide at least two waste storage areas to separately cater for the dwellings and non-residential uses on an allotment.
- A development must provide a waste storage area inside every food premises, and inside any shop that is capable of accommodating a food premises.
- A development must locate a waste storage area inside the building, or adjacent to a lane where it is convenient and safe for residents, tenants, and waste collection trucks to access the waste storage area and the location and floor level are to the satisfaction of Council.

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Controls for Land in the B6 Zone – Enterprise Corridor

7.1 Site Planning

Applies to

This section applies to land in the B6 zone.

Objectives

- To ensure that the development is compatible with amenity to nearby residential areas and open space.
- b) To ensure that the development is compatible with the adjoining business development.
- c) To ensure that the development reflects the character of the locality and environment.
- d) To ensure that the development contributes to the public domain and attractiveness of the centre for its users.

Controls

The siting of buildings and the development should:

- 1. Provide safe pedestrian, cycle and vehicle access to and from the public street.
- Be compatible with nearby residential development in terms of appearance, overshadowing, privacy, views, setbacks and height.
- 3. Address the street and consider its presentation to the public domain.
- 4. Consider the impact on existing and potential pedestrian links.
- Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Refer to Water Cycle Management in Part 1.
- Be compatible with existing business development in terms of scale, bulk, setbacks, materials and visual amenity.
- 7. Address the street and consider its presentation to the Classified road environment

7.2 Setbacks

Objectives

- a) To ensure the height and scale of a development complements neighbouring development, and/or the desired character of a commercial centre.
- b) To ensure a development does not detrimentally affect the amenity of adjoining residential development.

Controls

Rear Setbacks

 Where the site has rear lane access the building may be built to the rear boundary, at ground and first floor level. Any floors above the first floor shall be setback equal to the height of the additional floors. Where there is no rear lane access and the site adjoins land that is in a residential zone, the building may be required to be setback from the rear boundary or limited to one storey near the boundary. Any floors above the ground floor shall be setback equal to the height of the additional floors.

Side Setbacks

- Where the site adjoins land that is also in a business zone there is no setback requirement.
- Where the side boundary of the site adjoins land that is in a residential zone, the building may be required to be setback from the side boundary or limited to one storey near the boundary. Any floors above the ground floor shall be setback equal to the height of the additional floors.

Front Setbacks

- The minimum setback from the front boundary is 10m for the ground floor and 7.5m for the first floor.
- Any floors above the ground floor shall be setback equal to the height of the additional floors

7.3 Landscaped Areas and Pedestrian Areas

Objectives

- a) To ensure active street frontages on public streets.
- b) To encourage provision of attractive pedestrian areas.
- To encourage linkages between centres and any adjacent public areas such as open space.

Controls

- Pedestrian areas should minimise any changes in levels and allow wheelchair access to the shops from the car parking area and public footpaths.
- 2. Pedestrian areas should link all major activity areas of the centre.
- 3. Pedestrian areas should be separate from loading areas.
- Separate pedestrian access should be provided to adjoining public footpaths, community facilities and open space.
- Sufficient area shall be provided to permit landscaping and tree planting within pedestrian areas and car parking areas.

7.4 Building Form, Streetscape and Layout

Achieving a high amenity of urban design is greatly dependent on the design and appearance of individual buildings. Well-designed new buildings not only enhance character and appearance, but also contribute to the coherence of the public domain. In particular:

- Building corners are important both in terms of "way finding" and "place making".
 They are often used as markers or signs that contribute to place making and or marking an important intersection.
- The relative consistency in roof height and form assists in defining streets. A range of roof forms and parapets contribute to the skyline.
- The palette of materials contributes to the perceived image of the built environment and assists in creating a unified and memorable streetscape.

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<u>Objectives</u>

- To ensure that new buildings contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes.
- To address the streetscape by providing a consistent and appropriate street frontage in the town and neighbourhood centres.
- c) To ensure corner sites are developed as visually significant elements in order to promote a strong and legible character.
- d) To ensure working and living environments have good internal amenity that minimises the need for artificial heating, cooling and lighting.

Controls

- External walls are to be constructed of high quality and durable materials and finishes, with low maintenance costs.
- Articulate facades so that they address and add visual interest. Buildings four storeys and above are to be articulated to differentiate between base, middle and top in design.
- Buildings on comer sites are to be designed to address the two adjacent streets in a similar way.
- 4. Limit opaque or blank walls for ground floor uses to 20% of the street frontage.
- Highly reflective finishes and curtain wall glazing are not permitted above the ground floor
- Incorporate changes in level within retail development and civic facilities such that they are accessible to the people with disabilities.
- Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass.

Roof Forms

- Minimise the bulk and mass of roofs and the potential for overshadowing from roofs.
- Roof top structures, such as air conditioning, life motor rooms and the like are to be incorporated into the architectural design of the building and to be screened from public view.
- Communication towers, such as mobile phone towers and the like, are not to be located on buildings with a residential component.

Material and Finishes

- 1. Avoid expanses of any single material.
- 2. Utilise high quality and durable materials and finishes.
- 3. The following materials are preferred:
 - Face brick with / without coloured render; and
 - Plain glass windows.
- 4. The following materials must be avoided:
 - Large wall tiles,
 - Rough textured render,
 - Polished metal and curtain walls, and
 - Reflective glass.

Building Depth

 Maximum building depths for ground floor uses are 40m for Enterprise Corridor. Speciality retail shops should not exceed 15m in depth from the street frontage. All points on an office floor should be no more than 12.5m from a source of daylight (e.g. window, atria or light wells).

7.5 Landscaping and Fencing

Objectives

- a) To ensure appropriate landscaping in commercial centres; and
- b) To ensure the protection of existing trees on neighbouring residential zoned land.
- To ensure the visual impact of development is minimised and integrated into the streetscape.
- d) To improve the amenity of commercial centres.

Controls

- Where trees are planted around high use facilities such as car park areas, children's play areas and walkways, they should have clean trunks to height of 1.8m.
- Landscaping on any podium level or planter box shall be appropriately designed and irrigated.
- Where landscaping is to be provided a detailed landscape plan shall accompany a development application. A suitably qualified Landscape architect must prepare all Landscape Plans submitted with the development application. Refer to Part 1 for requirements for Detailed Landscape Plans.
- 4. Landscaped areas within Business Development shall generally involve the provision of trees and shrubs in mulched garden beds. In particular the landscaping shall involve the following:
 - The trees shall provide a canopy for the streetscape and soften the appearance of the Enterprise Corridor environment, without unduly concealing approved site signage
 - Mulched garden beds shall incorporate ground covers that will cover the ground area.
 - Shrubs shall be used to soften appearance of the area but still allow viewing between the street and the development.
 - Large shrubs shall be used as screen planting where there is a need to screen certain areas such as outside storage.
 - Shrubs shall only be planted in mulched garden beds.
 - Grassed areas may be considered in limited areas in conjunction with mulched garden beds.
 - Trees shall only be planted in grass where there is a border around the tree separating it from the grassed area.
 - Figure 47 48 illustrates these requirements.

Final DCP

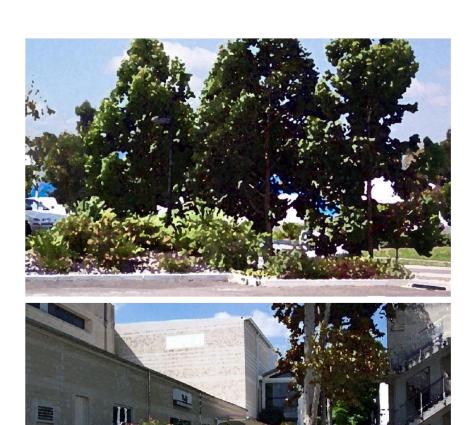


Figure 47 48: Landscaping around a Local Centre

Attachment 5

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7.6 Car Parking and Access

Background

Car parking and safe access provision is fundamental for all sites in the business areas. The layout of car parking areas may in the case of Local Centres may reflect the street environment. Refer to Part 1 for additional information about car parking and access requirements.

Objectives

- a) To ensure the provision of appropriate off-street parking for business areas.
- To ensure car parking and loading facilities are in the most appropriate location given the urban design needs for the centre.
- To ensure that car parking areas that are attractive and don't dominate the streetscape.
- d) To locate loading in appropriate locations.

Controls

- 1. Car parking shall generally be located toward the front of the site.
- Car Parking must meet the requirements of Part 1 of this DCP.

7.7 Amenity and Environmental Impact

Background

Business Areas are centres of activity for residents, workers and visitors. The level of activity varies depending on size, location and land uses in the centre. This activity may take for long periods of the day each day of the week. They are also increasingly the location of residential development. While this presents opportunities to add to activity it also presents some potential amenity issues and impacts on transport.

Objectives

- a) To provide adequate amenity to the occupants of buildings and to neighbouring residential development in terms of solar access, and visual and acoustic privacy.
- b) To ensure buildings and businesses provide safe and easy access for people.
- c) To provide useable private open space for dwellings

Controls

Privacy

Development shall be designed to minimise overlooking of adjoining and nearby residential development.

Access to sunlight

Dwellings above shops shall be designed to maximise solar access.

- 1. Where an allotment adjoins a Classified Road, dwellings must comply with the requirements of the SEPP (Infrastructure).
- Dwellings should be located to minimise the impact of noise from car parking and loading areas.

Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road, Edmondson Park

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Lighting

External lighting to a development must give consideration to the impact of glare on the amenity of adjoining and nearby residents

7.8 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes and House Numbering

- A common letterbox structure must be located close to the main pedestrian entrance of a building.
- The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency vehicles to easily identify the location of the building.

Frontage works and damage to Council assets

- Where a footpath, road shoulder, new or enlarged access driveway or is required to be provided this shall be provided at no cost to Council.
- Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.

Electricity Sub Station

In some cases it may be necessary to provide an electricity substation at the front of
the development adjacent to the street frontage. This will involve dedication of the
area as a public street to allow access by the electricity provider. The front boundary
treatment used elsewhere on the street frontage shall be used at the side and rear of
the area.

Waste management

- Development involving dwellings shall provide at least two waste storage areas to separately cater for the dwellings and non-residential uses on an allotment.
- A development must provide a waste storage area inside every food premises, and inside any shop that is capable of accommodating a food premises.
- A development must locate a waste storage area inside the building, or adjacent to a lane where it is convenient and safe for residents, tenants, and waste collection trucks to access the waste storage area and the location and floor level are to the satisfaction of Council and Part 1.

Storage Facilities

 A multi-unit development must provide a minimum storage area of 8m3 to each dwelling. The storage area may be attached to the car parking space or spaces to each dwelling. Final DCP

8. Controls for Certain Sites

8.1 North of Maxwell's Creek urban park

Background

Two gateway style buildings are proposed to the northern edge of Maxwell's Creek Urban Park along Bernera Road. Due to the sensitive and highly visible location, special design guidelines are to apply to any buildings proposed on these sites in addition to the applicable objectives and controls already contained in this Plan. It is envisaged that two apartment buildings are proposed, one on each site flanking Bernera Road. A small corner café or other active use will be encouraged on the corner of the parkland and Bernera Road.

Objectives

- a) To provide surveillance over Maxwell's Creek Urban Park and to increase the perception of safety and security in the area.
- To shorten the walking distance and increase connections between the Urban and Town Centre Character Areas.
- To provide a built form and architectural quality that reflects the special gateway location and parkland setting.

Controls

- Buildings are to address the Bernera Avenue section of the Bus Priority Corridor. Maxwell's Creek Urban Park and the street running to the north of the site. Site servicing and vehicular access is to be provided from:
 - The western or north-western edge of the site for the western building, or
 - The eastern or north-eastern edge of the site for the eastern building. Refer to
- 2. The gateway buildings are to provide a strong contemporary urban form and be of architectural merit.
- Minimum street wall heights are 4 storeys. Additional storeys may be set back behind the primary building line up to a maximum height of 6 storeys.
- Car-parking and servicing is to be predominantly located underground or in semibasements. Any surface parking areas are to be well integrated into the landscape treatment and be made of semi-pervious paving materials.
- Sub-basement parking areas are not permitted to be raised greater than 750mm above existing ground level to maximise opportunities for ground floor interface between the public and the private domain and to minimise the negative visual impact of exposed parking and ventilation structures.
- Landscape features such as terraced planter beds, wall and fence treatments up to 1.2m high are to be used to define the public and private domain.
- Additional communal open space will be encouraged on the roof top.

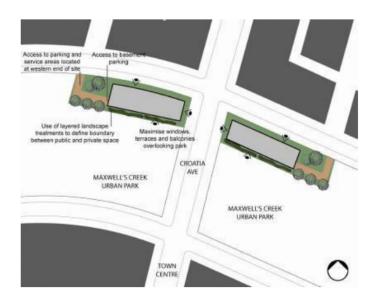


Figure $48 \underline{49}$: Design guidelines for development to the north of Maxwell's Creek Urban Park

8.2 Lots backing onto Camden Valley Way and the Rail Corridor

Background

As a number of properties will back onto Camden Valley Way and the South West Rail Link (SWRL) corridor, the presentation of the back of the lot to the public domain and the travelling public, as well as the amenity of the lot resident, is important to the overall quality of the precinct.

As part of the detailed design for the SWRL, and in accordance with the Conditions of Consent, the Transport Infrastructure Development Corporation (TIC) has investigated all reasonable and feasible noise mitigation options for existing and planned future receivers.

Objectives

- To ensure that a high quality, low maintenance, solid and consistent rear boundary treatment to lots backing onto Camden Valley Way and the rail corridor.
- To minimise the noise impacts to lots backing onto Camden Valley Way and the rail corridor.
- To provide security and privacy to the rear of lots backing onto Camden Valley Way and the rail corridor.
- d) To encourage a high quality architectural treatment to the rear façade of the property as visible to the public domain and travelling public.

Controls

- 1. Lots are to have a minimum depth of 30m.
- An 8m minimum setback is required from the back of the lot to the rear, or side, façade of the dwelling.

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- Architecturally the rear façade of the building (and side façade if visible from the public domain) are to be articulated and modulated to reduce the bulk of the dwelling and to add visual interest.
- Internal dwelling layouts should be designed to minimise noise in living and sleeping areas.
- Double glazed windows are to be used on the rear façade of the dwelling to minimise noise impacts.
- Where naturally ventilated (windows open) conditions cannot be achieved, due to noise levels, mechanical ventilation or air-conditioning systems are to be provided compliant with AS1668 and the National Construction Code.

Lots backing onto Camden Valley Way only

- All allotments with a boundary to Camden Valley Way are to provide a wall to limit noise along that boundary. Walls are to be 2m high, of solid masonry construction, and provided along the length of all lots backing or siding onto Camden Valley Way.
- Rear walls are to be vertically modulated at least every 5m on the side facing Camden Valley Way.
- A coping is to be provided along the rear wall with a drip edge on the Camden Valley Way side (10 degree slope to coping).
- The walls and footings are to be constructed on the boundary or entirely within the lot boundary.

EGROW 04 Post Exhibition Report - Draft Liverpool Local Environmental Plan 2008 (Amendment 78) and Draft

Liverpool Development Control Plan (Amendment 35) - land subject to Basin 14 and Bernera Road,

Edmondson Park

Attachment 5 Final DCP



L I V E R P GREAT SOUTH WEST

LIVERPOOL CITY COUNCIL

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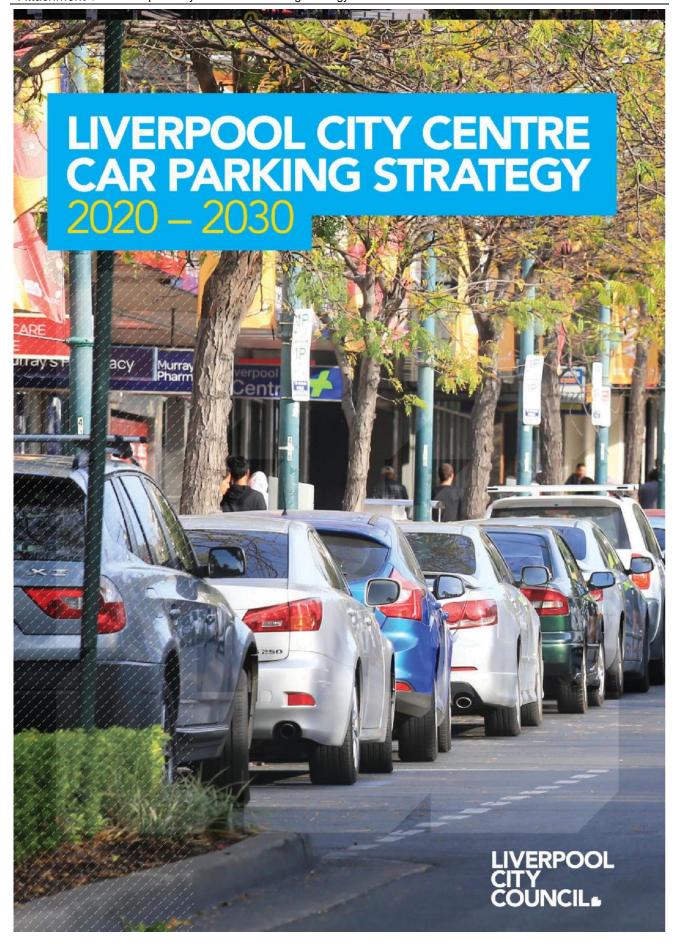
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AUTHORISED BY

The Liverpool City Centre Car Parking Strategy was authorised as a policy of Council by Council resolution on XXXXXX

EFFECTIVE FROM

The Liverpool City Centre Car Parking Strategy became an effective policy of Council on XXXXXX

DEPARTMENT RESPONSIBLE

The directorate and unit of Council that is responsible or accountable for the administration of the policy: Planning and Transport Strategy

REVIEW DATE

This document is intended to be a live document that can be updated as conditions change, or as certain actions are completed. However, the policy must be reviewed at minimum, every five years. It must be revoked and replaced with a new strategy 10 years from its effective date.



Executive Summary

The Liverpool City Centre Car Parking Strategy outlines car parking provision and management measures within the Liverpool City Centre. In addition to outlining methods to increasing parking supply, the strategy demonstrates the need to provide residents and visitors with high-quality alternative travel choices, to reduce parking demand.

Since 2010, Council has adopted parking strategies and undertaken a number of projects to optimise parking in the Liverpool City Centre. Some of the notable examples are as follows:

- February 2010: Adopt Liverpool City Centre Car Parking Strategy;
- January 2011 August 2012: Construction of Collimore car park (496 spaces);
- January 2012: Introduced parking meters in the city centre core;
- February 2013: Adopt Update Liverpool City Centre Car Parking Strategy
- March 2015: Refurbishment of the Northumberland Street car park, to extend building life;
- August 2015: Introduced a Residential Parking Permit Scheme;
- November 2019: Construction of additional parking at Whitlam Centre, Woodward Park;
- October 2019: Introduction of the 'Park n Pay' app in the city centre.

The Strategy is consistent and aligns with State Government policies, including the Sydney Region Plan, Western City District Plan, as well as Liverpool Local Strategic Planning Statement, which are used to inform the principles, objectives and actions of the strategy.

The Strategy objectives include optimising existing parking provision, providing new parking, improving parking signage, identifying funding sources, and development of benchmarks for public car parking management.

The Strategy includes ten deliverables designed to increase parking availability and provide a better customer experience for visitors to the Liverpool City Centre.

The deliverables include projects which Council has a commitment to deliver, including:

- Construction of a new multi-storey parking structure on the city periphery and identification of other suitable locations for additional parking;
- · Investigation of opportunities to provide simplified parking signage easier to understand; and
- Provision of parking improvements consistent with the Liverpool City Centre Public Domain Master Plan.



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1. About the Strategy

The purpose of the Liverpool City Centre Car Parking Strategy (the Strategy) is to address and manage existing and future parking demand and supply in the Liverpool City Centre over the next 10 years.

The Strategy establishes a baseline of the city's parking environment, acknowledges current and future issues, and includes a Delivery Plan to manage these issues based on current research, land/funding availability, and planning principles.

The Strategy has been developed to:

- Improve the effectiveness of current parking provision;
- Seek opportunities to increase parking and repurpose existing parking where there is a benefit in doing so;
- · Reduce the demand for parking where viable; and
- Suggest practical methods to increase capacity where warranted.

1.1 Principles

To ensure that the parking strategy does not undermine the intent of other policies and strategies, a series of fundamental principles have been developed. These are:

- P1. Optimise the capacity of short-term and long-term parking within the Liverpool City Centre.
- P2. Strike an appropriate balance between parking provision and demand for public space by ensuring that pedestrian priority and amenity is maintained on all streets.
- P3. Ensure that significant disruptions and decisions that may cause negative economic impacts on local businesses are minimised.
- P4. Provide an urban environment and transport network which provides for public and active transport choices to reduce parking demand.
- P5. Provide a clear, accessible car-parking environment.
- P6. Ensure adequate provisions are made for motorcycle, bicycle and mobility impaired users.
- P7. Ensure that management of parking responds to changing transport systems and services and is adaptable to disruption technologies such as car-sharing and Mobility as a Service (MaaS).
- P8. Align with other relevant NSW Government policies and Council strategies.

Mobility as a Service: Moving beyond focusing on infrastructure and assets, the future of mobility is customer-focused, data-enabled and dynamic. Personal mobility includes traditional 'modes' supplemented with technology platforms and new service offerings like on-demand, car share, rideshare and smart parking. (TfNSW, Future Transport 2056, 2018)



1.2 Strategic objectives

To fulfil the purpose of the Strategy, and in keeping with the principles, the following objectives have been identified:

- O1. Identify the appropriateness of providing increased car parking within the Liverpool City Centre.
 - Identify the theoretical and desirable parking capacity within the Liverpool City Centre to achieve best practice urban design, mode-shift and congestion reduction outcomes.
 - ii. Explore locations suited to an increase in on-street parking with angled parking.
 - Advise on the best approach and preferred locations to accommodate a clustering of motorcycle parking areas to service this transport mode.
- O2. Further evaluate the concept of concentrating public parking on the fringe of the Liverpool City Centre, including complementary transportation, impacts on passing trade, effectiveness, and user acceptance of this approach.
 - Devise a project plan to implement this approach.
- O3. Provide parking infrastructure that responds to land use changes, population and economic growth in the Liverpool City Centre over the next 10 years.
 - To create a vibrant city centre which prioritises pedestrian amenity, maximises the productivity of the city, and makes the city centre a safe walking and cycling environment.
 - ii. To support public domain improvements, access to public open space and landscaping.
 - iii. Identify future trends in public transport and ensure that infrastructure is adaptable to be redeveloped for other uses if the demand for parking falls.
- O4. Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.
 - To increase the number of accessible parking spaces at key destinations in the Liverpool City Centre.
 - ii. To reduce parking demand and increase active transport and public transport mode share.
- O5. Explore and deploy smart parking technologies to support an efficient and innovative city centre
- O6. Provide a delivery framework to improve parking over the next 10 years, including a recommended number and location of car spaces.



The study area

The Strategy primarily focuses on the Liverpool City Centre as defined by the Liverpool Development Control Plan 2008 (outlined in Figure 1), as well as opportunities for commuter parking on the periphery of the city centre. The Liverpool City Centre is divided into three sub-precincts, the CBD core area (where most retail activity occurs), the public use precinct (dominated by schools and hospitals), and the noncore area which is predominately residential.

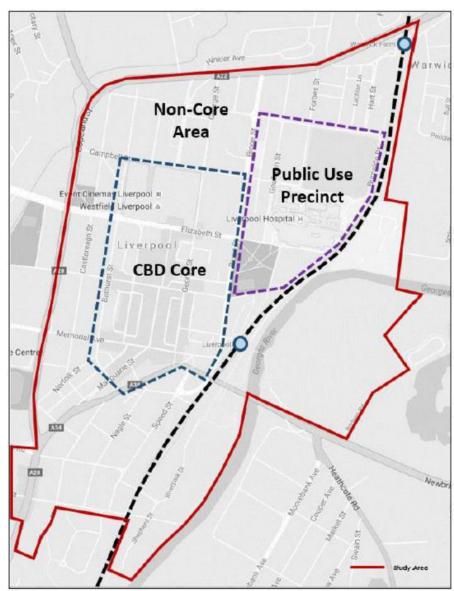


Figure 1: Study area - Liverpool City Centre



1.4 Related strategies and studies

The Strategy addresses endorsed Council strategies, State government policies, and other relevant information, including the following:

- Western Sydney City Deal;
- Future Transport 2056;
- A Metropolis of Three Cities Sydney Region Plan;
- Western City District Plan;
- Liverpool Community Strategic Plan;
- Liverpool Local Strategic Planning Statement Connected Liverpool 2040;
- Liverpool City Centre Collaboration Area Place Strategy 2018;
- A Transport Strategy for Liverpool City Centre 2017;
- Liverpool City Centre Precinct Car Parking Strategy 2017;
- Liverpool City Centre Parking Strategy 2013;
- Liverpool City Centre Open Space Analysis Report (November 2018 Draft);
- Draft Liverpool City Centre Public Domain Master Plan; and
- Destination Management Plan 2019-2023.

Table 1 summarises links between State government policies and Council strategies; and specific actions in the Liverpool City Centre Car Parking Strategy.

Table 1: Consistency with key strategic plans

Strategy	Directives	Link to Actions/Deliverables
Metropolis of Three Cites:		A1: Provide a benchmark for the appropriate supply of public parking;
Greater Sydney Region Plan		A2: Improve and simplify parking signage;
	Objective 3: Infrastructure adapts to meet future needs.	A3: Optimise existing on-street parking provision;
		A4: Investigate opportunities to move long-term parking to the City Centre periphery; and
		A8: Investigate and identify alternative uses for car parks.
	Examples:	D1: Public parking rate benchmarks;
	 Design transport and infrastructure that responds to demand for use; 	D2: Construct new car park at 68 Speed Street.
	- Promote digital technology to improve the provisions of	D7: Collimore/Woodward Park carpark upgrades;
	services such as (commercial uses, storage, logistics hubs,	D9: Dynamic parking guidance system;
	depots or community uses) in the event that autonomous vehicles reduce the requirements for car parking.	D10: Optimising usage of car parking spaces;



Strategy	Directives	Link to Actions/Deliverables
	Objective 4: Infrastructure use is optimised.	A2: Improve and simplify parking signage; A3: Optimise existing on-street parking provision; A6: Review Council's parking prices; and A7: Investigate all funding sources for additional parking in the City Centre.
	Examples: - Adopting new technologies such as smart traffic management systems; - Changing user behaviours by flexible pricing and other policies; and - Developing and implementing travel plans to encourage the use of sustainable transport choices.	D2: Construct new car park at 68 Speed Street. D6: Review of car parking pricing and on-street free parking D9: Dynamic parking guidance system; D10: Optimising usage of car parking spaces; and
	Objective 12: Great places that bring people together.	A2: Improve and simplify parking signage; A5: Investigate the potential for ridesharing facilities in residential areas; and A8: Investigate and identify alternative uses for car parks.
	Strategy 12.2: - Investigating opportunities for precinct-based provisions of adaptable car parking and infrastructure in lieu of private provision of car parking; - Ensuring parking availability considers the level of access by public transport; and -Incorporating facilities to encourage the use of car sharing, electric and hybrid vehicles including charging stations.	D2: Construct new car park at 68 Speed Street. D3: Introduce a car share scheme into Liverpool City Centre; D7: Collimore/Woodward Park carpark upgrades; D9: Dynamic parking guidance system; D10: Optimising usage of car parking spaces; and
Western City District Plan	Planning Priority W1: Planning for a city supported by infrastructure.	A1: Provide a benchmark for the appropriate supply of public parking; A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre; and A8: Investigate and identify alternative uses for car parks.



Strategy	Directives	Link to Actions/Deliverables
	Actions: -Align forecast growth with infrastructure; -Sequence infrastructure provisions using a place-based approach; -Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans; and - Maximise the utilities of existing infrastructure assets and consider strategies to influence behaviour changes, to reduce the demand for new infrastructure, including supporting the development of adaptive and flexible regulations to allow decentralised utilities.	D1: Public parking rate benchmarks; D7: Collimore/Woodward Park carpark upgrades; and D10: Optimising usage of car parking spaces.
	Planning Priority W7: Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City. Actions:	A3: Optimise existing on-street parking provision; and A8: Investigate and identify alternative uses for car parks D7: Collimore/Woodward Park carpark
	-Designing adaptable infrastructure such as more flexible design of streets and public spaces, for example through car parking strategies.	upgrades; D8: Provide angled parking;and D10: Optimising usage of car parking spaces.
Liverpool Community Strategic Plan	<u>Direction 3:</u> Generating Opportunity.	A2: Improve and simplify parking signage; and A3: Optimise existing on-street parking provision.
	Community wants: Improved traffic management.	D5: Provide simplified parking signage; D9: Dynamic parking guidance system; and D10: Optimising usage of car parking spaces.
Liverpool Local Strategic Planning Statement:	Planning Priority 1: Active and public transport.	A1: Provide a benchmark for the appropriate supply of public parking.

Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy



Strategy	Directives	Link to Actions/Deliverables
Connected Liverpool 2040	Action 1.1: Update the Liverpool City Centre Parking Strategy.	D1: Public parking rate benchmarks.



2. Background

Council has prepared and adopted the following parking strategies, since 2010:

- Liverpool City Centre Parking Strategy (adopted February 2010
- Liverpool City Centre Parking Strategy (amended 26 June 2013)

In addition, as part of the 2017 Liverpool City Centre Traffic and Transport study, a 'Liverpool City Centre Precinct (LCCP) Car Parking Strategy Report' was carried out.

Implementation of the deliverables of the above strategies are outlined in Appendix B.

2.1 Initiatives undertaken

Council has successfully implemented the following demand management measures:

- July 2010: Introduced "Pay and Display" ticket parking in the Northumberland Street and Bathurst Street car parks
- January 2011-Aug 2012: Upgraded Collimore park to provide 496 parking spaces
- January 2012: Introduced parking meters (including ticketing via number plate recognition) on streets in the inner core for on-street parking, in the area bounded by Bathurst, Elizabeth, Bigge, Scott and Macquarie Streets, and Macquarie Street North to Lachlan Street
- March 2015: Refurbished the Northumberland Street Car Park to rectify structural issues and prolong its life
- August 2015: Introduced a Residential Parking Permit Scheme in suitable and defined parking zones close to homes
- March 2019: Resolved to increase the number of parking spaces within proximity of the Liverpool
 City Centre at 68 Speed Street and the Whitlam Leisure Centre at Woodward Park.
- October 2019: Collaborated with the NSW Government to introduce a 'Park n Pay' smartphone app which allows drivers to pay for parking and top up using their smart phones

2.2 Initiatives not completed

Some major car park infrastructure projects from previous strategies are yet to be completed, have been altered, or are no longer necessary. The proposed demolition of the Northumberland Street car park and construction of replacement parking on the same site (or in a new location) has not been undertaken as the car park was refurbished in 2015.

A multi-storey car park has yet to be constructed at Collimore Park. Council is in the early planning phase for this project, involving amendments to the Liverpool Local Environmental Plan (LLEP) 2008 to permit construction of a multi-level car parking building on the site. Subject to further investigation, it is also recommended that a multi-storey carpark is considered at Woodward Park in conjunction with any redevelopment of that site, with the Woodward Place master plan identifying suitable locations.

3. Current issues

To effectively manage parking in the Liverpool City Centre, the underlying factors surrounding demand must be understood. Most people travelling to the Liverpool City Centre by car, do so because of one or more of the following factors:

It is convenient;



- It is faster than alternative transport modes;
- It is cheaper than using public transport;
- Amenity of using active transport is poor;
- The benefits of active transport are not realised;
- Travelling via public or active transport is not an option or too difficult;
- A mobility or other impairment makes travel other than by private vehicle not feasible;
- · Perceptions of poor safety or feeling uncomfortable using active or public transport; and
- There is a perception of availability of parking (even if constrained).

The management of car parking supply and demand involves prioritising parking for users who require it the most and providing viable alternatives for others, whilst addressing the factors listed above.

3.1 Journey patterns

Travel patterns can assist in analysing whether areas have a car parking demand or car parking supply issue (or both).

Journey to work by location

Current Australian Bureau of Statistics (ABS) Journey to Work data indicates that approximately 37.8% of persons employed within the Liverpool LGA live within the Liverpool LGA. Of the remaining 62.2% of the workforce, many come from neighbouring LGAs (as shown in Figure 2) including:

- Campbelltown 10.9%
- Fairfield 10%
- Camden 6.3%
- Bankstown 6.0%
- Sutherland Shire 3.2%
- Penrith 2.8%
- Wollondilly Shire 2.2%



Residential locations of local workers by LGA, 2016

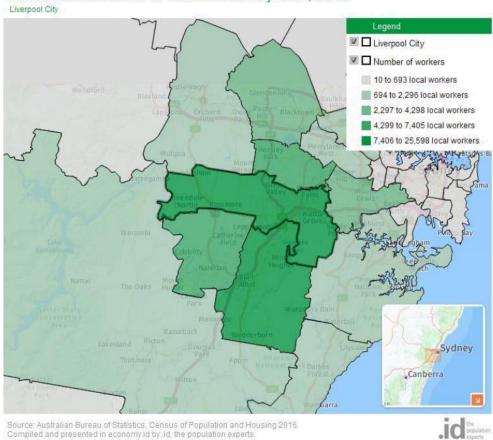


Figure 2: Residential location of workers working in the Liverpool LGA

Given that a large portion of Liverpool workers are travelling from urban areas within the LGA, or from neighbouring Council areas, it is reasonable to assume that a commute into the Liverpool City Centre by public transport would be possible. As such, it is important to also consider improvements to public/active transport to improve patronage and reduce parking demand and congestion.

Journey to work by mode

Data from the ABS reveals that approximately 73% of workers accessing the Liverpool City Centre are doing so via private vehicle. Approximately 11.5% of workers are using public transport and 3.5% are using active transport. Table 2 demonstrates that while the proportion of workers accessing the city by car (and presumably parking in the city centre) is lower than Fairfield, it is still higher than that of Parramatta, and substantially higher than that of the Sydney CBD. As Sydney's next CBD, the proportion of workers accessing the Liverpool City Centre by cars must steadily decline to provide for sustainable transport choices and to avoid further congestion in the Liverpool City Centre.



Table 2: Journey to work: Place of work

	Liverpool	Fairfield	Parramatta	Sydney
Travel Mode	Count (%)	Count (%)	Count (%)	Count (%)
Public Transport	2,251 (11.53)	399 (7.17)	18,445 (36.72)	227,512 (70.91)
Vehicle	14,268 (73.08)	4,585 (82.45)	24,628 (49.03)	43,212 (13.47)
Active Transport	701 (3.59)	101 (1.82)	2,076 (4.13)	21,708 (6.77)
Other Mode	45 (0.23)	33 (0.59)	119 (0.24)	1,136 (0.35)
Worked at home*	2,052 (10.51)	385 (6.92)	4,487 (8.93)	24,812 (7.73)
Mode not stated	222 (1.14)	63 (1.13)	470 (0.94)	2,456 (0.77)
Total	19,523	5,561	50,228	320,828

^{*} Includes persons who stated they 'Did not go to work'. (Source: ABS, 2016, Journey to Work)

Data from the Warren Serviceway carpark

The Warren Serviceway carpark is a multi-storey parking facility located in the centre of the Liverpool City Centre on Warren Serviceway. It provides all day parking in the city centre for a fee of \$16.00/day or a 1-month pass can be purchased for \$130.00.

Operation of the car park includes the collection of the post codes of those who use it. The data is a small sample of commuters accessing the Liverpool City Centre and has been analysed to determine the distance and direction in which motorists are travelling. This data is tabulated below:

Table 3: Warren Serviceway data

	Direction of	Direction of Travel to Liverpool					
Proximity to Liverpool	North	South	East	West	Total		
Less than 1.5km	- (0%)	- (0%)	(0%)	6 (2.6%)	6 (2.6%)		
1.5 – 5 km	5	1	14	30	58		
	(2.2%)	(0.4%)	(6.2%)	(13.2%)	(25.6%)		
5 – 10km or direct rail	4	9	13	51	77		
	(1.8%)	(4%)	(5.7%)	(22.5%)	(33.9%)		
10km +	16	39	24	15	94		
	(7%)	(17.2%)	(10.6%)	(6.6%)	(41.4%)		
Total	25	49	51	102	227		
	(11%)	(21.6%)	(22.5%)	(44.9%)	(100%)		

- 2.6% of drivers using this parking facility are people who reside in the suburb of Liverpool.
- 25.6% of users live within a 5km radius of the Warren Serviceway Carpark.
- 33.9% of users live within 5 10km of the carpark.

While active transport will not be desired or viable for a large number of these users (those travelling over 5km), if high quality and frequent public transport is available, mode shift from private vehicles to public transport can become a reality.

The Sydney Region Plan, the Western City District Plan and the Liverpool Local Strategic Planning Statement contain objectives and actions to achieve a 30-minute city. Given that the average speed of



a Sydney bus (including stops) is 35km/h, 10km represents a catchment in which people can likely walk to a bus stop, catch a bus and reach their destination in about 30 minutes (provided the bus achieves these average speeds, and provided a bus stop is convenient to homes). Trains are substantially faster, so have a larger catchment.

To effectively manage car parking demand, more emphasis is needed on encouraging mode shift from cars to public transport.

3.2 Off-street parking

Approximately 10,500 car parking spaces are provided within the Liverpool City Centre. This includes 7,900 off-street spaces, including hospital spaces, Council-controlled facilities, and commercially operated facilities.

On-site observations indicate that current parking demands within off-street car parking areas is high, with facilities in the CBD core typically reaching capacity in the early morning (i.e. prior to approx. 10am).

Off-street parking numbers within the city centre and associated time restrictions and fees are summarised in Table 4.

Table 4: Total existing publicly accessible off-street parking supply

Number	Parking Station	Payment Method	Type of Restriction	Owner (Operator)	Supply** (No. of Spaces)
1	33 Moore Street	Paid	Permit Parking only	Liverpool City Council	51 ^[1]
2	Liverpool Plaza	Limited free parking, then paid parking	1.5-hour free parking, paid parking thereafter	Perpetual Trustee Company (Point Parking)	230
3	Westfield	Limited free parking, then paid parking	3-hour free parking, paid parking thereafter	Westfield	3438 (incl. 500 leased)
4	Norfolk Serviceway	Paid	1-hour limit	Liverpool City Council	26
5	52 Scott Street (Crunch Gym)	Limited free parking, then paid parking	2-hours free parking and fee thereafter	Liverpool City Council (Elders Real Estate)	179
6	Warren Serviceway	Paid	Unlimited	Liverpool City Council	640 (incl. 120 reserved spaces)



Number	Parking Station	Payment Method	Type of Restriction	Owner (Operator)	Supply** (No. of Spaces)
7	Northumberland Street	Limited free parking, then paid parking	2-hr ground floor All day Level 1 & 2, All day and 3- hour free Levels 3 &4	Liverpool City Council	440
8	Bathurst Street (North)	Paid	3-hour limit	Liverpool City Council	240
9	Bathurst Street (South)	Free	2-hour limit (M-F) 1-hour limit (Sat)	Liverpool City Council	49
10	Collimore Park	Free	Unlimited	Liverpool City Council	496
11	Speed Street	Free	3-hour limit	Liverpool City Council	87
12	Warwick Farm	Free	Unlimited	Rail Corporation NSW	328
13	Liverpool Railway Station	Free	1-hour limit (15-min limit in peak times)	Rail Corporation NSW	124
14	Liverpool Hospital	Paid	Unlimited	NSW Health	324 [2]
15	Sydney Southwest Private Hospital	Paid	Unlimited	Healthscope Ltd (Wilson Parking)	87
16	Lighthorse Park	Free	Unlimited	Liverpool City Council	50
17	Whitlam Leisure Centre/Woodward Park	Free	Unlimited	Liverpool City Council	1051
Overall					7900 spaces

⁼ Privately owned car parks

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Information relating to parking supply dated as of 2019.

[1]A total of 274 spaces are provided at 33 Moore Street, with 223 spaces allocated to Council and UOW and 51 spaces available to the public (subject to parking permit).

[2]A total of 1343 spaces are provided at the Hospital on-site, with 1019 spaces allocated to Hospital staff and employees and 324 spaces available to the public.

The existing off-street parking spaces are considered to be generally satisfactory for their intended use (i.e. city or town centre parking).

Appropriate pedestrian amenity within the car parks is limited, typically with no separated paths between pedestrians and vehicles. In some instances, where internal stairs are not provided, pedestrians were observed to travel via the internal car park ramps to access/exit the car park.

A summary of the key off-street car parks are documented in Table 5.

Table 5: Summary of off-street car parking design issues

Car Park	Access points	Internal vehicle circulation	Pedestrian access	Recommendation / Comments		
Bathurst Street	 Main access provided from Northumberland Street via single two-way driveway Separate entry and exit provided from/to Bathurst Street 	 Line marking to indicate circulation Signage outlining entry and exit points 	No dedicated pedestrian path	Parking demand at capacity Difficult to locate available parking easily Prime City Centre location with restricted access Recommend installing wayfinding signage to indicate multiple exit locations (e.g. "Exit via Bathurst Street/Exit onto Northumberland Street")		
Warren Serviceway	 Single driveway access off Warren Serviceway (via Bigge Street and George Street) Single egress into Warren Serviceway 	 One-way internal circulation Reversed ingress/egress movements on lower ground floor Express exit lane 	No dedicated pedestrian path	Narrow internal ramps, difficult to circulate with larger vehicles Parking spaces are narrow Inconsistent wayfinding signage on approach		
52 Scott Street (Crunch Gym)	Single 11.3m wide two-way driveway, with access off Terminus Street Boom-gate ticketed control upon entry and exit		No dedicated pedestrian path	 Poor public domain interface with Terminus Street 		



Car Park	Access points	Internal vehicle circulation	Pedestrian access	Recommendation / Comments
Northumberland Street	 Four single one-way access points (two "in" and two "out") Ground floor – one entry and one exit point Upper levels – one entry and one exit point 	One-way internal circulation Reversed ingress/egress movements within internal ramps Line marking to indicate "in" and "out" movement	No dedicated pedestrian path	 Parking spaces are narrow Poor visibility at exit (vehicle/pedestrian conflicts) Additional signage indicating vehicle circulation recommended
Collimore Park	Two driveway access points off Moore Street and Collimore Avenue	Two-way circulation Several parking sections	No dedicated pedestrian path	Low parking occupancy of disabled parking spaces Large area, multiple intersection points within car park – potential vehicle conflict points Tight turn around bends Occupies public open space Located in a residential neighbourhood

(GTA Consultants, 2017)

Expansion of existing multi-storey carparks

The expansion of existing multilevel car parking structures will need to account for the updated Australian Standard AS3600:2018 for concrete structures. This standard requires any modified multi-level car parking structures to be strengthened. Implementation of the Australian Standard has potential implications, as additional bracing could result in the removal of multiple existing car spaces.

For example, it was proposed to add two additional levels to the Warren Service Way car park, however modelling showed that around 100 existing car spaces would need to be removed as a result of strengthening work requiring to comply with AS3600:2018. The additional two levels were intended to provide for 160 parking spaces, therefore the loss of 100 spaces meant the upgrade was not considered to be viable. Due to the new standard requirements, the cost of providing additional spaces in an existing car park could be higher than the construction of a new car park.

3.3 On-street parking

Liverpool City Centre has approximately 10,500 car parking spaces including 2,600 on-street spaces. The majority of on-street car parking spaces are in high demand, with only isolated areas of moderate to low occupancies recorded in the south-eastern part of the city centre.

Parking observations indicate an existing demand of approximately 9,660 spaces during the typical weekday peak period (92% occupancy). This demand includes 2,230 on-street spaces (86% occupancy) and 7,900 off-street spaces (93% occupancy). (GTA Consultants 2017 and updated parking survey 2019)

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Of the existing parking provision, a number of 'speciality spaces' exist and were observed to experience the following occupancies during the peak period as follows:

- Disabled: 37 spaces (97% occupied)
- · Loading: 9 spaces (100% occupied)
- Mail: 1 space (0% occupied)
- No Parking (Police Excepted): 15 spaces (93% occupied)
- Taxi: 12 spaces (92% occupied)

(GTA Consultants, 2017)

Most parking areas within the city centre reach typical capacity by 10am. Existing peak parking demands generally comprise of people visiting retail shops, commercial and services precincts (including the library and hospitals). As a result, short-term parking is at a premium. This is exacerbated by allowing for all day parking within the city centre core.

Demand exceeding capacity results in excessive circulation for users attempting to locate a vacant space. All other modes of transport in the network are subsequently impacted by the increased traffic movements, which impacts traffic efficiency and the amenity of the city. Parking management intervention is required to manage existing demand for car parking.

Broadly, spaces closest to the CBD core are restricted to stays of one hour or less, with two-hour restrictions around the retail and services precincts and unrestricted parking provided in non-core and residential areas.

Existing car parking demands across the city centre are high, with an overall occupancy rate of 86% at peak times. This represents a typical demand of approximately 2,234 vehicles, with approximately 368 vacancies being available. (GTA Consultants, 2017)

It is noted that a large portion of these vacancies exist within the outer periphery of the city centre, generally within the non-core area which largely comprises residential land uses.

3.4 Parking permits

The purpose of a parking permit scheme is to provide a parking demand management mechanism for homes and businesses in the area during times of peak parking demand whilst minimising adverse impacts on commercial activities, particularly during peak business hours. It also serves to provide exemptions from parking restrictions.

Careful planning is required to ensure that applications for permits do not exceed car parking supply, and that any permits are only issued in extenuating circumstances (i.e. there are no off-street parking spaces in the vicinity).

3.5 Car park pricing

Like other major central business districts, paid parking in the Liverpool City Centre has fee structure for on-street and off-street parking.

The parking fees in Liverpool are much lower than the applicable fees in the Sydney CBD but are comparable to the Parramatta CBD fees.

Table 6 provides a comparison of the minimum and maximum parking fees for Parramatta CBD and Liverpool CBD Council controlled off-street and on street parking.



Table 6: Parking fare comparison

	Parramatta		Liverpool	
	Off Street	On Street	Off Street	On Street
Maximum all-day	\$26.00	\$9.50	\$16.00	N/A
Minimum all-day	\$14.00	\$8.00	\$11.00	N/A
Maximum per-hour	\$3.00	\$4.00	\$3.00	\$2.70
Minimum per hour	N/A	\$2.00	\$2.20	N/A

The parking fees are reviewed annually as part of Councils Revenue Pricing Policy. If required, the parking fee can be revised to moderate parking demand in the City Centre as part of an approach to encourage public and active transport. Such an approach will moderate traffic growth and support sustainable growth of the City Centre. Any fee changes will need to be balanced with the need to provide appropriate parking taking into consideration available transport.

Additionally, increasing parking fees also represents a tangible reflection of local policy and attitudes towards private vehicle travel and mode choice, prioritising amenity over vehicle movement and aligns Council policy with other state and district policies.

Council currently provides 15-minutes free on-street parking on the road sections with paid parking in the city centre. The free parking will be increased to 30 minutes to meet the needs of local business(s) and short-term visitors.



3.6 Wayfinding signage

Wayfinding signage is located along key roads to provide directional guidance for motorists to major offstreet car parking areas within the city centre, as shown in Figure 3.

It is noted that wayfinding signage for privately operated off-street car parks has not been reviewed i.e. Westfield Shopping Centre, Liverpool Plaza and Hospital etc.



Figure 3: Existing wayfinding signage locations to key off-streetcar parking areas (Council Owned)

While the broad strategic location of wayfinding parking signage (as nominated in Figure 3) is generally considered satisfactory, the adequacy of specific sign placement is investigated further in Table 7. Another notable issue is the consistency of the design of wayfinding signage. Signs should be coordinated with similar styles and colours so that they are easily recognisable.



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Table 7: Existing car park wayfinding signage

Photograph	Car Park (CP)	Issue/Status
PAO CONTRACTOR OF THE	Bathurst Street CP via Bathurst Street access	This sign is located just before a traffic signal and may block motorists' view of the signal on approach.
	Bathurst Street CP via Northumberland Street access	There is relatively little advanced warning of this car park.
	Liverpool Plaza & Northumberland Street CPs	Multiple off-street car parks have been included on the sign. This may cause some confusion for motorists who are not familiar with the area.
	Liverpool Plaza & Bathurst Street & Warren Serviceway & Northumberland Street	Similarly, multiple parking locations have been included in the wayfinding sign, which may cause confusion for motorists unfamiliar with the area.

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Photograph	Car Park (CP)	Issue/Status
MANUAL MENTAL AND	Warren Serviceway CP	Sign is difficult to see due to the presence of an existing tree on Bigge Street.
Swary A Heathest Cambridge	Northumberland Street CP	Wayfinding sign is not made apparent due to the significant signage clutter on this post, particularly due to the sign positioned in conjunction with two larger road signs.
UNITED RALL ES E * LANGESTICEN GROWALLAG SI *	Liverpool Plaza, Warren Serviceway & Northumberland St CPs	Multiple parking locations have been included in the wayfinding sign, which may cause confusion for motorists unfamiliar with the area.
TREIO MITRE	Northumberland Street CP	Sign is located on the opposite side of the street to the carpark entry, despite being a one-way street.
		(GTA Consultants, 2017)



4. Future Issues

4.1 Growth of Liverpool

The Liverpool City Centre is positioned as Sydney's third CBD - an active and mixed-use city. Significant development opportunities are now being taken up for high rise commercial and mixed-use developments, including the redevelopment of the Westfield Liverpool shopping centre.

The Western City District Plan has also identified the Liverpool City Centre as a Health, Research and Education Precinct. The University of New South Wales has had a teaching presence at Liverpool Hospital for 30 years, and the University of Wollongong and Western Sydney University have established campuses in the City Centre and will continue to grow.

Future Transport 2056 (Transport for NSW) has identified a number of public transport upgrades over the next 20 years and beyond, to encourage increased public transport use and to reduce private vehicle dependency, including the following:

- Express train services between the Liverpool City Centre and the Sydney CBD and beyond;
- The Sydney Southwest Metro extension from Bankstown to Liverpool;
- A rapid bus route between the Liverpool City Centre and the Western Sydney (Nancy-Bird Walton) International Airport (WSIA);
- A safe cycleway network between 10km of Greater Penrith, Liverpool, Campbelltown-Macarthur and Western Sydney Aerotropolis; and
- The Leppington to Western Sydney Aerotropolis and Western Sydney Aerotropolis to Campbelltown-Macarthur train links.

A business-as-usual approach that provides for all parking to meet demand linked to forecast growth will limit the achievement of broader objectives for a liveable, vibrant, innovative, accessible and green city centre.

4.2 Land use and parking supply

The current B4 Mixed Use zoning within the Liverpool City Centre is expected to generate an increase in development within the city centre as follows:

Table 8: Future land uses

Land Use	Retail	Commercial	Residential
Existing	68,054 m ²	146,915 m ²	5485 dwellings
Future	107,788 m ²	322,177 m ²	12,385 dwellings
Difference	+39,734m ²	+175,262m ²	+6900 dwellings

(Greater Sydney Comission, 2017)

Given the projected future development yields within the Liverpool City Centre, car parking supply is also expected to increase dramatically under a business-as-usual approach. The estimated existing and future parking supply within the city centre is summarised in the table below:



Table 9: Future parking demand

Land Use	Parking Rate	Minimum Parking Requirements		Net Difference
		Existing	Future	(Future – Existing
Retail	1 space per 100m ²	681 spaces	1078 spaces	+397 spaces (58%)
Commercial	1 space per 150m ²	980 spaces	2148 spaces	+1168 spaces (119%)
Residential	 0.4 spaces per 1-bedroom 0.7 spaces per 2-bedroom 1.2 spaces per 3-bedroom 1 space per 7 units (visitor parking) 	3664 spaces	10,775 spaces	+7111 spaces (194%)
Total		5325 spaces	14,001 spaces	+8676 spaces (163%)

For the purpose of estimating parking supply, residential parking rates have been assumed based on high density residential development with an apartment mix of 10% 1-bedroom, 80% 2-bedroom and 10% 3-bedroom or more.

Parking rates for non-residential uses have been based from the Liverpool LEP 2008, with residential uses based off the Roads and Maritime Services' Guide to Traffic Generating Developments

Taking into consideration the above parking rates within the city centre, parking supply is expected to increase by 163%.

The modelling above has not considered the impacts of increased parking on the amenity and congestion on local streets in Liverpool, rather it highlights a substantial increase in off-street parking that will provided in the Liverpool City Centre under current policy settings.

4.3 Collaboration Area

The Greater Sydney Commission has adopted a Place Strategy for the Liverpool Collaboration Area which includes the Liverpool City Centre. It is estimated that the Liverpool Collaboration Area will cater for approximately 18,800 additional dwellings.

4.4 Liverpool Civic Place

Located at 52 Scott Street, Council's proposed mixed-use Liverpool Civic Place development will anchor and activate the southern end of Liverpool City Centre by providing new public spaces, community facilities and job opportunities. Liverpool Civic Place will include:

- A 24-level mixed-use tower combining commercial, retail and educational spaces
- A nine-level 126 room hotel or student accommodation building
- New council offices
- A new 5,000sqm city library

The site will provide 285 car spaces (of which, approximately half would be used for Council staff / vehicles during business hours).



4.5 Technology impacts

Technological advances in parking guidance technology have improved the ability for car parking users to be matched with available spaces, therefore reducing the gap between car parking demand and perceived supply. Dynamic signage and in-ground sensors can guide users to vacant spaces and reduce circulation. New technologies such as number plate recognition in Westfield Liverpool shopping centre will increase the efficiency of vehicles entering and exiting the car park. Phone based parking apps can also help users to identify places to park and view costs.

Some operators enable users to view the availability of parking, pay for parking, or pre-book a space via an app before the user leaves their point of origin. The data collected from smart technologies can provide parking operators with the information they need to optimise the use of their space, and reduce customer frustration, and aligns with principles of Mobility as a Service.

4.6 Demand for recreational areas

As the population within the city centre increases, the location of recreational areas will need to be considered in conjunction with the location of any proposed car parking. Car parking spaces should not impede upon existing recreational areas such as public open space and other areas where people congregate. Parking spaces should be adaptable to meet the increased demand for open space and ensure that they can also be used to host various events when needed. Opportunities should be undertaken to incorporate public open space into any new parking structures (i.e. roof top open space on multi-deck parking).

4.7 Public Domain Masterplan

The Liverpool City Centre Public Domain Master Plan outlines a ten-year plan of improvements for the public domain (streets, plazas and service ways) across the city centre. The plan specifies improvements to encourage pedestrian movements into and out of the city centre, with improved pedestrian pavements, improved connectivity, additional shade through street trees and vegetative separation along busy thoroughfares. Additionally, improved bicycle infrastructure will encourage mode shift, particularly for short distance journeys within and into the city centre.

The master plan has been developed collaboratively to ensure proposed outcomes align with community needs. Study findings of the Liverpool City Centre Traffic and Transport Study (2017) have been considered in the development of the master plan. Accordingly, any parking initiatives within the city centre should not compromise the implementation of the masterplan.

4.8 Potential redevelopment of key sites

Council is considering potential redevelopment options at a number of key sites in the city centre. These include:

- Council owned car parks at Northumberland and Bathurst Street
- · Liverpool Train Station and Bus Interchange
- Liverpool City Library and Council Administration Building 33 Moore Street
- Liverpool Civic Place

Although substantial plans have yet to be prepared for some of these sites, parking would need to be reorganised to accommodate any proposed land use changes. Any potential redevelopment should not result in the net loss of parking spaces in the city centre.



5. Actions

For this Strategy to be successful, it must manage parking demand by creating additional capacity where appropriate and reducing demand through mode shift to active and public transport. The Strategy proposes eight actions as follows:

Table 10: Actions

	Action	Description
A1	Provide a benchmark on the appropriate supply of public parking	A benchmark is to be developed to determine how much public car parking should be supplied by Council in the Liverpool City Centre.
A2	Improve and simplify parking signage	Improve signage for parking in the Liverpool City Centre to reduce confusion and the number of drivers circulating local streets in search of parking.
А3	Optimise existing on-street parking provision	Increase the availability of on-street parking by utilising methods to increase turn-over. Investigate a range of methods to reduce demand and increase supply if warranted.
A4	Investigate opportunities for long-term parking to be located at the periphery of the city centre	Investigate suitable sites for long-term car parking, to allow City Centre core parking to be repurposed for short-term parking or other suitable purposes.
A5	Investigate the potential for ride-sharing facilities in residential areas	Work with a car-share operator to carry out a service trial in the Liverpool City Centre and develop a guideline to establish the services. The guidelines will include the approval process to allocate parking spaces for car-share service and applicable fees.
A6	Review Council's parking prices.	Council reviews parking prices as part of its annual review of Fees and Charges to manage demand whilst respecting social equity.
A7	Investigate funding sources for the provision of additional parking in and around the city centre;	Identify the source of funding for all projects, including user pay systems, development contributions, grant funding, general revenue, or redevelopment opportunities. Funding of parking must assess whole-of-life costs including construction, maintenance, demolition/conversion to other uses and the cost of doing nothing.
A8	Investigate and identify alternative uses for car parks	Investigate and prioritise opportunities for parking infrastructure to cater for multiple user groups, are adaptable to pop-up/temporary events, and which provide for other public benefits in addition to parking.

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A9 Investigate the provision of additional parking in the city centre

Investigate for additional parking in the city centre, to cater for increasing short term car park demand

6. Delivery Plan

To fulfil the actions above, Council will need to explore a number of options to reduce demand, increase appropriate supply and consider other projects which will assist in addressing parking issues. The deliverables identified below represent individual projects which can address one or more of the actions above, whilst noting how they relate to the strategic objectives and actions identified in the Strategy.

A summary of the Delivery Plan can be found in Appendix A.



D1: Public parking rate benchmarking

Link to Actions

- A1: Provide a benchmark for the appropriate supply of public parking.
- A4: Investigate opportunities to move long-term parking to the city centre periphery.
- A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

- O1: Identify the appropriateness of providing additional parking within the Liverpool City Centre.
- O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.
- O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.
- O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

- To provide a numerical benchmark for the provision of public car parking spaces to support businesses and other uses in the City Centre.
- To provide guidance for additional car parking provision to facilitate economic development

Project Description

Liverpool City Council has an ambitious goal of becoming Sydney's third CBD. The Liverpool Local Environmental Plan includes parking rates that new development must comply with. Alternatively, a developer may propose a monetary contribution to Council for the provision of parking elsewhere in the city centre.

To provide the optimal amount of public car parking in the Liverpool City Centre, a benchmark must be developed, by using current research on the supply and demand of public parking (for short-term and all-day parking) in modern, vibrant city centres.

The benchmarking would consider and recognise:

- How other similar cities are responding to pressures to increase available public parking, particularly given some historic developments did not provide parking or cannot accommodate parking on-site.
- The source of public parking demand (such as the hospital, commuters, and retail premises which cannot provide parking), the mobility of the local population, and availability of alternate transport modes.
- Constraints in the regional road network and how additional parking facilities within the city centre
 will impact the efficiency of the road network.

The benchmark can be utilised to determine the number of public parking spaces which Council needs to provide to meet existing and future parking demands.

Project Timeline

2020-2021



D2: Construct car park at 68 Speed Street

Link to Actions

A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre.

A7: Investigate all funding sources for additional parking in the city centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O2: Further evaluate the concept of concentrating

public parking at the outer fringe of the city centre.



O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

Increase parking availability at the southern end of the city centre.

Project Location

68 Speed Street, Liverpool

Project Description

Demolish an existing disused community facility and construct an at-grade carpark comprising of approximately 75 car spaces.

Project Costs and Considerations

Approximately \$450,000-\$500,000.

Project Timeline



D3: Introduce a car share scheme into Liverpool City Centre

Link to Actions

A5: Implement car-share services

Link to Strategic Objectives

O1: Identify the appropriateness of providing additional parking within the Liverpool City Centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the city centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

Project Objectives

- Encourage Mobility as a Service (MaaS).
- Reduce the demand for parking and car ownership in the city centre.
- Promote alternate transport options for residents within the city centre by reducing motor vehicle ownership/dependence.
- To encourage public and active transport use and facilitate interaction facilitating cohesive residential communities.

Project Location

Liverpool City Centre

Project Description

Council will work with car-share operators to trial car-sharing services within the Liverpool City Centre. The initial trial includes 10 new locations on streets in the City Centre.

Council will review usage of car-share services at the trial locations to monitor demand and ensure that the services meet the community's needs.

Once the trial is completed, Council will develop a Car-share Service Guide to establish the approval process to allocate parking spaces for car-share service and applicable fees.

Project Costs and Considerations

There is no cost to Council for the carshare service trial.

Car-share operators will bear costs associated with converting regular spaces to car share spaces (painting and signage).

Council may need to revise its parking permit policy as a result of implementation and develop a Carshare Service Guide for on-going operation of the service and applicable fees.

Project Timeline



2020-2021

D4: Identify a location within 100m of Liverpool train station, for a carpark

Link to Actions

- A7: Investigate all funding sources for additional parking in the city centre
- A9: Investigate for the provision of additional parking in the city centre.

Link to Strategic Objectives

- O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.
- O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

Increase parking availability in the Liverpool City Centre.

Project Location

Liverpool City Centre

Project Description

Identify a location within 100m of Liverpool train station, for a carpark, if Pirie Street cannot be closed to accommodate a future car park

Project Costs and Considerations

Investigations - approximately \$50,000.

Project Timeline



D5: Provide simplified parking signage

Link to Actions

A2: Improve and simplify parking signage.

Link to Strategic Objectives

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

- Provide simple parking restriction signs within the Liverpool City Centre
- Reduce driver frustration.
- · Provide signage that is consistent in design with other signage in the Liverpool City Centre

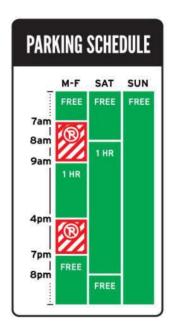
Project Location

New signage would need to replace all existing wall and pole mounted signs.

Project Description

Many motorists and residents can be confused by standard parking restriction signage. This can lead to vehicles parked in areas that are prohibited, causing congestion and/or dangerous road conditions. Visitors are also fined when parking contrary to these regulatory signs, some of which could be avoided by replacing such signage with clearer directions. Beginning in Los Angeles, several cities have begun using clearer and easier to understand signs.





(Source: nikkisylianteng.com)

Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy



It is recommended that signage design be considered as part of the Liverpool City Centre Public Domain Master Plan. However, due to current regulations, the simplified signage could only be used in conjunction with the current regulatory signage and cannot replace the existing signs. Continued advocacy to allow new signage should be explored.

Project Costs and Considerations

The costs associated with implementation of simplified parking signage is estimated to be approximately \$10,000 (assumes 400 signs throughout the city centre). The signs should be consistent with the Liverpool City Centre Public Domain Master Plan, and consideration should be given to collaborating with TfNSW to permit such signs in Liverpool.

Project Timeline



D6: Review of car parking pricing and on-street free parking

Link to Actions

- A1: Provide a benchmark for the appropriate supply of public parking.
- A3: Optimise existing on-street parking provision.
- A4: Investigate opportunities to move long-term parking to the city centre periphery.
- A6: Review Council's parking prices as part of Council's annual review of Fees and Charges.
- A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

- O1: Identify the appropriateness of providing additional parking within the Liverpool City Centre.
- O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.
- O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the city centre over the next 10 years.
- O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.
- O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

Project Objective

- Ensure parking pricing manages parking demands in the city centre.
- Provide an evidence-based approach to identify a minimum parking charge required to recover Council's costs while catering for competitive public transport pricing.
- Find a balance between meeting the community's expectations regarding parking prices and using
 prices to increase turnover of parking spaces while encouraging mode-shift.

Project Location

On-street and off-street parking areas in Liverpool City Centre.

Project Description

A review of current parking prices for on street and off-street parking areas. The review will set up a short to long-term pricing framework which guides Council's set up for parking fees over the next 10 years.

Council will review and increase 15 minutes free parking to 30 minutes along some streets in the City Centre.

Project Costs and Considerations

While there is no direct cost to Council in reviewing parking prices, there may be secondary costs if patronage reduces due to prices increase, or reduced income should prices decrease significantly.

Consideration should be given to how this will align with Council's Parking Permit Policy, contributions plan and other funding mechanisms.

Project Timeline



D7: Collimore/Woodward Park carpark upgrades

Link to Actions

- A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre.
- A7: Investigate all funding sources for additional parking in the city centre.
- A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

- O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.
- O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.
- O6: Provide a parking improvement delivery framework, to guide Council to carry out parking improvement works over next 10 years.

Project Objectives

- Provide long-term parking outside of the city centre in at-grade or multi-storey car parking facilities.
- Improve accessibility to the city centre from satellite parking facilities via upgraded pedestrian and cycling infrastructure and a permanent shuttle bus.
- Ensure that the quality of existing public open space and other elements of the public domain is not decreased but enhanced.
- Maintain residential amenity.

Project Location

Collimore Park is located to the west, outside of the city centre, and is bounded by Elizabeth Drive, Collimore Avenue, Moore Street, and Brickmakers Creek.

Woodward Park is located to the west, outside of the city centre, and is bounded by Memorial Avenue, the Hume Highway, Hoxton Park Road and the T-way



Project Description

Establish a multi-deck car park at Collimore Park and/or Woodward Park to provide all-day parking for city centre employees and university students, in addition to providing timed parking for motorists who attend appointments in the medical precinct.

The present at-grade car park in Collimore Park provides a total of 496 spaces, including (9) nine accessible parking spaces.



The potential for Woodward Park to accommodate additional commuter parking is another option, as the site is currently subject to a master planning exercise. The park currently includes the Whitlam Centre, several sporting fields, and car parking.

Project Costs and Considerations

The cost of a single at-grade parking bay (including costs for drainage, circulation space, design, etc.) is approximately \$6000; this rises to \$30,000 for above ground facilities or \$60,000 per bay for basement parking. As such, an additional 1000 spaces on Collimore Park or Woodward Park would likely cost approximately \$30 million. This does not include operational costs.

Council's contributions plan currently has approximately \$6 million allocated for city centre parking improvements. Part of the construction costs could be derived from development contributions, although these funds are also committed to projects such as the Speed Street car park and improvements at Woodward Park. Council would likely need to source additional funding from general revenue. User-pay systems could be provided to cover the costs of operation and potentially offset costs of construction. A revised contributions plan for the city centre may be required to raise additional funds.

The parking facilities at Collimore Park and Woodward Park are located on land that is zoned for public open space. There is a Council resolution and planning proposal to facilitate the construction of a multi-level parking facility at Collimore Park. Several Council events and sporting clubs utilise Woodward Park on weekends, which generates demand for parking. The site is bound by heavily trafficked roads such as the Hume Highway and Hoxton Park Road.

Whilst located near the city centre, construction of a multi-storey carpark at Collimore Park will concentrate additional traffic on residential streets, as accessibility into Collimore Park is severely restricted by turn-bans from the Hume Highway and Elizabeth Drive. Woodward Park has more opportunities to cater for alternative users, given weekend demand, compared to Collimore Park, and has better access to higher-order streets, reducing traffic movements on residential streets. Integration of a commuter car park on this site in association with a broader masterplan may result in no net loss of open space whilst providing additional parking and the potential for better connectivity to the city centre via a pedestrian bridge.

Project Timeline



D8: Investigate further opportunities to provide angle parking

Link to Actions

A3: Optimise existing on-street parking provision.

A7: Investigate all funding sources for additional parking in the City Centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O1: Identify the appropriateness of providing additional parking within the Liverpool City Centre.



O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

 Indicate where angled car parking bays can be located in accordance with the City Centre Public Domain Masterplan and car parking rate benchmarks.

Project Location

Streets within the Liverpool City Centre

Project Description

The Liverpool City Centre is generally devoid of angled parking bays, except for the portion of Macquarie Street north of Westfield. Angled parking, where the carriageway is sufficiently wide, provides a higher parking capacity than parallel parking and cars can more quickly enter or exit spaces (depending on whether vehicles drive in forward or in reverse). Where streets are sufficiently wide to be able to be reconfigured, angled parking can provide for additional parking bays. The decision to include angled parking bays must reflect the Liverpool City Centre Public Domain Masterplan and be consistent with the benchmarks provided in Deliverable 1. The benchmarks can be used to determine if it is feasible to use the parking bays for alternate purposes such as outdoor seating after hours.

Project Costs and Considerations

The cost of implementing this action depends on whether the work is limited to changing line-marking or whether kerbs and landscaping bays require reconstruction. Cost will be determined on a project-by-project basis. Any new car spaces should be consistent with the Liverpool City Centre Public Domain Master Plan.

Project Timeline



D9: Investigate and Install dynamic parking guidance system

Link to Actions

- A2: Improve and simplify parking signage.
- A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

- O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.
- O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

- Minimise vehicle circulation which contributes to congestion.
- Reduction noise and air pollution.
- Reduce driver frustration.
- Provide signage that is consistent in design with other signage in the Liverpool City Centre.

Project Location

Wayfinding would be provided at the main entry points to and from and within the city centre, directing motorists to car parks and primary businesses and medical facilities.

Project Description

Provide motorists with electronic/dynamic directional wayfinding to off-street parking facilities (with the potential to include on-street facilities as this becomes available) including the number of available parking spaces. The signs will be linked to a mobile phone app to alert drivers of parking opportunities.

NORTHERN BEACHES NORTHERN BEACHES COUNCIL Parking Spaces Available Parking Spaces Available Whistler Street Wentworth Street P2 999 231 P3 2 HOURS FREE PARKING BETWEEN SAM & 7PM

Project Costs and Considerations

The costs associated with the initial installation of a dynamic parking guidance system (with signage) is estimated to be approximately \$1 million. This assumes that 20% of all parking spaces in the city centre will be fitted with sensors. However, there may be potential additional monthly costs for ongoing maintenance of the system.

NB: It will need to be investigated whether it is feasible to roll out such technology in older facilities such as the Northumberland Street car park.

Project Timeline



D10: Optimising usage of car parking spaces

Link to Actions

- A3: Optimise existing on-street parking provision.
- A7: Investigate all funding sources for additional parking in the city centre.
- A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

- O1: Identify the appropriateness of providing additional parking within the Liverpool City Centre.
- O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.
- O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.
- O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

- To increase turnover of on-street parking spaces in the city centre.
- To support local business and the night time economy.
- To promote short-term stay (business and shopping trips) in the city centre core area and longterm stay (employee and commuter trips) in designated parking areas such as Council-owned car parks.
- Discourage all day parking in areas where there is a demand for higher parking turn-over.
- Ensure alternative options are provided for all-day parkers to offset a loss in all day parking.

Project Location

On-street parking spaces in the Liverpool City Centre.

Project Description

The projects include:

- · Prioritising parking near health facilities;
- Introducing timed parking restrictions (three- or four-hour parking) to unrestricted parking areas; and
- Re-evaluating parking restrictions in the city centre core (change from one hour to 30min).

Council will carry out surveys and demand analysis to identify suitable locations where parking turnover can be increased to cater for short-term and medium-term parking demands.

Project Costs and Considerations

The costs associated with implementing this initiative would be approximately \$10,000. Consideration must be given to the availability of parking for disabled permit holders and reviewing the Parking Permit Policy to minimise conflicts.

Project Timeline



Appendix A – Delivery Plan summary

Deliv	verable	Description	Time frame
Denv	relable	Description	Time mame
D1	Public parking rate benchmarking	Benchmarking will inform assessment and provision of public car parking in the city. A benchmark for car parking provision in the city centre, would be developed using current research on demand and public parking provision (for short-term and all-day parking) in modern, vibrant city centres, taking into consideration measures to encourage higher public transport use and reduce car parking in the centre core.	Short term 2020/2021
D2	Construct a new car park at 68 Speed Street	Demolish and construct an at-grade carpark comprising approximately 75 car spaces, at 68 Speed Street.	Short term 2020-2021
D3	Introduce car share scheme into Liverpool city centre	Work with car share companies to introduce car share scheme into Liverpool city centre, with annual fee for the required parking spaces after a trial period.	Short term 2020/2021
D4	Identify a location within 100m of Liverpool train station, for a carpark	Identify a location within 100m of Liverpool train station, for a carpark, if Pirie Street cannot be closed to accommodate a car park	Short term 2020/2021
D5	Provide simplified parking signage	Installation of new signs to simplify and clarify parking restrictions and improve traffic flow.	Short term 2020/2022
D6	Review of car parking pricing and on-street free parking	Ongoing annual review of on-street and off-street parking fees.	Short term 2020/2025
D7	Collimore/Woodward Park carpark – Additional Car Parking	Construct a multi-deck car park at Collimore Park with approximately 1000 spaces; or alternatively increase the number of new spaces at Woodward Park (as part of the Woodward Place masterplan) to provide all-day parking for city centre	Short to Medium term 2020/2025



		employees, visitors and university	
		students.	
D8	Investigate further opportunities to provide angled parking	Investigate where angled parking bays can be provided, in accordance with the measures outlined the City Centre Public Domain Masterplan and parking rate benchmarks.	Short to long term 2019/2030
D9	Investigate and install Dynamic parking guidance system	Investigate and install electronic and /dynamic directional way finding to car parks (with the potential to include onstreet facilities). The signage information could include the number of available parking spaces, and possible link to a mobile phone app to alert drivers of available parking.	Short to long term 2020/2030
D10	Optimising usage of car parking spaces	 Encourage turnover of parking spaces by reviewing parking fees for on-street parking (longer than 2 hours) Prioritising short term parking near health facilities Introduce timed parking restrictions (3 or 4 hour parking) to unrestricted parking areas. Investigate locations where ½ P can be installed. 	Short to long term 2020/2030



Appendix B – Previous implementation plans 2010 - 2017

Actio	on	Timeline	Outcome
2010		TATIONNO	
1	Establish one free all day at-grade car park at Collimore Park outside the city centre.	Short-term (0-2 years)	Completed
2	Increase the number of available on-street spaces throughout the city centre.	Short-term (0-2 years)	Completed
3	Increase parking turnover by rationalising existing time limits with increasing time allocations allowed further away from the inner core.	Short-term (0-2 years)	Completed
4	Reduce driver confusion by providing one consistent duration of timed restrictions applying throughout the City Centre.	Short-term (0-2 years)	Completed
5	Introduce 'pay and display' ticket parking in the Northumberland Street and Bathurst Street car parks; and Devote city centre revenue from the parking fees for a period of five years exclusively to measures which improve car parking and transport in the city centre.	Short-term (0-2 years)	Completed
6	Introduce parking meters on streets in the Inner Core for on-street parking, in the area bounded by Bathurst, Elizabeth, Bigge, Scott and Macquarie Streets, and Macquarie Street north to Lachlan Street.	Short-term (0-2 years)	Completed
7	Undertake a comprehensive investigation into the practical and commercial feasibility of locating a new car park to replace the existing Northumberland Street car park in an appropriate location either on the same site, or more preferably in the peripheral areas of the southern city centre; Develop a financial model for a new multi-story car park in the southern city centre area to permanently replace and if possible significantly supplement the car park currently located in Northumberland Street; and Commence the design process for the new car park.	Short-term (0-2 years)	Not completed
8	Introduce a Residential Parking Permit Scheme in suitable and defined parking zones close to residences.	Short-term (0-2 years)	Completed
9	Improve entry into the periphery of the city centre by removing the bottleneck caused by the interchange of Terminus Street, Hoxton Park Road and the Hume Highway.	Short-term (0-2 years)	Work in Progress Council is working with RMS to identify improvement works at Hume Highway/Hoxton



Actio	on	Timeline	Outcome
			Park/Terminus Street
			intersection.
10	Commence investigations to locate as many temporary car parking spaces in, or in proximity to the city centre as possible to offset the loss of parking during the construction of the replacement for the existing Northumberland Street car park.	Short-term (0-2 years)	Not completed Northumberland Street car park was not demolished
11	Undertake the demolition of the Northumberland Street car park and commence construction of its replacement, either on the same site or in a new location at the earliest opportunity.	Medium- term (2-4 years)	Not completed Refurbishment works have been completed, car park to be maintained in the short/medium term.
12	Introduce a five hour parking restriction after the construction of the multi-deck car park at Warwick Farm.	Medium- term (2-4 years)	TfNSW will not allow Council to restrict parking
13	Improve infrastructure conditions for cyclists so that more people use cycling to travel to work and undertake simple shopping trips.	Medium- term (2-4 years)	Work in progress Shared path has been constructed surrounding the city centre. More improvements are required within the city centre.
14	Investigate opportunities to implement two-	Long-term	Work in progress
15	storey parking structure at Collimore Park. Investigate improvements to the Southern City Centre Ring Road.	(4-6 years) Long-term (4-6 years)	Completed Studies completed, however Council has resolved to consider construction of a car park on land identified for the Bathurst Street extension.
15	Investigate the potential for an overhead shared pedestrian and cycleway over the Hume Highway.	Long-term (4-6 years)	Completed Investigations identified locations for a potential bridge. To be further considered in the Woodward Place Master Plan.
16	Investigate the potential for improved traffic light phasing at Moore Street and Hume Highway to enable better connectivity to the city centre from the Collimore Car Park for buses. This would also enable better bus priority into the city centre as this is the main bus access point.	Long-term (4-6 years)	Not Completed The project will be part of Moore Street Transit Boulevard.
17	Investigate traffic improvements to the arterial road network in conjunction with the RMS: Grade separation of Hoxton Park Rd/Macquarie St/Hume Highway intersection; Alternative bypass of Liverpool; and	Long-term (4-6 years)	Work in progress Council has made presentations to RMS for the proposed grade separation, Liverpool bypass and additional Georges River bridge.

Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy



Acti	on	Timeline	Outcome
	 Investigate the potential for another Georges River bridge crossing into the City Centre to reduce traffic congestion. 		
2013			
1	Multi-storey car park at Collimore Park -1200 free all day parking spaces.	Short term (2 years)	Work in progress Planning proposal submitted to DPIE seeking Gateway Determination.
2	Provide electronic/dynamic wayfinding signage to on and off-street parking facilities.	Short term (2 years)	Partially completed.
3	Rationalise existing time limits with increased time allocations, further away from the core.	After Collimore Park	Not Completed Relies on progression on multi-storey parking at Collimore Park.
4	Develop pricing strategy for on/off street parking.	2.700	Not Completed No timeframes provided for completion.
5	Provide standard parking time restrictions throughout CBD.	-	Not Completed No timeframes provided for completion







For further information



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National Relay Service (NRS): 133 677
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Adopted: 29 May 2019

TRIM: 2016/2682, 091748.2019



875

1. LEGISLATIVE REQUIREMENTS

Local Government Act 1993, Section 356

2. OBJECTIVE

Council is committed to building strong and resilient communities within the Liverpool Local Government Area (LGA) and to increase social wellbeing for all residents. One way of achieving these goals is to provide financial assistance in the form of grants, donations, and sponsorships to individuals and groups to develop leadership skills, increase participation in community life and address identified social issues. Council seeks to support programs that can build or enhance the reputation and brand of Liverpool City in accordance with Council's Community Strategic Plan.

3. **DEFINITIONS**

Acquittal	Reporting on the activities of a project as set out in the funding agreement. This could take the form of providing financial reports, written reports, evidence of activity performance and where funding was spent
Auspice	An agreement where an incorporated organisation agrees to apply for funding or resources on behalf of an applicant that is not incorporated. If the application is successful, the auspicing organisation then administers the resources on behalf of the applicant, and is legally responsible for ensuring that the terms of the agreement are met
Charity	Listed on the Australian Charities and Not-for-profit Commission (ACNC) website as a registered charity
Community	Involves the provision of community activities that contribute to people
Capacity	developing their own capacity and resilience to maintain and build on their
Building	own resources and to manage future challenges
Incorporated	A legal entity (organisation) that provides legal protection to its members
Association	in legal transactions

4. GRANTS OVERVIEW

Council seeks to enhance the use of public funds through effective and efficient grant processes. Clear grant program objectives are linked to the organisation's strategic goals, outlined in Council's Community Strategic Plan. Council's grant programs provide a coordinated and integrated approach to growing Liverpool socially, culturally, economically and environmentally. Grants may be provided to individuals who reside in the LGA, or to community-based groups, organisations and services that operate within the Liverpool LGA and/or for the benefit of Liverpool residents. Council administers nine programs for the allocation of grants:

- 1. Kick-Starter Grants
- 2. Small Grants
- 3. Liverpool Young Achievers Awards
- 4. Community Grants
- 5. Sustainable Environment Grants
- 6. Matching Grants
- 7. Corporate Sponsorship
- 8. Sporting Grants
- 9. Sporting Donations

4.1 Our philosophies of grant making

- Community Strategic Plan. Grants programs align with Council's Community Strategic Plan, and other social, economic and environmental policies and plans.
- Partnerships and collaboration. Develop and maintain partnerships between Council and the community to achieve Council's strategic directions.
- Capacity building. Support community groups and organisations to function positively, develop skills and increase participation.
- Social inclusion. Liverpool is a diverse community and our grant programs encourage directing resources to the needs of disadvantaged groups.
- Leveraging value. Leverage community expertise, capacity, networks and resources to provide the best suite of grant programs.
- Good governance. Demonstrate integrity, professionalism and transparency in our decision making and have strong governance structures in place to support this. Council will ensure that grant processes are transparent and fair.
- Reflection and learning. Commitment to continuous improvement, Council will ensure there are evaluation mechanisms in place and opportunities for feedback on grant processes.

5. GENERAL CONDITIONS

5.1 General Eligibility

To be eligible for funding an applicant must:

- Acquit previous Council grants, donations or sponsorship and have no outstanding debts to Council:
- Be a resident of the LGA, or an organisation located in the LGA and/or principally providing services to the residents of Liverpool; and
- c) Include all required supporting documentation with an application.

5.2 Applications that are ineligible for funding include:

- a) Projects that duplicate existing Council services or programs or identical projects previously funded by Council.
- Projects that do not meet the identified priority needs of Liverpool in Council's Community Strategic Plan.
- Applications from government departments, political parties, or commercial/profitmaking/private organisations (excluding Corporate Sponsorship which accepts applications from private organisations).
- d) Applications from charities for general donations.
- e) Applications for general fundraising activities, general operational expenditure (e.g. administration, insurance, office equipment, car parking, IT costs/equipment), shortfalls in funding by government departments, or completed/retrospective projects.
- f) For employee salaries/wages or any direct employment costs.
- g) Projects that will rely on recurrent funding from Council.
- h) Projects or programs that charge people for participation, including charges to participants through an individual's NDIS funding plan.

5.3 Further Conditions

5.3.1 Council will not:

- a) Provide in-house design, printing and distribution services.
- b) Provide cleansing and waste services for events.
- Support political activities or activities that could be perceived as benefiting a political party or political campaign.
- d) Support religious activities that could be perceived as divisive within the community.

- e) Support activities that deliberately exclude any individuals or groups from participating or attending.
- 5.3.2 For specific eligibility requirements and exclusions for each program, refer to Section 7 of this policy.

5.4 Ethics Framework

Council will not support any activities or entities that:

- a) Pollute land, air or water, or destroy or waste non-recurring resources.
- b) Market or promote products/services in a misleading or deceitful manner.
- c) Produce, promote or distribute products/services likely to be harmful to the community.
- d) Acquire land or commodities primarily for speculative gain.
- e) Create or encourage militarism or engage in the manufacture of armaments.
- f) Entice people into financial over-commitment
- g) Exploit people through the payment of below award wages or poor working conditions.
- h) Discriminate by way of race, religion, or sex in employment, marketing or advertising.
- i) Contribute to the inhibition of human rights generally.

5.5 Conflicts of Interest

- 5.5.1 Council staff assessing and determining applications should identify and manage any potential conflicts of interest in accordance with Council's Code of Conduct and Ethical Governance: Conflicts of Interest Policy.
- 5.5.2 Members of Council staff and Councillors must ensure that any affiliation between them and the applicant is appropriately managed when assessing and determining applications for grants and donations.

6. GRANTS MANAGEMENT PROCESS

6.1 Applications

All applicants must register with Council's online grants management system before applying. Applications must be submitted using the approved online application form on Council's online grants management system. Council will not accept any hard copy or emailed submissions, or any submissions after any applicable closing date or time.

6.2 Assessment and Recommendations

- 6.2.1 All applications received by Council will be assessed by relevant Council staff members. Sporting Grants and Donations will be sent to the Sports Committee for review. Recommendations for funding of \$1,000 or less may be approved by the CEO or their delegate, provided the funding is in accordance with sections 356(3), 377(1A), and 378 of the Local Government Act 1993. Council will be notified of funded projects by Council report as soon as appropriately possible. Recommendations for funding over \$1,000 will be made to Council for endorsement in accordance with Section 356 of the Local Government Act 1993.
- 6.2.2 For grant programs that are open for applications all year, recommendations will be made to the next available Council Meeting. For grant programs with specific funding rounds, recommendations will be made within three months of the closing date.
- 6.2.3 Unsuccessful applicants are encouraged to seek feedback from relevant Council staff on their application. Programs are highly competitive and even though an application may meet the program criteria it may not be competitive against other applications.

- 6.2.4 Council uses the Australian Business Register (ABN) as its sole source of truth to confirm an applicant's operating status as an incorporated not-for-profit or charitable organisation http://www.abr.business.gov.au/.
- 6.2.5 Council values and recognises the importance of applicant financial and in-kind contributions. Applicants that demonstrate a commitment to the project through either financial or volunteer support are considered favourably.
- 6.2.6 For all applications, council will consider the criteria of: sustainability, value for money, appropriate project and evaluation process, evidence of a need for the project, the number of individuals participating in or benefiting from, and that the organisation has the capacity to deliver the project.

6.3 Approval

- 6.3.1 The elected Council has authority to approve grants, donations, and sponsorship. In some circumstances, specific delegation for this purpose is given to the CEO.
- 6.3.2 Approval of a grant, donation or sponsorship does not imply that Council has given any other consent. Applicants should note that events or any capital works require approvals and consents from Council, NSW Police and other state government agencies.

6.4 Funding Agreements

- 6.4.1 All successful applicants are required to enter into a funding agreement before funds are released and before a project can commence.
- 6.4.2 Council's support must be acknowledged on all promotional material. The Council logo should be used with the text "proudly supported by Liverpool City Council". All promotional material must be approved by Council prior to publication. Council also reserves the right to receive the following: joint media release opportunities, opportunity for Mayor to speak at the event or occasion, space at the event (table/stall), and tickets to attend the event or occasion.

6.5 Reporting

All grant recipients are required to acquit their project as detailed in their funding agreement. Reports are to be submitted using the approved online grants management system. Reports provide feedback on the success of the project in terms of the agreed outputs and outcomes, relevant data, and any lessons learnt. Funding recipients are required to submit detailed financial reports and may be requested to provide further documentation and evidence of expenditure. Council may audit recipients at any time. Previously funded applicants must receive an acknowledgement of a successful acquittal prior to applying for further funding. No further funding will be granted to any organisation who has failed to submit an acquittal report for previous funding from Council.

6.6 Minor changes to this policy

Council authorises the CEO to make minor changes to this policy to reflect changes in legislation, expiry of or changes to grant programs, and changes in Council structure.

7. FUNDING PROGRAMS

7.1 KICK-STARTER GRANTS | UP TO \$500 | OPEN ALL YEAR

This program supports individuals or unincorporated community groups to establish a social enterprise aimed at addressing priorities in Council's Community Strategic Plan or a project which promotes social inclusion and increased community participation. Applications can be made for funding of up to \$500 per financial year. Repeated applications of the same project in subsequent years will not be accepted.

7.1.1 Project outcomes must meet at least one of the below priorities:

- a) Improve connections and social networks within the community.
- Increase participation in community activities, including by those experiencing social disadvantage.
- c) Facilitate access to education, training, or employment opportunities.
- d) Improve collaboration and coordination of community support and services.
- e) Improve social and physical wellbeing through prevention and early intervention approaches.

7.1.2 <u>Program timeframe</u>

Applications can be made all year. Grants must be spent within 12 months of receiving them.

7.1.3 Eligibility

To be eligible for funding applicants must:

- a) Be an individual resident or unincorporated community group based within the Liverpool LGA.
- b) Be 100% volunteer run or operate as a not-for-profit.
- c) Must update Council's Community Development Worker (Funding and Support) during the delivery of the project or initiative.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

Grants, Donations and Corporate Sponsorship Grants, Donations, and Corporate Sponsorship Policy

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

7.2 SMALL GRANTS | UP TO \$1,000 | OPEN ALL YEAR

This program supports a range of small-scale community initiatives and is for community groups who may not have experience with grants programs. It aims to provide more intensive support and build the capacity of less established groups to familiarise themselves with grants programs and Council processes.

- 7.2.1 Initiatives and projects can contribute to one or more of the following outcomes:
 - a) Develop trial community capacity building programs or facilitate small-scale community awareness events.
 - b) Increase engagement of individuals in academic, cultural, and environmental fields.
 - c) Improve relative equality, resilience and adaptive capacity of Liverpool's diverse communities.
 - d) Enhance positive social, cultural, or sustainability outcomes for local communities related to Council's strategic priorities.

7.2.2 Available funding

Applications can be made for funding of up to \$1,000 per project. Repeated applications of the same project or initiative in subsequent years will not be accepted.

7.2.3 Program timeframe

Applications can be made all year. Grants must be spent within 12 months of receiving them.

7.2.4 Eligibility

To be eligible for funding applicants must:

- a) Be incorporated or auspiced by an incorporated organisation;
- A non-profit community service organisation or group providing programs/services to the residents of Liverpool; and
- c) Supply a copy of their most recent financial statements.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.3 LIVERPOOL YOUNG ACHIEVERS AWARDS | OPEN ALL YEAR

The Liverpool Young Achiever Awards are given as a prize to a student who has excelled in citizenship, academic studies, artistic endeavors, or sporting proficiency.

7.3.1 Available funding

Under each applicable category there will be two prizes as follows:

Citizenship:	Artistic Endeavours:	
1x \$1,000 for a high school student	1x \$1,000 for a high school student	
1x \$500 for a primary school student	1x \$500 for a primary school student	
Academic Studies:	Sporting Proficiency:	
1x \$1,000 for a high school student	1x \$1,000 for a high school student	
1x \$500 for a primary school student	1x \$500 for a primary school student	

7.3.2 <u>Highly Commended</u>

All eligible nominees who are not selected for the major prize will be awarded a \$200 student donation.

7.3.3 Program timeframe

Applications will be accepted from the beginning of school Term 1 until the end of Term 3. A presentation ceremony will be held during Term 4.

7.3.4 Eliaibility

To be eligible for this award applicants must:

- a) Be a high school or primary school based in the Liverpool Local Government Area (LGA):
- Be nominating a student attending either a high school or primary school based in the Liverpool LGA; and
- Supply a letter of support from the principal of the applying school for the nominated student.
- 7.3.5 Each high school and primary school are only eligible to submit one student nomination per year. For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.4 COMMUNITY GRANTS | UP TO \$5,000 | TWO ROUNDS PER YEAR

This program provides financial assistance to community groups, organisations and services for projects that foster partnerships and collaboration, build capacity, promote social inclusion and increase community participation. The program assists in developing pilot or trialling innovative services or programs that address the needs of residents, workers and visitors. The program will support projects that:

- a) Improve connections and build social networks within the community.
- Increase participation of people in community activities and programs, including members of the community who are experiencing social disadvantage.
- c) Facilitate access to education, training and employment opportunities.
- d) Improve opportunities for people to build confidence and develop their skills.
- e) Facilitate inclusion and access to facilities, services, open spaces and activities.
- f) Improve collaboration and coordination of community support and services.
- g) Improve social or physical wellbeing through prevention and early intervention.
- h) Strengthen governance and accountability in community organisations.

7.4.1 Expected program outcomes

Initiatives and projects can contribute to one or more of the following outcomes:

- a) Increased involvement and engagement by communities in social activities.
- b) Increased number of people feeling a strong sense of social wellbeing.
- Strengthened maintenance, management or improvement of physical and mental health and wellbeing.
- d) Improved access to information and development of new skills.
- e) Increased numbers of people undertaking educational courses and gaining sustainable employment.
- f) Reduced financial hardship and social disadvantage, including food insecurity and homelessness.

7.4.2 Available funding

Applications can be made for funding of up to \$5,000 per round. Grants must be spent within 12 months of receiving them.

7.4.3 Program timeframe

This grant program has two rounds per year.

7.4.4 Program eligibility and exclusions

To be eligible for funding through the Community Grants Program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation.
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- c) Have public liability insurance of at least \$10 million (must be active during the period of funding)
- d) Supply a copy of their most recent annual report and/or financial statements.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Conditions.

7.5 SUSTAINABLE ENVIRONMENT GRANTS | UP TO \$5,000 | TWO ROUNDS PER YEAR

The Sustainable Environment Grants program provides financial assistance to support schools and community groups to play an active role in reducing their impact on the environment and implementing environmentally sustainable actions. The program seeks projects focused on environmental improvement, sustainability education, awareness-raising and the promotion of sustainable living as a way of life that provide benefit to the natural environment and local community. Projects can include:

- Waste Minimisation including reuse, recycling, litter reduction, composting and worm farming, waste education projects.
- Sustainable Water Use including water efficiency, stormwater harvesting and water reuse, rain gardens and water quality improvements, and sustainable water use education programs.
- Environmental Improvement including protection and enhancement of natural areas, habitat creation for native fauna, and natural environment education programs.
- Sustainable Living including establishment of vegetable or native display gardens, bush tucker or community gardens, and the keeping of chickens or native bees.

7.5.1 Expected program outcomes

Grants from this program can contribute to one or more of the following outcomes:

- a) Build the capacity of schools and community groups to promote efficient resource use and improve the quality of the local environment.
- b) Encourage community members to become involved and take initiative in improving their behaviours for a more sustainable future.
- c) Encourage schools and community groups to identify and implement innovative approaches and positive solutions that protect and enhance Liverpool's unique natural environment.
- d) Improve the health of vegetation, water quality and healthy ecosystems contributing to cleaner waterways, air and healthier native vegetation.
- Raise awareness and promote sustainable living as a way of life, including actively participating in Council's environmental programs and activities.
- f) Generate positive community engagement (e.g. involvement of local businesses, environmental education centres or botanic gardens).

7.5.2 Available funding

Applications can be made for funding of up to \$5,000 per year by a school or an incorporated community group. Grants must be spent within 12 months of receiving them.

7.5.3 Program timeframe

This grants program has two rounds per year.

7.5.4 Program eligibility and exclusions

To be eligible for the Sustainable Environment Grants program applicants must have not received funding under this or another program for the same project (separate and additional stages of a previous project are eligible), operate in the Liverpool LGA and:

- a) Be a registered NSW school, not-for profit pre-school or child care centre; or
- An incorporated, non-profit, community service, welfare or charitable organisation or group providing programs or services to the residents of Liverpool; or
- c) Community group auspiced by an incorporated organisation.

Applications will not be accepted for:

a) For profit organisations

- b) Overall project coordination
- c) Capital works for major infrastructure or construction of buildings
- d) Work being completed on land not owned by the applicant without evidence of approval from the landowner.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Conditions.

7.6 MATCHING GRANTS | UP TO \$15,000 | TWO ROUNDS PER YEAR

This program is designed to provide financial support to projects and activities that build or strengthen communities within Liverpool. These projects will focus on supporting the development and implementation of community capacity building activities and providing opportunities for a broader cross section of the community to be involved in community and recreational activities.

7.6.1 Funding will support projects that address one of the following categories:

- Arts Contribute community art to a neighbourhood or work to increase the participation of residents within art-based programs/projects.
- Capacity Building Bring residents together and enhance participation in the community, including those who are experiencing social disadvantage, or provide benefits to address an identified community need. This could be a community event or community-based capacity building project.
- Youth Engagement Focus on increasing the ability of young people to obtain skills and qualifications or increase their active participation within the community.
- Accessibility Enhance and improve access options for the community, either through education, transport, disability access or connectivity.
- Environmental Address environmental issues and concerns or contribute to environmental education and awareness.
- Community Safety/Public Space Activation Address community safety and security issues such as activities that activate or diversify the night time economy including pop up entertainment and night time performances in public spaces. These projects can also include addressing perceptions of community safety.
- Sports Development Contribute to the development of sporting groups or enhance participation in sporting and recreational activities.

7.6.2 Expected program outcomes

Grants from this program can contribute to one or more of the following outcomes:

- a) Develop social connections and partnerships within communities, or reinforcement of those that already exist.
- b) Increased participation in community activities and organisations by improving collaboration and coordination of community support and services.
- Strengthened opportunities for community members and others to build personal creativity and self-expression.
- Increased opportunities for community members to acquire or develop new skills and/or employment.
- e) Create, renew or revitalise places and spaces within the community.
- f) Strengthened community members' feelings of safety and sense of belonging within public spaces.

7.6.3 Available funding

The matching grants program recognises community contribution towards a project and can offer up to \$15,000 support to match this contribution. The program supports projects that involve genuine community participation. By 'matching' what the community contributes, Council is building a sense of community and strengthening partnerships as people work together on the project. Contributions from the community or Council can be made in cash or value-in-kind. Recognised in-kind community contributions include:

 a) Design services, professional services, trade services (such as plumbing), provision of trucks and plant, concreting and painting, donated supplies, materials or venues.

- b) Volunteer time such as labour, set up and pack down, and meeting time to identify, plan and implement projects. The rate of volunteer time is calculated as \$20 per hour. For professional or contracted services, the rate is \$75 per hour.
- c) Direct cash input to the project through donations or income generated.

The value of in-kind contributions should be verified by an independent quote, and where the value is in question, Council's assessment of the value of in-kind contributions will take precedence in the assessment of the matching grant given. The costs of Council and other approvals required by government agencies/authorities must also be considered when applying under this grants program.

7.6.4 Program timeframe

This program accepts applications twice per year. Grants must be spent within 12 months of receiving them.

7.6.5 Program eligibility and conditions

To be eligible for the Matching Grants program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation.
- A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- Have public liability insurance of at least \$20 million (must be active during the period of funding).
- d) Supply a copy of their most recent annual report and/or financial statements.

Council reserves the right to defer consideration of a Matching Grant application where planning, leasing or ownership, statutory approvals, or appropriate development issues are raised by a project.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.7 CORPORATE SPONSORSHIP | UP TO \$10,000 | OPEN ALL YEAR

Council may provide financial contributions of up to \$10,000 through its Corporate Sponsorship Program to organisations, groups, or individuals for programs that can build or enhance Council's reputation. These include but are not limited to providing appropriate branding benefits and opportunities for Council, and/or providing cross-promotional opportunities for Council's services or facilities.

Applications to Council for sponsorship must address at least one of the following:

1. Economic benefit

- a) Delivers significant economic benefit to the Liverpool LGA.
- b) Delivers benefit to tourism, hospitality and retail sectors through the attendance of regional, national, or international delegates at events.
- c) Provides a platform for research, trade, and/or investment opportunities.
- Attracts national or international attention to Liverpool as a place to reside, visit, work and/or invest.
- e) Creates employment opportunities within the Liverpool LGA.

2. Community, cultural, and social benefit

- a) Provides an innovative opportunity to meet community needs and promote Liverpool's cultural diversity and celebrate our City's uniqueness.
- Enhances Liverpool's profile and reputation as an outward looking, creative and connected city.
- Creates opportunities for education and information exchange between Council, the community and the sector.
- d) To support the organisation and activation of a charity event with the Liverpool LGA. Sponsorship funds are not to be used for direct fundraising, including but not limited to the purchase of tickets or tables at a fundraising event.
- e) Attracts a major program to Liverpool that has South West-Sydney region, state or national significance.

3. Environmental benefit

 a) Enhances Liverpool's reputation as a sustainable city through leadership in waste and environment management.

7.7.1 Expected program outcomes

Projects must contribute to one or more of the following outcomes:

- a) Provide an opportunity for measurable economic, social, environmental and/or cultural benefits to Council and the Liverpool LGA.
- b) Provide opportunities for the community to participate and contribute in activities/events in the Liverpool LGA.
- c) Create a valuable strategic alliance for Council.
- d) Provide extensive coverage and promotional/publicity opportunities across a range of media outlets.
- e) Promote Liverpool's reputation as a great place to live, visit, work, and invest.

7.7.2 <u>Program timeframe</u>

- This program accepts applications all year.
- Applications must be submitted at least three months prior to an event taking place. Applications submitted with less than three months lead time will be deemed ineligible.

 Activities should take place within 12 months of successful sponsorship funding being received.

7.7.3 Program eligibility and conditions:

To be eligible for the Corporate Sponsorship program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation and hold a current ABN.
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- Have public liability insurance of at least \$10 million (must be current during the period of funding).
- d) Supply a copy of their most recent annual report and/or financial statements.
- e) Must apply for sponsorship towards an event or activity in the Liverpool LGA that attracts a significantly high level of attendance from the community and provides direct benefits for Liverpool based organisations and/ or Liverpool residents.
- f) Must ensure that attendance and participation is free where sponsorship is sought for a community event.
- g) Must be registered with the Australian Charities and Not-for-profits Commission if an application is for a local charity event.

7.7.4 Funding will not be provided to:

- a) Projects that do not address the identified directions of the Liverpool LGA as set out in Council's Community Strategic Plan.
- b) Charities for general donations including the purchase of tickets or fundraising tables at an event.
- c) Projects that will rely on recurrent funding from Council.
- d) More than one event within the Liverpool area in a two-month period that celebrates or marks a specific occasion or activity.
- e) Organisations whose activities are not aligned with the City's ethical framework.
- f) Previous recipients who have not fulfilled the conditions of a sponsorship.
- g) Organisations that are not registered in Australia.
- h) Activities or events that do not benefit the Liverpool LGA or its residents.
- i) Underwrite events, programs or projects.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.7.5 Council's current standing sponsorship resolution:

Sponsorship Activity	Amount	Council Resolution
Police Officer of the Year	\$1,000	27/06/2011

7.7.6 Approval of sponsorship does not imply that Council has given any other consent. Applicants should note that many festivals and events require approvals and consents from Council, NSW Police and other NSW Government agencies. For guidelines on applying to host an event in Liverpool, visit www.liverpool.nsw.gov.au/whats-on/events/event-organisers-information-kit-guidelines

7.8 SPORTING GRANTS | UP TO \$5,000 | ONE ROUND PER YEAR

This program offers funding to sporting clubs and junior disability sporting clubs to assist with the development of young people and encourage participation of the broader community in local sporting and recreational activities. Grants can also be used towards the purchase or maintenance of sporting equipment.

Funding will support applications by recreation and sporting organisations/clubs under one of six categories:

- a) Sports development Coaching clinics, sports camps, or training/development
- b) Ground development Minor capital improvements
- Maintenance Equipment Line marking equipment or ground maintenance equipment (to be eligible, equipment must remain the property of the club)
- d) Sporting Equipment Kits, bags, first aid supplies, safety equipment (to be eligible, equipment must remain the property of the club)
- e) **Education** First aid training, coaching programs or safe play
- f) Club diversity Introduction of additional sports or expansion of club to encourage greater community involvement

7.8.1 Expected program outcomes

Projects must contribute to one or more of the following outcomes:

- a) Increased opportunities for participation of the broader community in sporting and recreational activities.
- b) Improved condition and functionality of sporting equipment.
- Enhanced awareness of emerging trends in sports development and demonstrated best practice.
- d) Strengthened maintenance, management or improvement of physical and mental health and wellbeing by improving opportunities for physical activity.

7.8.2 Available funding

Grants of up to \$5,000 per sporting club are available. Clubs may submit applications for more than one project. Within the funding pool, \$5,000 is reserved to fund applications that support participants with a disability. Where eligible applications that support participants with a disability are less than \$5,000 the remaining funds are returned to the main pool of funding for distribution.

7.8.3 Program timeframe

This program accepts applications once per year. Grants must be spent within 12 months of receiving them.

7.8.4 Program eligibility and exclusions

To be eligible for the Sporting Grants Program applicants must:

- a) Be incorporated or auspiced, a non-profit recreation or sporting organisation/club, providing programs/services to the residents of Liverpool.
- b) Have public liability insurance of up to \$10 million.
- Supply a copy of most recent annual report and/or financial statements.
- d) Have not received funds from the Sporting Grants program in the previous year.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.9 SPORTING DONATIONS | UP TO \$500 | OPEN ALL YEAR

This program enables Council to provide small amounts of funding to assist community members in their efforts to achieve excellence in sport at a regional, state or national representative level. Individuals and teams based in the Liverpool LGA are eligible to apply for donations towards the cost of participating in representative sporting events for which they have qualified. Donations are based on the level of representation achieved and where events will be held. Participation at school sport events is also eligible for consideration.

7.9.1 Expected program outcomes

Donations from this program can contribute to one or more of the following outcomes:

- a) Increased participation of individuals/teams in representative sporting events.
- b) Improved accessibility to participation in representative sporting events.
- Improved confidence and capacity of local individuals and teams by acknowledging and supporting participation at a representative level.
- d) Enhanced positive social outcomes and opportunities for local communities.

7.9.2 Available funding

Donations are available for the following amounts:

- a) \$100 for regional representation (competitor only), or for coach/referee/umpire/official representation at a regional, state or national event more than 100km from Liverpool.
- b) \$200 for state representation (competitor only).
- s300 for Australian national representation at an event within New South Wales, Australian Capital Territory, Queensland and Victoria (competitor only).
- d) \$400 for Australian national representation at an event within Tasmania, South Australia, Northern Territory and Western Australia (competitor only).
- e) \$500 for Australian national representation at an overseas event (competitor only).
- f) \$500 for team representation.

7.9.3 Program timeframe

This program accepts applications all year and applicants are required to submit their application prior to the event taking place. Activities must take place within 12 months from when the application was submitted. Information must be provided on the costs associated with participating in the representative events.

7.9.4 Program eligibility and exclusions

To be eligible for funding through the Sporting Donations Program the following criteria applies:

- a) Individual applicants must be a resident of the Liverpool LGA.
- b) Applicants must provide proof of selection for the event.
- Applications from students at state, private or independent schools or for participation at school sport events, are eligible for consideration.
- d) Team applications must have a minimum of 75% of the team residing in the Liverpool LGA, club must be based in the Liverpool LGA, and a maximum of three teams per club can be funded in a financial year.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

AUTHORISED BY

Council Resolution

EFFECTIVE FROM

29 May 2019

DEPARTMENT RESPONSIBLE

City Community and Culture (Community Development and Planning)

REVIEW DATE

The policy will be reviewed every two years.

VERSION	AMENDED BY	DATE	TRIM NUMBER
1	Council Resolution	18 October 2010	158320.2014
2	Council Resolution	29 May 2013	097264.2013
3	Council Resolution	31 July 2013	150967.2014
4	Council Resolution	25 February 2014	026269.2014
5	Council Resolution	28 May 2014	126057.2014
6	Council Resolution	30 September 2015	227843.2015
7	Minor changes approved by CEO	12 July 2016	185151.2016
8	Council Resolution	26 April 2017	026648.2017
9	Council Resolution	29 May 2019	022779.2019

THIS POLICY WAS DEVELOPED AFTER CONSULTATION WITH

City Community and Culture, Governance, Legal and Procurement, and Infrastructure and Environment.

REFERENCES

Australian Institute of Grants Management: Grant making Manifesto (2011)

Liverpool City Council: Council's Community Strategic Plan

Liverpool City Council: Code of Conduct Procedures

Liverpool City Council: Social Justice Policy and Ethical Governance, Conflicts of Interest Policy



Collection Development and Information Access Policy

Liverpool City Council
2004

Liverpool City Library

Collection Development and Information Access Policy

Adopted by Council on 10 August 2004

Liverpool City Council
2004

A place for everyone where people and ideas connect

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Reducing Red Tape - Development of Policies, Standards, Charters, Procedures and Strategies Liverpool City Library Collections and Information Access Policy

Collection development and information access policy

Collection development and information access policy

1. Background

1.1 Introduction

This policy statement is intended to inform Library and Council staff, elected representatives, the people of Liverpool and other libraries of the policies and plans for developing the Library's collection and information services. The aim is to provide to the people of Liverpool a world class Library that meets their needs.

The first collection development policy was issued in 1989. This major review is therefore timely. It takes into account the changes that have occurred within the community, within the environment the Library operates in and the changing nature of information.

The key challenges are:

- To ensure that the Library acquires the library materials and provides access to the information services that the community needs
- To ensure that the collection and information services are marketed effectively to the community
- To provide information to customers in the format and language most convenient to them
- To incorporate off-site e-resources into the Library's collection and information services

The Library's primary commitment is to the people of Liverpool. The collection and information services are developed based upon knowledge of the community, the existing collection and information services, as well as input from customers and staff. This knowledge guides the Library in acquiring a wide range of library materials covering all subject areas and in a variety of formats to meet the needs of customers.

The challenge is to provide customers with access to an integrated collection of resources, including print, multimedia and electronic. In the emerging e-environment the location and ownership of information resources is no longer the critical issue. Rather, it is the ability to provide timely access to information. The Internet provides the Library with the opportunity to develop the collection and information services beyond the walls of the Library. The Library selects websites to meet the needs of customers. By providing access to these websites the Library is providing access to an off-site collection.

The Library has initiated strategies that facilitate an integrated approach to developing on-site and off-site collections. Strategies include:

- Integrating the selection of remote electronic publications into the selection of library resources for the on-site collection
- Establishing selection criteria for determining what resources are better to purchase for the on-site collection as against providing access in the off-site collection
- · Participating in co-operative collection development of off-site collections

1.2 Purpose of this policy

The specific aims of this policy are:

- To ensure that the Library's collection and information services meet the needs of the people of Liverpool
- To provide a guide to customers about what they can expect to find in the Library and inform them about the principles upon which selections are made
- · To set down the parameters of the collection and information services
- · To defend freedom of information and protect against censorship
- To provide a basis for the most effective use of the available funds
- To ensure that all parts of the collection are up-to-date, attractive and well maintained
- To identify responsibility for collection development and provide staff with consistent guidelines for development and maintenance of the collection and information services
- To increase the involvement and knowledge of the entire staff in collection development and management
- To form the basis for cooperative resource sharing arrangements with other libraries to increase and improve the information resources available to the people of Liverpool

1.3 Relationship to strategic plan

The Library's *Strategic Plan* is reviewed and updated on an annual basis, in line with the review of Council's Corporate Plan. The main aim of the strategic plan is to provide direction for the development of the Library.

The Library's vision as articulated in the Strategic Plan is -

A place for everyone where people and ideas connect

and the Library's mission is -

Collection development and information access policy

To provide a range of services that assists the community to live, learn, work and play by being a focal point for our community, a public space and the gateway to the information services of the World for the people of Liverpool

The Library's values, as identified by staff, guide the development of the Library's services and underpin the organisational values - recognition of staff, teamwork - working together, trust/integrity - respect for people; communication; and quality of service. The Library values:

Serving our community

We provide excellence in customer service and aim to provide services that meet the needs of everyone in our community.

The diversity and individuality of all people

We are committed to providing equity of access to our services for all individuals and groups within our community.

The free flow of information

We are committed to intellectual freedom and the free flow of ideas and information. Access to knowledge is central to the community's standing in the Knowledge Economy and is fundamental to a thriving culture, economy and democracy.

The professionalism of our staff

We value the expertise, knowledge and experience of our staff and are committed to equipping them with the skills that they need to provide quality service to our community.

Forming partnerships

We are committed to achieving better outcomes for our community by working together with community groups and other service providers.

The Library's objectives, as set out in the Strategic Plan, are -

- To provide services that meet the needs of the people of Liverpool.
- To enhance the Library's key role in the promotion and celebration of Liverpool's cultural diversity.
- To provide programs that contribute to the skilling of the community.
- To provide excellent customer service to the people of Liverpool.
- To promote the Library and its services to the people of Liverpool through effective communications.

To develop partnerships and secure external funding to assist in service improvement.

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1.4 Definitions

1.4.1 Books and library materials

Books, library materials, library resources and items are used interchangeably in this policy to refer to all information formats. They are used broadly to reflect the definition of books in the Library Act 1939 as being periodicals, newspapers and any other printed matter such as maps, music, manuscripts, pictures, photographic plates and films and any other matter or thing whereby words, sounds or images are recorded or reproduced.

1.4.2 Collection

The term collection traditionally refers to the total number of library materials, including books, journals and other materials, which the Library owns. This policy addresses the ownership of an on-site collection and access to an off-site collection. The on-site collection and access to an off-site collection has been defined as:

An on-site collection consists of the resources that a library purchases for client use and houses within the library's four walls, mainly stored on bookshelves. It includes books, newspapers, talking books, CD-ROMS and magazines.

An off-site collection consists of remote electronic publications selected by a library for client use; usually stored on computers not located in the library. A library provides access to these electronic publications by including catalogue entries in the catalogue or on a library created Web directory, both with Internet connectivity. Both the catalogue and the Web directory may also be available remotely, to clients within their homes, work places and places of education.

The remote electronic publications that a library does not select form part of the information service of a library. Access is facilitated through the Internet search engines and directories.1

1.4.3 Collection development

Collection development is the process by which the Library's collection and information services are developed to meet the needs of the people of Liverpool. It also involves the ongoing evaluation of the existing collection and information services to ensure that they are meeting the needs of customers. It includes the

¹ On-site and off-site collections: costs and challenges. in <u>Australian Library Journal.</u> vol 48 issue 1 May 1999. pp. 178-188.

planning, selection, acquisition, cataloging and weeding of the Library's collections and online information resources.

1.4.4 Information services

The Library's information services refer to the information services provided, controlled or managed by the Library. The *Guidelines relating to section 10, Library Act* states that information services include:

- provision of independent access to reference materials for persons who see such information on the premises of the library including assistance in identifying and locating library materials (by any appropriate means) within the library or from other sources.
- provision of assistance by library staff in identifying, retrieving, and making available, relevant information (by any appropriate means) in response to requests for information by library clients.²

1.4.5 Online information resources

Electronic and digital publications available via a computer are generally referred to as online information resources or e-resources. These e-resources include CD-ROMs, e-books, and online information sources such as subscription-based full-text databases and web resources. Web resources or remote electronic publications are usually stored on computers not located in the Library. The Library selects and provides access to some of these electronic publications.

1.5 Environmental statement

1.5.1 Legislation

The State legislation under which public libraries operate in New South Wales includes the:

- Library Act 1939 as amended
- Library Regulation 2000
- Local Government Act 1993

The following Commonwealth legislation also has implications for the information services provided:

Copyright Act 1968 as amended

² Guidelines relating to section 10, Library Amendment Act, 1992. Library Council of NSW, 1993. http://www.slnsw.gov.au/plb/legal/guide.htm Accessed 11 September 2002.

Collection development and information access policy

1.5.2 Professional association statements

The statements issued by professional associations like the Australian Library and Information Association (ALIA), articulate and encapsulate the service values and the philosophical basis for public libraries. They include:

ALIA policy statements

- Copyright and intellectual property Adopted October 2001
- Core values statement Adopted 2002
- Statement on free access to information Adopted October 2001
- Guidelines for public library funding Adopted 1999
- Policy statement on information as a commodity and its importance to economic development
 Adopted 1996
- Statement on information literacy for all Australians
 Adopted March 2001, Amended October 2001
- Statement on libraries and literacy Adopted 1979, Amended 1996
- Statement on library and information services and Aboriginal and Torres Strait Islander peoples
 Adopted 1995
- Library and information services for people with a disability
 Adopted 1979, Amended 1986, 1988, 1996, 2002
- Principles of access to government information Adopted 1999
- Statement on professional conduct Adopted 2001
- Interim statement on public library services Adopted 1999
- Statement on public library services to young people in Australia Adopted 1992

Library Council of New South Wales

The freedom of collection access for local government libraries

Reducing Red Tape - Development of Policies, Standards, Charters, Procedures and Strategies Liverpool City Library Collections and Information Access Policy

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International Federation of Library Associations and Institutions (IFLA) and UNESCO

UNESCO Public Library Manifesto (see appendix 1) 1994, Revised 1998

1.5.3 Book vote

The book vote determines the number of new materials and the range of information formats the Library is able to acquire. The Library's book vote has to cope with increases in average book prices, which continue to increase, and also an increasing range of library and information formats, such as online information resources.

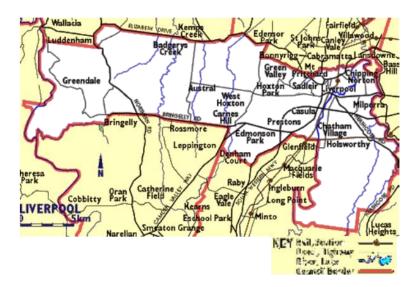
In 1992 the Library acquired 0.2 acquisitions per capita. In 2001/02 the level of acquisitions had declined to 0.12 acquisitions per capita due largely to the dramatic population growth and the funding issues mentioned above.

2. Community profile

2.1 Liverpool

2.1.1 Geographical description

Liverpool is situated 31 kilometres west of Sydney covering an area of 305 square kilometres.



2.1.2 Demographic characteristics

Liverpool has one of the fastest growing populations in Australia. The 2001 census found that Liverpool has a population of 154,287 people comprising 77,198 males and 77,089 females. This represents a dramatic increase of 28% since 1996 and an increase of 57% since 1991.

Just over 1.3% of the population (2,038) identified as being of indigenous origin.

Liverpool has a diverse multicultural community. Nearly 38% (58,463) of the population were born overseas with a greater number (67,072) being able to speak a language other than English. Of those born overseas the three main countries of birth are Fiji, Vietnam and the United Kingdom. The three most common languages spoken at home other than English are Arabic, Italian and Vietnamese.

The median age of the population is thirty years, compared to 35 years for Australia as a whole.

Liverpool is largely characterised by:

Two parent families with dependent children (58%)

Collection development and information access policy

- Couple families without children (25%)
- Single person households (16%)

When compared to Australia and New South Wales as a whole, Liverpool's population is characterised by:

- · A dramatic growth rate
- · A younger population
- A higher percentage of people born overseas and speaking a language other than English at home
- Fewer people as a percentage using a personal computer at home
- Fewer people as a percentage using the Internet, either at work, home, or elsewhere

Liverpool is a regional centre for the South-West of Sydney with a large non-resident working population.

2.1.3 Economic environment

Liverpool's unemployment rate is consistently higher than the Sydney and NSW state averages. At the September Quarter 2002, the unemployment rate for Liverpool was 6.2%. This is higher than the rates for Sydney (5.2%) and NSW (6.1%).

Despite this, Liverpool has seen a significant decrease in the level of unemployment over the previous twelve months, as the rate in September 2001 was 8.5%.

2.1.4 Surveys

A community survey conducted by Liverpool Council in 1999 indicated that the Library:

- Is a highly valued community resource
- Had been used by 73.5% of the respondents in the previous twelve months

A library user survey conducted in 2000 indicated that:

- 60% of users were female
- The most common age groups of users were 17-24 years (27%) and 30-39 years (17%)
- The two main reasons for people to visit the Library were "study or projects" (63%) and "recreation, fun and hobbies" (47%)
- Overall, users indicated a high level of satisfaction with current Library services and facilities

2.2 User profile

The Library has in the vicinity of 105,000 members, of which about two-thirds are adult members and a third junior members.

The Library provides services for all members of the community with targeted services being provided to the following:

- Councillors and council staff
- Family historians
- Local historians
- People from a non-English speaking background (NESB)
- · People who are housebound
- · People with disabilities
- · Students, including primary, secondary and tertiary students

Collection development and information access policy

3. Policy statements on collecting and information access

3.1 Censorship and intellectual freedom

3.1.1 Freedom to read and view

The Library collection is organised and displayed in order to facilitate ease of access to customers. The Library acknowledges that the content of some library materials in, or accessed from, the Library may offend some members of the community. No library materials are restricted in any way due to any controversy about the author, subject matter, or intended audience. The Library also recognises the democratic rights of individuals to freely pursue their own information interests. This view is reflected in the *UNESCO Public Library Manifesto* (see appendix 1) that states that:

constructive participation and the development of democracy depend on satisfactory education as well as on free and unlimited access to knowledge, thought, culture and information

In a similar vein the Australian Library and Information Association (ALIA) *Statement on free access to information* (see appendix 2) states that:

freedom can be protected in a democratic society only if its citizens have unrestricted access to information and ideas

Librarians and library technicians operate under a code of professional ethics, articulated in the ALIA *Statement on professional conduct*, which states that:

people engaged in library and information services are members of a profession committed to intellectual freedom and the free flow of ideas and information

The UNESCO Public Library Manifesto also states that:

collections and services should not be subject to any form of ideological, political or religious censorship, nor commercial pressures

The ALIA Statement on free access to information states that library and information services should resist:

attempts by individuals or groups within their communities to restrict access to information and ideas while at the same time recognising that powers of censorship are legally vested in state and federal governments

In addition, the Library Council of NSW Freedom of collection and access for local government libraries states that a public library has

a role as an unbiased source of recorded knowledge and ideas. It must accept responsibility for providing free access to materials and information

Collection development and information access policy

presenting, as far as possible, all points of view on current and historical issues, including controversial issues

Parents and guardians have responsibility for guiding the reading, listening, and viewing choices of their children. The selection of adult materials is not limited by the possibility that children may use the materials.

3.1.2 Online resources

Online resources, many of which are available through the Internet, provide access to a wealth of information from around the world. It is an unregulated medium and, as such, some users may find some materials offensive and disturbing. However, as with traditionally published books, powers of censorship are vested in state and federal governments and it is not the role of public libraries to practice censorship.

The *IFLA Internet Manifesto*, attached as appendix 4, articulates the philosophical basis and professional values for libraries providing access to the Internet. It states, in part, that:

The provision of unhindered access to the Internet by libraries and information services supports communities and individuals to attain freedom, prosperity and development.

... access should neither be subject to any form of ideological, political or religious censorship, nor to economic barriers.

The Library's Public Access Internet Policy is contained in appendix 3.

The Australian Broadcasting Authority (ABA), under Schedule 5 of the *Broadcasting Services Act* 1992 (the Act), administers a co-regulatory scheme for Internet content. The scheme aims to address community concerns about illegal and offensive content on the Internet. Under the Act certain categories of Internet content are prohibited.³ If a person wishes to make a complaint it must be lodged with the ABA in writing. Information about how to make a complaint is available through the ABA's website.⁴ A person making a complaint needs to state the reason why they think the Internet content is, or may be, prohibited content. In identifying the reason, they should refer to the Office of Film and Literature Classification Board's *Guidelines for the Classification of Films and Videotapes*.⁵

³ FAQs: Regulation and Internet content. Australian Broadcasting Authority. http://www.aba.gov.au/internet/faqs/int_cont.htm Accessed 30 August 2002

⁴ Complaints. Australian Broadcasting Authority. http://www.aba.gov.au/internet/complaints/complaints.htm Accessed 30 August 2002

⁵ Guidelines for the Classification of Films and Videotapes. (Amendment No. 3) Office of Film and Literature Classification Board. http://www.oflc.gov.au/resource.html?resource=62&filename=62.pdf Accessed 8 July 2004

Collection development and information access policy

3.2 Donations

The Library welcomes donations of books, which can be a valuable addition to the Library's collection, especially those relating to Liverpool. Donations of books are added to the collection when they meet the selection and weeding criteria outlined in this policy. Donations that do not meet the selection and weeding criteria are:

- · Offered to other public libraries in New South Wales
- · Offered for sale to Library customers if in reasonable condition
- · Offered to other appropriate outlets, such as local hospitals
- Recycled

The income received from selling books in book sales goes towards the purchase of new books.

Financial gifts and bequests are also welcomed.

3.3 Exclusions

The Library does not generally acquire textbooks that directly support educational courses. This is especially the case with classroom resources, many of which are designed for students to write in their answers. The Library aims to acquire materials that complement textbooks.

The decision on whether to purchase new and emerging formats is based upon a number of factors, including:

- · The extent of acceptance and uptake within the community
- · Cost and budget considerations

3.4 Multiple copies

In order to provide a wide range of books to customers multiple copies are not purchased for all titles acquired. Multiple copies of books are generally only acquired in response to customer demand as evidenced by the number of reserves, anticipated popularity and repeated suggestions.

In subject areas where customer demand is extremely high, the Library gives preference to purchasing one copy of several different titles instead of purchasing multiple copies of one title. Through this approach the Library is able to provide customers with more variety and greater choice.

3.5 Weeding

Weeding refers to the process of withdrawing items from the Library's collection so as to ensure that the collection remains relevant and useful to the community. It ensures that inaccurate, out-of-date, obsolete, damaged and books no longer used are removed from the collection.

Members of the Library's Information Services Team together with branch librarians are responsible for the ongoing weeding of the collection. All staff can make the decision to discard an item from the collection where the physical condition of the item is beyond repair.

The following weeding criteria are used in assessing whether to discard an item from the collection:

- · Currency of information i.e. is the item out of date?
- Accuracy of information i.e. is the information still accurate?
- Circulation history: how often has the item been borrowed (i.e. turnover rate) and has the item been recently used?
- · Topic is no longer of current interest
- · Availability of a new edition
- Is the format still the most appropriate format?
- · Physical condition: is the item in a worn-out and damaged condition?

In some circumstances the decision may be made to reallocate an item to another collection, such as a junior item to the adult collection, or to rotate an item to another branch.

The collection is weeded on an ongoing basis. High priority areas for regular weeding include:

- Computer science
- Law
- Management
- Health and medicine.

Items withdrawn from the collection are:

- Replaced, if it is the last copy, and the topic is still in demand and of current interest
- Offered to other public libraries in New South Wales
- Offered for sale to Library customers if in reasonable condition

- · Offered to community groups and organisations
- Recycled

The income received from selling books in book sales goes towards the purchase of new books.

3.6 Replacements

Books weeded from the collection due to poor physical condition and lost books will be replaced if they still meet the selection criteria and are still in print.

3.7 Retention

3.7.1 Newspapers

Set retention periods apply to the following original copies of newspapers:

•	Age	5 weeks
•	Australian	12 weeks
•	Courier Mail	5 weeks
•	Daily Telegraph	12 weeks
•	Financial Review	2 months
•	Guardian Weekly	6 months
•	The Land	6 months
•	Sun Herald	4 months
•	Sunday Telegraph	4 months
•	Sydney Morning Herald	12 weeks
•	Weekly Telegraph	4 months

3.7.2 Magazines

The following retention periods apply to magazines:

- · Lending magazines are weeded twice yearly
- Weekly publications are kept for six months
- Monthly publications are kept for two years
- · Bimonthly and quarterly publications are kept for three years
- A number of reference serials are bound annually and are kept for up to ten years

3.7.3 Local studies

Generally speaking, local studies materials are retained indefinitely. See section 7.3.14.

3.8 Public access Internet service

The Library is committed to increasing the number of available access points to the Internet. The Library also provides organised access to web resources. See appendix 3 for the Library's *Public Access Internet Policy*.

4. Collection access and use

4.1 Library access

The Library has a central library in Liverpool with branch libraries in Casula, Green Valley, Miller and Moorebank. The central and branch libraries are open as follows:

Central Library		
170 George Street	Phone: (02) 9821 9444	Monday-Friday - 9:30am-8:00pm
Liverpool 2170	Fax:(02) 9821 9456	Saturday - 9:30am-4:00pm
	Email:lplmail@liverpool.nsw.gov.au	Sunday - 12.00noon-4:00pm
Casula Branch		
Ingham Drive	Phone: (02) 9601 5740	Mon, Wed, Fri - 9:30am to 5:30pm
Casula 2170	Fax: (02) 9600 6250	Tues & Thurs - 9:30am to 8:00pm
	Email: casstaff@liverpool.nsw.gov.au	Saturday - 9:30am to 12:00noon
Green Valley		
179-183 Wilson Rd	Phone:(02) 9608 5544	Mon, Wed, Fri - 9:30am to 5:30pm
Green Valley 2168	Fax:(02) 9608 5622	Tues & Thurs - 9:30am to 8:00pm
	Email: grestaff@liverpool.nsw.gov.au	Saturday - 9:30am to 12:00noon
Miller	DI (00) 0007 7004	M E: 0.20 + E.00
Woodward Crescent	Phone: (02) 9607 7324	Mon-Fri - 9:30am to 5:00pm
Miller 2168	Fax:(02) 9607 7244	Saturday - 9:30am to 12:00noon
	Email: mlrstaff@liverpool.nsw.gov.au	
Moorebank		
Cnr Nuwarra Rd &	Phone: (02) 9601 6880	Mon, Wed, Fri - 9:30am to 5:30pm
Maddecks Av.,	Fax:(02) 9601 4583	Tues & Thurs - 9:30am to 8:00pm
Moorebank 2170	Email: mbkstaff@liverpool.nsw.gov.au	Saturday - 9:30am to 12:00noon

The Library runs a mobile library, which opens 22 hours per week visiting 23 sites.

The Library provides through the Special Services Library a free housebound service on request to older persons and people with disabilities who are unable to visit the central or branch libraries on their own. The service, which is for residents of Liverpool, makes deliveries to individual homes, nursing homes, and community meeting places. Visits are scheduled on either a fortnightly or monthly basis, depending upon the individual needs of customers.

The Library's eBranch is available 24/7 on the World Wide Web.6

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⁶ ebranch.liverpool.nsw.gov.au

Collection development and information access policy

4.2 Lending policy

Adults and children may borrow as many items as they choose at any one time, with the following limitations:

- · 2 videos per adult borrower, including VHS and DVD formats
- · 1 video per child borrower, including VHS and DVD formats
- 2 books on the same subject per customer or customer's family
- 2 music CDs
- 2 CD-ROMs
- · 4 magazines of the same title

Items may be borrowed for three weeks, with the exception of videos and Higher School Certificate (HSC) resources, which may be borrowed for one week. Items may be renewed twice, either in person or by telephone, provided the items to be renewed are not overdue and no other customer(s) has requested them.

4.3 Collection access

The Library's catalogue provides customers with the ability to locate the library materials they want by author, title and subject. Branch location and circulation status is displayed on catalogue records. The catalogue is available at the central and branch libraries, as well as on the World Wide Web through eBranch. Material from all branches may be accessed via the branch courier delivery service.

Customers may place a reserve on any item that they wish to borrow.

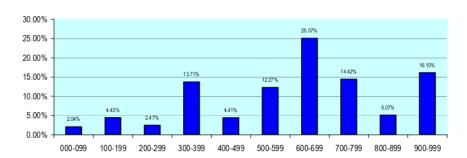
4.4 Collection evaluation

The Collection Development Librarian, with the Information Services Team, is responsible for evaluating the use of the collection on an ongoing basis so as to determine how well the collection is meeting customer needs. The following techniques are used in evaluating the use of the collection:

- Circulation history of books, including turnover rate
- In-house surveys such as the daily re-shelving of reference books
- · Customer opinions, obtained through surveys and customer feedback forms
- · Monitoring information requests to gauge customer needs
- Analysis of inter-library loan requests and customer suggestions so that collection weaknesses can be identified

The catalogue also allows the Library to monitor the use of specific parts of the collection, for example by specific Dewey Decimal Classification (DDC) classes. An index of the ten main Dewey classes is contained in appendix 5. A broad breakdown by the ten main Dewey classes showing circulation as a percentage of total circulation for each class is shown below.

Percentage of Library materials circulated within each Dewey class



The Library is investigating the model of giving preference to e-resources for subject areas with low circulation and where the information dates quickly. This strategy will enable the Library to optimise the use of its book vote, space, staff time and provide better customer service.

5. Cooperation and networking

5.1 New South Wales public library network

Libraries have a long tradition of cooperating together, especially in the area of information services. The Library is part of the statewide network of public libraries that actively cooperate together for the benefit of their communities. The Library recognises that it can achieve more for its customers through both formal and informal cooperative arrangements with other libraries rather than operating alone.

5.2 Inter-library lending

The Library provides on request an inter-library lending service. Inter-library lending services acknowledge that no one library can collect all the published works that its community needs. This service enables materials held by other libraries to be made available to the Library's customers. This is one means by which the Library attempts to make available materials it does not own or which fall outside the scope of this policy. Conditions may be imposed on materials obtained on inter-library loan and a fee may be levied by the lending library. The customer making the request is required to meet this fee. Likewise, materials from the Library's collection are loaned on request to other libraries for use by their customers.

5.3 State Library of New South Wales

The Library uses the following State Library services on behalf of customers:

- The Document Delivery Service for inter-library loans and copies of specific titles, community language materials and special format materials, such as captioned videos
- The State Reference Library for information requests. Customers can also use the Ask a Librarian service at: http://www.sl.nsw.gov.au/ask/
- Specialised information services such as the Legal Information Access Centre (LIAC) and the Health Information Service (HIS)

5.4 Kinetica

The Library is a member of the National Library of Australia's Kinetica service. Kinetica is used to download catalogue records into the Library's catalogue for newly acquired items. The Library adds holdings details to records obtained from Kinetica. Kinetica is also used as a location service for books that the Library does not hold.

Collection development and information access policy

6. Selection and acquisition

6.1 Selection responsibility

Ultimate responsibility for selection rests with the Manager Library Services. The Manager Library Services delegates to the Coordinator, Information Services responsibility for coordinating the selection process. The Collection Development Librarian with members of the Collection Development Committee has primary responsibility for selecting books for the collection. In addition, all staff are encouraged to make suggestions. The Collection Development Committee is convened by the Coordinator, Information Services and includes the:

- Access Services Librarian
- Customer Service Librarian
- Branch Librarians
- · Children's and Youth Services Librarian
- · Collection Development Librarian
- · Collection Services Librarian
- · Community Information Librarian
- Corporate Information Librarian
- Information Services Librarian
- · Local Studies Librarian
- · Multicultural Services Librarian
- Serials Officer

6.2 Selection criteria

Selection criteria vary depending upon the type of material to be acquired. **See** section 7.3 Collections and services.

Generally, books selected for the collection must satisfy one or more of the following criteria:

- · Level of customer demand or anticipated demand
- Currency of information
- · Popularity of an author, book or subject
- · Cost assessment of value for money
- · Appropriateness for the Library and to the community
- Format

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6.3 Selection methods and tools

The following methods are used in selecting books for the collection:

- Library book suppliers
- Local retail outlets, including book shops
- Standing orders
- Catalogues
- Bibliographies
- Reviews
- Pre-publication advice
- Publisher's blurbs
- Customer requests, suggestions and recommendations
- Best seller lists
- Usage and satisfaction surveys
- Auctions, both traditional and online

6.4 Customer suggestion policy

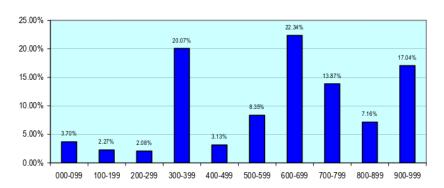
The Library encourages customers to participate in the development of the collection and information services by making suggestions for books to be acquired. This enables customers to request the Library to purchase a particular item or books on a particular subject. Although high priority is given to suggestions made by customers, not all suggested books are acquired. All suggestions are assessed using the same selection criteria as applied to other materials and as such are not automatically purchased for the collection. If they don't meet the criteria the suggested books are obtained, if possible, on inter-library loan from another library.

7. The collections

7.1 Description of the collection

The Library holds approximately 301,000 items. During 2001/02 the Library acquired nearly 19,000 items consisting of both new acquisitions and donated materials. A broad breakdown by the ten main Dewey classes showing stock as a percentage of total stock for each class is shown below.

Percentage of Library materials within each Dewey class



7.2 Formats

The Library does not attempt to meet the information needs of customers with just one format. Depending upon the different needs of customers and the nature of information required, a range of formats is usually appropriate. The Library has collections in the following formats: monographs, both hardback and paperback; newspapers; serials; CD-ROM; large print books; talking books; music compact discs; microforms, both microfilm and microfiche; videos, both VHS and DVD; captioned videos; maps and plans; images, both hardcopy and digital; pamphlet files; manuscripts; and online information services. The Library's ability to acquire new information formats is limited by the available budget and consumer acceptance. Consideration is given to new formats when there is sufficient customer demand.

Criteria for selection of new formats does not differ from the selection criteria outlined in this policy. Before deciding whether to acquire some existing non-book formats and new information formats, a number of other issues need to be considered, such as:

- Is special equipment needed to use the format? If so, is the equipment standardised and readily available?
- · Are there any implications for storage and circulation?
- · Are there legal or licensing issues that limit circulation?

7.3 Collections and information services

The following collections are described in more detail:

- Access service
- · Adult fiction
- Adult non-fiction
- Audio-visual
- · Community information
- Corporate Information Service (CIS)
- · Family history
- · Higher School Certificate (HSC) collection
- Indigenous collection
- Junior fiction
- · Junior indigenous collection
- Junior non-fiction
- Large print
- Legal Information Access Centre (LIAC) collection
- Local studies
- · Multicultural collection
- Professional collection
- Reference
- Serials
- Web resources

7.3.1 Access service

Scope

The English Workshop Collection is a collection of books and audio-visual materials, which promotes the importance of English language and literacy development to people with special needs.

The Deafness Resources Collection is a collection of books and captioned videos, which provides ongoing support to the Deaf Community and to individual learners of sign languages.

Target client groups

- Students and tutors of English-as-a-Second-Language (ESL) and literacy
- · Students and tutors of deaf communication (AUSLAN, Signed English)
- · Customers with a hearing disability, their families and friends
- · Independent learners
- · Other libraries through inter-library lending services
- Tourists and visitors

Access

- The full range of English Workshop materials and deafness resources is available at the Central Library
- The English Workshop materials are shelved separately to the deafness resources
- All non-fiction materials are shelved numerically by the Dewey Decimal Classification (DDC) scheme
- · Other libraries may request items via inter-library lending services

Formats

- Books
- Sound recordings
- Videos
- CD-ROMs

Complementary collections

- Internal: adult fiction and non-fiction, junior fiction and non-fiction and videos
- External: other libraries

Selection criteria

- · Wide selection of resources for self-directed or independent learning
- English language course material suitable for students and teachers at various levels from beginners to advanced
- Material supports current teaching methodologies, projects and activities
- · Customer and staff recommendations
- Price
- Physical presentation
- Availability

Responsibility for selection

- · Access Services Librarian
- Staff as delegated by the Access Services Librarian

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7.3.2 Adult fiction

Scope

The adult fiction collection is a recreational collection that contains a wide range of adult fiction titles at various levels to meet the needs of identified target customers.

Target client groups

· General community

Access

- · The adult fiction collection is shelved alphabetically by author family name
- · The broadest range of materials is available at the Central Library
- Selected collections are available in the four branch libraries at Miller,
 Moorebank, Casula and Green Valley. The nature of the collection at a branch
 will be based on perceived needs in the immediate surrounding area. Branch
 collections will not replicate the range or size of the Central Library collection

Formats

· Print: hardback and paperback editions

Complementary collections

- Internal: large print fiction and talking books
- External: other libraries

Selection criteria

- Wide selection of contemporary authors
- Some multiple copies of works by popular authors
- Customer requests where available and suitable
- Price
- Physical presentation

Responsibility for selection

- Collection Development Librarian
- Branch librarians and other staff as deemed appropriate by the Collection Development Librarian are also involved in selection

Collection development and information access policy

7.3.3 Adult non-fiction

Scope

The adult non-fiction collection includes materials that fall into two main categories:

- · Information and curriculum support materials
- · Recreation and leisure materials

This collection contains a wide range of resources at various levels to meet the needs of identified target clients. The Library does not generally purchase prescribed textbooks, but provides a wide range of support material for students.

Target client groups

- General community
- Students
- Local business community

Access

- The adult non-fiction collection is shelved in subject order according to the Dewey Decimal Classification (DDC) scheme
- The broadest range of materials is available at the Central Library
- Selected collections are available in the four branch libraries at Miller,
 Moorebank, Casula and Green Valley. The nature of the collection at a branch
 will be based on perceived needs in the surrounding area. Branch collections
 will not replicate the range or size of the Central Library collection

Formats

 Print: hardback and paperback editions. Hardback publications are preferable for items expected to receive heavy use

Complementary collections

- Internal: junior non-fiction, reference, serials, local studies, family history, audiovisual: kits, audio and video tapes, CD-ROMs, DVDs
- External: Internet and other libraries

Selection criteria

- · Wide selection of subjects at various levels
- Currency and relevancy
- · Customer and staff requests
- Core works in specific subject areas

- Syllabus support material
- Price
- Physical presentation
- Availability

Responsibility for selection

- Collection Development Librarian
- Branch librarians and other staff as deemed appropriate by the Collection Development Librarian are also involved in selection

Collection development and information access policy

7.3.4 Audio-visual

Scope

This collection focuses on informational, educational and recreational material. It is not always possible to replace audio-visual material since it is often only commercially available for a short time.

Target client groups

- General community
- People with special needs
- Students

Access

- Adult fiction video collection is shelved separately and arranged alphabetically by title
- · Adult non-fiction video collection is inter-filed with the adult non-fiction books
- · Junior videos are shelved in the Children's area
- Adult fiction talking books are shelved separately and arranged alphabetically by author family name
- Adult and junior non-fiction talking books are inter-filed with non-fiction books
- Junior fiction talking books and kits are shelved separately in the Children's area and arranged alphabetically by author family name
- · Compact discs are shelved separately
- · CD-Roms are shelved separately

Formats

Audio-visual materials include video recordings, CD-ROMs, compact discs and talking books on both cassette tape and compact disc. In regards to video recordings, the VHS format is being phased out in preference to the DVD format. VHS videos will only be acquired if there is no DVD video version available and where there is demand.

Music CDs

- A wide range of music styles
- · Recordings of major works by recognised composers and performers

Talking Books

- Popular fiction and non-fiction titles
- Language instruction kits

Collection development and information access policy

CD-ROMs

- Informational and recreational CD-ROMs
- · Indexes and encyclopedias available only for reference

Video recordings

- Informational and instructional VHS and DVD videos
- Curriculum support material
- An emphasis will be placed on feature films based on books, both fiction and non-fiction, with less emphasis on current release movies:
 - MA rated movies will be clearly labelled and restricted to borrowing by those holding an adult card
 - Θenerally "R" rated movies will not be acquired; where they are purchased, they will only be available to customers 18 years and over
- · Selected Australian film and television productions
- · Selected classics and community language films

Complementary collections

- Internal: all other Library collections
- External: State Library of New South Wales, Royal Blind Society

Selection criteria

- · Wide selection of resources within each format
- Price
- Video recordings are generally preferred to be of at least 20 minutes duration.
 Videos of shorter duration are considered if the informational content is not otherwise available

Responsibility for selection

- Collection Services Librarian
- · Staff as delegated by the Collection Services Librarian

Weeding

 As in the general weeding policy with the exception of video recordings which will be reviewed after 150 loans

7.3.5 Community information

Scope

Community Information is "information for every day living". It provides information on services, programs, activities and facilities relevant to all people in the Liverpool community. It encompasses information that will:

- · Improve the quality of people's lives
- Ensure that people's rights are catered for
- Ensure that individuals and groups have equal access to information without discrimination
- Acknowledge and support existing information networks of individuals and groups within the community
- Promote community activities, services and programs within the community

Target client groups

- · General community
- Community workers
- · Councillors and Council staff

Access

Access to community information is provided through:

- An online database available at www.liverpool.nsw.gov.au/library/ebranch/ebranch.htm
- A disk version available on request
- · Printed directories:
 - a) Full directory (containing a complete list of organisations in the database)
 - b) Subject specific directories that are produced based on monthly usage statistics (e.g. Seniors' services, Health services, Leisure Activities & Facilities, Child Care & Schools)
 - c) Tailored directories produced upon request
- Notice boards available at the Central and branch libraries
- · Referral provided through email, telephone and face to face

Selection criteria

Consideration is given to including all organisations that provide a service to the Liverpool community.

Selection methods and tools

The following sources and methods are used in identifying organisations to be contacted for inclusion in the database and selecting material for display or dissemination:

- · Local papers (Champion & Leader)
- · Pamphlets, flyers and commercial guides
- Interagency meetings
- · General public (word of mouth)
- Internet
- Community networking
- · Chamber of Commerce
- · Phone book
- Community service providers
- · Public notice boards
- · Community workers
- · Councillors and Council staff

Database management

The Library joined the DataDiction LINCS service (Local Information Network for Community Services) in 2001. LINCS is a cooperative network comprising a large number of local councils and other government organisations. LINCS is a geographical database. "Ownership" of a record is determined by local government boundaries when dealing with other councils. Healthlink and Disability Information Resource Centre manage health and disability records respectively and they tend to own records in these fields regardless of their geography.

Information is collected, added, indexed, and updated on an ongoing basis. The membership agreement with LINCS database expects all entries to be updated at least once a year.

Display management

Library leaflet display areas and notice boards are managed and maintained by the Community Information Librarian or designated staff at the Central Library and branch libraries. They display information about activities and services of current relevance to the community on a broad range of subjects and topics including education, health, culture and social events. They are monitored and updated regularly.

(See Community Notice Board Guidelines below for more information)

Collection development and information access policy

Responsibility for selection

- · Community Information Librarian
- · Staff as delegated by the Community Information Librarian

Weeding and retention

Entries will be deleted from the database when:

- a) The service no longer exists
- b) The organisation has repeatedly failed to respond to written, telephone and email requests for updated information

Leaflets and posters will be disposed of when:

- a) The service provider no longer exists
- b) The event date has passed

Community Notice Board Guidelines

All items are evaluated by the Community Information Librarian before being displayed on the Community Notice Boards.

The boards are monitored and checked regularly for neatness and currency.

Guidelines

- The highest priority is given to notices on education, social and support groups and sport and recreation. Education is broadly defined to mean any information about courses, notice of lectures, cultural exhibitions, meetings, seminars, study and craft weekends, summer courses, etc.
- Local community notices and leaflets as well as notices of Council meetings, competitions, local events, etc. are always displayed
- Notices of cultural events which are not local, including shows, film and other "What's-on" activities will be displayed where space allows with priority to those not well publicised
- Personal notices such as offers of tutoring, courses, lost animals, text-books for sale, etc. are displayed when space allows for one month only and are prominently dated. No notices about accommodation in any form are accepted
- Display material in other languages must be accompanied by an English translation that clearly identifies the organisation and what they are promoting
- Any request for display of material which is in breach of legislation relating to discrimination, racial vilification, offensive behaviour, defamation and elections will be refused
- · No petitions are accepted

 Notices promoting religious philosophies, political or for-profit organisations and events are not accepted

The Library does not endorse or guarantee the accuracy of the information provided by community groups using Library notice boards. The Library retains the right to remove unsuitable material.

Collection development and information access policy

7.3.6 Corporate Information Service

Scope

The aim of the Corporate Information Service (CIS) is to provide research and library services to assist Liverpool City Council staff. The collection and information services of the CIS reflect the needs and objectives of Council.

The collection aims to provide a range of up-to-date reference, management, and government resources including print material, web resources, and online databases. Its vision is to move away from a paper based service to an electronic based service.

Target client groups

The CIS serves a closed and specialised group of people with varying research requirements within Council:

- Mayor
- Councillors
- General Manager
- · Corporate Management
- Other staff

Access

The CIS collection and information services are accessed in three different physical locations. Within these locations, the collection's access and purpose is different.

The main part of the collection is housed within Council both in the administration and central business district buildings. The resources are catalogued and then housed, managed and maintained solely within the Council department. Access to this part of the collection is via the Library catalogue, where library staff are able to search the collection.

The remainder of the collection is housed within the Library. Access to the CIS collection is via the catalogue and the resources are shelved according to the Dewey Decimal Classification (DDC) scheme. Access to selected online databases and web resources is provided through eBranch.

The general public may view the CIS collection in-house at the Central Library.

Formats

- Print : books, journals, reports
- Videos

Collection development and information access policy

- Online databases
- · Web resources

Complimentary collections

- · Internal: local studies, adult non-fiction, reference and serials
- External: Internet, corporate library network and other libraries and information agencies

Selection criteria

- Books, web resources, online databases
- Wide selection of government and management related subjects
- Currency
- Price
- Authority Is the author, publisher reputable in the field of study?
- Format is it available in print or online?
- · Ease of use, whether it's a reference resource or an online database

Responsibility for selection

- Corporate Information Librarian
- Staff as delegated by the Corporate Information Librarian

Weeding and retention

The CIS collection is kept up-to-date and current. Those resources that become unsuitable for the collection are weeded and given to the Local Studies Librarian and Information Services Librarian for consideration.

Collection development and information access policy

7.3.7 Family history

Scope

The aim of the family history service is to provide access to a comprehensive research collection for the study of family history. The collection focuses primarily on records from Australia and particularly from NSW. Records that include a Liverpool component will be given highest priority, especially where these records will also be useful for the study of local history.

Overseas records will be purchased, but only where they are useful to a substantial proportion of researchers. Australian records with limited applicability may be purchased, subject to budgetary constraints.

The collection facilitates publications about Liverpool residents, past and present.

Target client groups

- · Family historians
- · Liverpool City Council staff and Councillors
- The Liverpool Genealogy Society Inc.
- · Local historical groups
- · Primary, secondary and tertiary students
- Consultants and professional historians
- General community

Access

Family History material is available for use only within the Ward Havard Research Centre within the Central Library. Materials are not available for loan, but may be copied in accordance with the Copyright Act.

Formats

- Books
- Newspapers
- · Magazines and journals
- Oral histories
- Family histories
- Maps and plans
- Microforms
- Video, audio and multimedia products
- Digitised resources

Where material inappropriate to the collection is offered for acquisition, it is referred to local complementary collections.

Complimentary collections

- Internal: local studies, corporate information collection, non-fiction, reference and serials
- External: Liverpool Genealogy Society, City of Liverpool and District Historical Society, Liverpool Regional Museum, State Library of New South Wales, State Records of New South Wales, and Australian Archives

Selection criteria

All materials collected must fall within the scope and format criteria already stated.

Responsibility for selection

- Local Studies Librarian
- Other staff may be delegated as appropriate

Weeding and retention

Material is generally to be retained permanently.

Material may be weeded from the collection if it:

- Is outside the scope of the Collection Development and Information Access Policy
- · Excessively duplicates material already held
- · Is in very poor condition, beyond economic repair

Weeded material is offered to local complementary collections in the first instance before disposal.

Disaster recovery

It is not envisaged that the collection will contain original materials. In the event of a disaster, retrieval of unique local studies material will be given a higher priority than family history material that can more easily be replaced.

Collection development and information access policy

7.3.8 Higher School Certificate

Scope

This collection includes non-fiction material for students preparing for the Higher School Certificate (HSC).

It contains syllabus support material for the broad range of subjects studied for the HSC.

Target client groups

Students in years 11 and 12 preparing for the HSC examination.

Access

- The collection is shelved separately and available for 7 day loan.
- A core collection is available at each branch library and the mobile library, with a wider range of material available at the Central Library.

Formats

- · Print: hardback, paperback
- Audio-visual
- Pamphlets
- CD ROM
- Internet

Complementary collections

- · Internal: adult and junior non-fiction collections, reference and CD-Roms
- · External: Internet and other libraries

Selection criteria

- Student and staff requests
- Local high schools/TAFE
- NSW Board of Studies curriculum text lists
- Currency and relevancy
- Price
- Physical presentation
- Availability

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Collection development and information access policy

Responsibility for selection

- Collection Development Librarian
- Staff as delegated by the Collection Development Librarian

Weeding and retention

Material that no longer supports the subjects studied for the HSC will be withdrawn from this collection. The items will be transferred to the adult non-fiction collection if they are considered of value to the collection.

Collection development and information access policy

7.3.9 Indigenous collection

Scope

The indigenous collection contains a wide range of resources relating to Aboriginal and Torres Strait Islander culture, covering a wide range of authors and subjects at various levels to meet the needs of identified target clients. The indigenous collection includes fiction, non-fiction and audio-visual materials.

Target client groups

- · Aboriginal and Torres Strait Islander communities
- Students
- · General community

Access

- The indigenous collection is shelved in alphabetical order by author family name in the case of fiction, and subject order according to the Dewey Decimal Classification (DDC) scheme for non-fiction
- · The broadest range of materials is available at the Central Library
- Selected collections are available in the branch libraries. The nature of the
 collection at a branch will be based on perceived needs in the immediate
 surrounding area. Branch collections will not replicate the range or size of the
 Central Library collection

Formats

- Print, including hardback and paperback monographs
- Audio-visual
- · Newspaper and journal

Complementary collections

- · Internal: fiction, non-fiction, reference, LIAC, local studies, pamphlet files
- · External: Internet, other libraries and indigenous organisations

Selection criteria

- Wide selection of subjects at various levels
- · Sensitivity of portrayal of indigenous culture
- Accuracy, currency and relevancy
- Customer and staff requests
- · Core works in specific subject areas
- Syllabus support material

- Price
- · Physical presentation
- Availability

Responsibility for selection

- Collection Development Librarian with the Children's and Youth Services Librarian, the Collection Services Librarian and the Serials Officer
- Branch librarians and other staff as deemed appropriate by the Collection Development Librarian are also involved in selection

Collection development and information access policy

7.3.10 Junior fiction

Scope

This collection is representative of a wide range of fiction types and genres. It reflects the diversity of cultural backgrounds present in the population as well as the variety of interests and reading levels of this age group.

The collection includes 'novelty' format books such as board books, pop-up books and books without text.

Target client groups

- · Children and young people from birth to seventeen
- · Parents and carers

Access

- Materials are shelved alphabetically by author family name. The exception is
 Easies at Central and Miller libraries. These collections are not kept in
 alphabetical order due to the volume of material and the browsing habits of the
 customers
- The fiction collection is separated into three categories based upon age:
 - ρ Items in the Easies collection are suitable for children from birth to approximately seven (7) years
 - P Items in the junior fiction collection are suitable for children from seven (7) to thirteen (13) years of age
 - Items in the youth fiction collection are suitable for young people from thirteen (13) to seventeen (17) years of age
- · Australian authors are identified by a 'kangaroo logo'
- · High interest titles are displayed on sloped display shelves
- Material of special use for children learning or practicing reading is collected as 'Junior Readers' and is categorised into three groups
 - ρ E1 Beginning readers
 - ρ E2 Emergent readers
 - ρ E3 Practicing readers
- · Junior fiction CD-ROMs are inter-filed with the CD-ROM collection

Formats

- Print
- CD-ROMs
- Digital

Collection development and information access policy

Magazines

Complementary collections

- Internal: adult fiction and multicultural collection
- · External: other libraries and bookstores

Selection criteria

- Wide selection of authors and illustrators
- · Collection of consistently popular authors and illustrators
- · Staff and customer requests
- Prospective national and international award winners
- · Collection of recognised classics
- Price
- Physical presentation including text size and placement
- Durability
- · Syllabus support materials
- International materials are judged on their appeal and relevance to Australians
- · Appeal to current 'popular culture'
- · Suitability to target age group and reading ability

Responsibility for selection

- Children's and Youth Services Librarian
- Staff as delegated by the Children's and Youth Services Librarian

Collection development and information access policy

7.3.11 Junior indigenous collection

Scope

This section represents a wide range of materials including picture books, fiction and non-fiction. The collection is both a resource centre for indigenous persons and a study collection for people interested in indigenous culture.

Target client groups

Children and young people aged from birth to seventeen

Access

- Fiction items are shelved alphabetically by author family name
- Non-fiction items are shelved numerically by the Dewey Decimal Classification (DDC) system
- · Australian authors are identified by a 'kangaroo logo'

Formats

- Print
- Digital

Complementary collections

- Internal: fiction, non-fiction, easies, reference, closed reserve and pamphlet file collections
- · External: other libraries

Selection criteria

- Sensitivity of portrayal of Indigenous culture
- · Suitability to target age group's reading and cognitive ability
- The clarity of the text
- The accuracy of the information
- Currency of information
- Customer requests and 'Suggestions for Purchase'
- Prospective major national and international award winners
- Wide selection of contemporary authors
- Collection of consistently popular authors
- Collection of recognised classics and consistently popular items
- Price
- Physical presentation

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Collection development and information access policy

- Durability
- · Syllabus support material
- International materials are judged on their appeal and relevance to Australians
- Appeal to current 'popular culture'

Responsibility for selection

- Children's and Youth Services Librarian
- · Staff as delegated by the Children's and Youth Services Librarian

7.3.12 Junior non-fiction

Scope

Non-fiction materials are selected for their current popular value and use, and / or their important subject content.

The collection provides information for children's study and recreation needs.

Textbooks are included if they are the only available content.

Target client groups

Children and young people aged from five to thirteen years

Access

- Materials are shelved numerically by the Dewey Decimal Classification (DDC) scheme
- Shelf labels 'point out' high interest areas and the range of DDC numbers on each shelf
- · Junior non-fiction CD-ROMs are inter-filed with the CD-ROM collection
- Pamphlet files are filed alphabetically at the Level 2 Reader Assistance desk
- Materials labeled as reference are selected for their important subject content.
 The reference collection provides ready-at-hand materials to answer the widest variety of questions possible and therefore does not go out on loan. The reference collection may also include items to answer specific questions that appear at least annually
- Items in heavy demand are placed on closed reserve, which is kept for in-house library use only

Formats

- Print
- CD-ROMs
- Digital
- Pamphlet files

Complementary collections

- Internal: adult non-fiction, multicultural non-fiction, videos and indigenous nonfiction collections
- External: other libraries and web resources

Collection development and information access policy

Selection criteria

- Suitability to target age group's reading and cognitive ability
- · The clarity of the text
- The accuracy of the information
- · Currency of information
- · Appropriate use of the medium to the content
- · Customer requests and 'Suggestions for Purchase'
- Prospective major national and international award winners
- International materials are judged on their appeal and relevance to Australians
- · Syllabus support material
- Appeal to current 'popular culture'
- Price
- Durability
- Physical presentation including quality of illustrations, photographs, charts, tables and diagrams
- Use of reference tools such as indexes and table of contents

Responsibility for selection

- · Children's and Youth Services Librarian
- Staff as delegated by the Children's and Youth Services Librarian

Collection development and information access policy

7.3.13 Large print

Scope

The large print collection includes both recreational and informational materials.

This collection contains a wide range of adult fiction titles, plus a selected range of adult non-fiction titles at various levels to meet the needs of identified target customers.

Target client groups

- Older people
- · Customers with a sight impairment
- Customers who need or desire large print reading material

Access

- Large print fiction is shelved alphabetically by author family name, and separately from the adult fiction collection
- Large print non-fiction is shelved in subject order according to the Dewey
 Decimal Classification (DDC) scheme, and separately from the adult non-fiction
 collection
- The broadest range of materials is available at the Central Library
- Selected collections are available in the four branch libraries at Miller,
 Moorebank, Casula and Green Valley. The nature of the collection at a branch
 will be based on perceived needs in the surrounding area. Branch collections
 will not replicate the range or size of the Central Library collection
- Large print collections are periodically rotated between branches according to the requirements of branch librarians

Formats

Print: principally hardback monographs, with some paperback editions

Complementary collections

- Internal: adult fiction, adult non-fiction and talking books
- · External: other libraries

Selection criteria

Fiction

- Wide selection of contemporary authors
- Some multiple copies of works by popular authors

Collection development and information access policy

- · Customer requests where available and suitable
- Price
- · Physical presentation

Non-fiction

- Wide selection of subjects
- Currency and relevancy
- Customer requests
- Price
- · Physical presentation

Responsibility for selection

- Collection Development Librarian
- Branch librarians, the Special Services Library Operator and other staff as deemed appropriate by the Collection Development Librarian are also involved in selection

7.3.14 Legal Information Access Centre (LIAC) collection

Scope

This is a reference and lending collection of Australian legal resources. The aim of the collection is to provide up to date and accurate plain language legal resources to the general community.

Target client groups

- General community
- Students
- Local business community
- · Indigenous community

Access

- The collection is shelved separately at the Central Library and inter-filed at the branch libraries
- The reference and lending collections are shelved separately at the Central Library
- The Legal Tool Kit is shelved in its own stand at the Central Library and at the branches
- The Hot Topics are shelved separately at the Central Library and inter-filed at the branches
- The pamphlet collection is shelved separately in its own stand at the Central Library
- Smaller collections are kept at each branch library based on local need. No attempt will be made to replicate the range or size of the Central Library collection at the branch libraries
- Selected high use reference items are kept in closed reserve at the Central Library
- · Online databases are available through the Internet

Formats

- Print: both hardback and paperback monographs
- Audio-visual is in the lending collection only
- Web resources
- Online databases
- Pamphlets

Collection development and information access policy

Complementary collections

- Internal: CD-ROMs, adult non-fiction, indigenous non-fiction, online databases and serials
- External: Internet, other libraries and information agencies

Selection criteria

- Resources as outlined and selected by the State Library of NSW Legal Information Access Centre (LIAC)
- · Currency and relevancy
- · Presentation of content
- Price
- · Durability and accuracy
- Availability

Responsibility for selection

- Information Services Librarian
- Staff as delegated by the Information Services Librarian

Reallocation

 Items identified by the State Library of NSW LIAC to be transferred from the reference to the lending collection

7.3.15 Local studies

Scope

The aim of the local studies service is to provide an accessible and comprehensive research collection for the study of all aspects of the Liverpool local government area, past and present. This is achieved by acquiring, preserving and providing access to a range of locally significant documents. This includes, but is not limited to, documents in the following areas:

- Natural environment and landscape
- Aboriginal heritage
- Social, economic, cultural and political history
- · Built and natural heritage

The collection facilitates publications about Liverpool, past and present.

The collection also falls under the Liverpool City Art, Heritage and Local Studies Collection Policy (see appendix 6). Under this Policy the stated aim of the collection is to provide an accessible and comprehensive local studies research collection for the study of all aspects of the City, past and present.

Target client groups

- Liverpool City Council staff and Councillors
- Local historical groups
- · Primary, secondary and tertiary students
- · Consultants and professional historians
- · Local and family historians
- · General community

Access

Intellectual access to the collection is via the library catalogue, card indexes and photograph database. Digital copies of sections of the collection are made available via the Library's eBranch.

Local Studies material is available for use only within the Ward Havard Research Centre within the Central Library. Materials are not available for loan, but may be copied in accordance with the Copyright Act.

Material may be duplicated for public use, by photography, photocopy or microfilm. Where material has been duplicated, the public will need to obtain approval from the Local Studies Librarian in order to access original materials.

Collection development and information access policy

Formats

- Books
- · Pictures, including photographs, negatives, prints, paintings and sketches
- Newspapers
- · Magazines and journals
- Oral histories
- · Community archives
- Council archives (Liverpool and Nepean Councils)
- Family papers
- Maps and plans
- Microforms
- Video, audio and multimedia products
- Ephemera, newspaper and magazine cuttings
- · Digitised resources

Realia and artifacts will not be collected for the Local Studies Collection unless these objects bear an integral relationship with documentary material acquired for the collection. Where material inappropriate to the collection is offered for acquisition, it is referred to local complementary collections.

Complementary Collections

Local - Internal

- Corporate Collection
- Reference Collection
- Non-fiction Collection

Local - External

- · City of Liverpool and District Historical Society
- · Liverpool Genealogy Society
- Liverpool City Council Records Section
- Liverpool Regional Museum
- · Casula Powerhouse Arts Centre

State and Federal

- State Library of New South Wales
- State Records of New South Wales

Australian Archives

Selection criteria

All materials collected must fall within the scope and format criteria already stated. Further, where material of local significance is part of a larger work, the cost of the work and the importance of the material must be taken into account before acquisition.

Responsibility for selection

- · Local Studies Librarian
- · Staff as delegated by the Local Studies Librarian

Priority collection areas

This assessment is based on the strengths and weaknesses of the current collection and observed patterns of usage:

- · Aboriginal heritage
- · Ethnic communities
- Pictorial material
- · Council archives (by microfilm, digitisation or acquisition of original material)

Weeding and retention

Material is generally to be retained permanently.

Material may be weeded from the collection if it:

- · Is outside the scope of the collection development policy
- · Excessively duplicates material already held
- · Is in very poor condition, beyond economic repair

Weeded material is offered to local complementary collections in the first instance before disposal.

Conservation of materials

Accessibility of the Library's permanent collections for present and future use will be ensured by:

 Maintaining an appropriate environment that minimises the deterioration of the stock. This includes temperature and humidity control, correct handling of the stock, individual assessment of the extent and type of repairs required and ongoing monitoring of the extent of use of key items

- 2. Actively preserving material in the collection by:
 - · isolating items needing treatment and withdrawing them from active use
 - applying appropriate preservation techniques to those items that warrant such treatment as and when possible
 - reformatting material where the extent of use is incompatible with the ongoing preservation of the item

Disaster preparedness

Possible disasters, which could affect the collection, include:

- Water penetration/local flooding
- Fire
- Vandalism
- Earthquake

The most likely possible disaster, which could affect the collection, is water penetration/local flooding.

In the case of a disaster, the highest priority for the collection will be preserving unique material relating to Liverpool.

7.3.16 Multicultural collection

Scope

The Multicultural Collection reflects the diversity of cultural backgrounds present in the local population and addresses the needs of non-English speaking communities. The collection contains adult and junior fiction and non-fiction, audio-visual materials, music CDs, magazines and newspapers.

Highly specialised, academic material is not collected. This is in line with the target client groups for this collection, and the Library as a whole. Such material may be requested through inter-library loan.

The Library aims to provide local multicultural communities with a wide range of materials with special attention given to the largest community groups and most popular and heavily used languages.

Target client groups

- Adults and young people living in the Liverpool area who speak a language other than English
- · Students from English language courses
- · Ethnic community organizations

Access

- The full range of multicultural materials is available at the Central Library
- Selected language collections are available in the four branch libraries at Miller, Moorebank, Casula and Green Valley. The decision to include a language collection at a branch is based on the need in the surrounding area.
 No attempt will be made to replicate the range or size of the Central Library collection at the branches
- Multicultural Collection material is housed separately from the English language collection. Each language is shelved individually
- All items can be accessed on the Library catalogue. The Library's system currently does not provide non-Roman characters
- Through eBranch the Library offers electronic access to community language newspapers published overseas and to other multicultural sites
- Customers can request community language material from the State Library of NSW or other public libraries via the document delivery service
- · Other public libraries may request bulk loans of community language material

Formats

- Print: both hardback and paperback monographs
- · Newspapers and magazines
- Audio and video tapes
- Compact discs
- Kits (book and tape or CD)

Complementary collections

- Internal: adult non-fiction, English Workshop collection, junior easies
- External: State Library of NSW and other public libraries, including inter-library loans and bulk loans

Selection criteria

- Price
- Availability
- Durability
- · Suitability to target multicultural group

Selection methods and tools

In addition to the selection methods and tools outlined in section 6.3, community book selection meetings are also held for the most popular languages.

Responsibility for selection

Multicultural Services Librarian

In addition, Library customers have the opportunity to recommend material for purchase through the Library's "Community Book Selection Meetings". It is an opportunity to maximise the use of the Library's resources by ensuring that items purchased for the collection are a true reflection of the needs and interests of the community.

This event is part of the Library's ongoing commitment to the development of quality services and collections through consultation with members of the local community.

Liverpool City Library Collections and Information Access Policy

Collection development and information access policy

7.3.17 Professional collection

Scope

The Library has a professional collection of library and information science resources. The aim is to provide staff with a professionally based collection that supports them in their work, studies and professional development.

Target client groups

- Staff
- Students

Access

The professional collection consists of items that are available for loan or that are for reference only within the Library.

Formats

Primarily monographs and serials. Other formats are also selected as required.

Complementary collections

- Internal: adult non-fiction, reference, serials
- External: other libraries, other information agencies and web resources

Responsibility for selection

All Library staff are encouraged to make recommendations to the Collection Development Librarian and Serials Officer

7.3.18 Reference

Scope

The reference collection is a non-lending collection of resources specifically selected for use within the Library. The aim of this collection is to provide a range of up-to-date reference resources.

Target client groups

- General community
- Students
- · Local business community
- · Indigenous community
- Library staff

Access

- The Central Library reference collection includes the Legal Information Access Centre (LIAC) resources collection, CD ROM databases, access to online databases and services, and Australian telephone directories
- Smaller reference collections are kept at each branch library based on local need. No attempt will be made to replicate the range or size of the Central Library collection at the branch libraries
- Adult and junior reference collections are inter-filed. The books are shelved in subject order according to the Dewey Decimal Classification (DDC) scheme
- Indigenous collection reference items are shelved separately at the Central Library, but are inter-filed at each branch library
- LIAC Collection reference items are shelved separately at the Central Library, with the smaller Legal Tool Kit available at the branch libraries
- Di@YLL (drug information at your local library) reference resources are shelved separately at the Central Library, but are inter-filed at the branch libraries
- Selected high use reference items are kept on closed reserve
- Selected online services are available at the Central Library with a smaller range of services available at the branch libraries. Remote access is also available for some databases
- Australian telephone directories are shelved separately

Formats

- Print: hardback and paperback
- Pamphlets
- CD-ROMs

Collection development and information access policy

- · Online databases
- Websites

Complementary collections

- Internal: adult non-fiction, junior non-fiction, local studies, family history,
 Corporate Information collection, English Workshop collection, audio-visual: kits,
 audio and video tapes, and serials
- · External: Internet, other libraries and information agencies

Selection criteria

- General print collection
 - ρ wide selection of subjects at various levels
 - ρ currency and relevancy
 - ρ presentation of content
 - ρ customer and staff requests
 - ρ core works in specific subject areas
 - ρ syllabus support material
 - ρ price
 - ρ availability
 - ρ durability and accuracy

CD-ROM

- content quality
- p **price**
- ρ space-saving value over the print equivalent
- ρ ease of use
- ρ currency and relevancy
- CD ROM format should enhance the value of the product over the print equivalent
- ρ accuracy

Responsibility for selection

- Information Services Librarian
- · Children's and Youth Services Librarian
- Staff as delegated by the Information Services Librarian or Children's and Youth Services Librarian

Retention and reallocation

Stack

- Selected yearbooks are kept for 10 years
- Other reference books are kept in stack when their content is considered valuable to the collection

Reallocation

 Superseded editions may be transferred to a branch reference collection or the lending collection provided the item is still in good condition and the information is still accurate and current

7.3.19 Serials

Scope

Lending magazines

 Primarily a collection of popular magazines for recreational purposes, the collection aims to cover a wide range of subjects. A small number of community language magazines of general interest are also acquired

Reference periodicals

 The Reference periodical collection consists of current affairs publications and technical magazines. This collection supports and supplements the non-fiction collection and the reference collection

Newspapers

- The Library acquires the local newspapers and a selection of the most popular metropolitan newspapers
- Newspapers in a wide range of community languages are also acquired

Target client groups

- General community
- Students
- · Local business community

Access

Lending magazines

- · Central Library and each branch library have collections
- Titles of magazines vary at each branch
- · All magazines are filed in alphabetical order by title
- The latest issue of each magazine (with the exception of weekly magazines) is put on display and is not available for loan until the next issue is received
- All weekly magazines are available for loan

Reference periodicals

- Reference periodicals are kept at the Central Library and are not for loan
- Back issues are bound each year and kept for up to ten years

Newspapers

- · Newspapers are not for loan
- English language newspapers in hardcopy are filed at the Central Library
- · Community language newspapers in hardcopy are filed at the Central Library
- All branch libraries receive a daily copy of The Sydney Morning Herald and the Daily Telegraph

Formats

- Print
- Online
- CD-ROM
- Local newspapers and The Sydney Morning Herald are available on microfilm
- · The Sydney Morning Herald is available on CD-ROM

Complementary collections

- Internal: reference, non-fiction, multicultural, local studies and family history
- External: other libraries (local, national and international), retail outlets and the Internet

Selection criteria

- Wide selection of subject areas
- Customer requests
- · Information needs of the wider community
- Price
- Availability
- · Emphasis on providing an Australian edition
- · Current recreational trends and interests
- · Areas of rapidly changing information

Responsibility for selection

- Serials Officer, with the Information Services Librarian, the Multicultural Services Librarian and branch librarians
- Staff as delegated by the Serials Officer

7.3.20 Web resources

Scope

The Library selects World Wide Web (web) resources for inclusion in the Library's catalogue and as part of the Internet resources database available through eBranch. The aim is to identify, describe and make available web resources to meet the informational, educational and recreational needs of customers. Web resources are selected for, and complement, all Library collections.

The aim, where possible, is to select websites in the community languages represented in Liverpool. However, the range of language expertise of Library staff will limit the evaluation of non-English websites. Particular emphasis is placed on the selection of newspapers in community languages.

The Library has no control over linked websites and due to their dynamic nature the Library cannot be responsible for information provided through selected websites.

Target client groups

- General community
- Students
- Council staff
- Local business community

Access

Access to selected web resources is provided through:

- the Library catalogue
- the Internet resources database available through eBranch

The catalogue allows web resources to be located by subject, title and author.

The Internet resources database allows web resources to be browsed and searched. Web resources can be browsed through a number of topic and level views, such as reference, local studies and children's.

Website links will be checked on a regular basis so as to ensure that records are only provided to active websites.

Formats

- Websites
- · Electronic journals and other online publications
- Frequently Asked Questions (FAQ) websites

Complementary collections

- Internal: adult non-fiction, junior non-fiction, reference, local studies, family history, audio-visual materials
- · External: Other libraries and information agencies

Selection criteria

The selection criteria applied to developing the collection as a whole are used in selecting web resources. Web resources are also evaluated according to their credibility, quality and usefulness in order to support the needs of customers.

Other criteria applied to websites include:

- Authority is the website a commercial, educational, government, association website? What is the reputation of the author?
- Does the website have its own domain name?
- · Content is the site content accurate, up-dated regularly and verifiable?
- Costs are any fees required to access the content of the website?
- Accessibility is the site accessible?
- Design is the site easy to use and well organised?

Generally, the Library does not select personal home pages.

In applying selection criteria to library resources, an assessment of the most suitable format for the information and expected use is also made. For example, electronic access to overseas newspapers is often preferable to purchasing paper copies. The advantages of electronic access are that the Library is able to provide customers with access to a wide range of newspapers at far lower costs. In addition, the time delay for the delivery of paper copies is removed.

As with all library resources, the Library welcomes customer suggestions for websites to be added. All suggested websites will be evaluated against the selection criteria outlined in this Policy.

Responsibility for selection

All staff are encouraged to locate and submit suitable websites for inclusion in the database. However, the staff member responsible for each particular section of the database will ultimately decide what websites will actually be included.

Weeding and retention

Selected sites are reviewed periodically for access, design and content. If a web resource no longer meets the selection criteria or is inactive, it is removed from the catalogue and Internet resources database.

8. Review

This Collection Development and Information Access Policy is reviewed on an ongoing basis so as to ensure that it continues to meet the needs of the people of Liverpool. A new edition will be issued whenever substantial changes are required to the Policy.

Appendix 1: UNESCO Public Library Manifesto

1994 English Version

Freedom, prosperity and the development of society and of individuals are fundamental human values. They will only be attained through the ability of well-informed citizens to exercise their democratic rights and to play an active role in society. Constructive participation and the development of democracy depend on satisfactory education as well as on free and unlimited access to knowledge, thought, culture and information.

The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision- making and cultural development of the individual and social groups.

This Manifesto proclaims UNESCO's belief in the public library as a living force for education, culture and information, and as an essential agent for the fostering of peace and spiritual welfare through the minds of men and women.

UNESCO therefore encourages national and local governments to support and actively engage in the development of public libraries.

The Public Library

The public library is the local centre of information, making all kinds of knowledge and information readily available to its users.

The services of the public library are provided on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status. Specific services and materials must be provided for those users who cannot, for whatever reason, use the regular services and materials, for example linguistic minorities, people with disabilities or people in hospital or prison.

All age groups must find material relevant to their needs. Collections and services have to include all types of appropriate media and modern technologies as well as traditional materials. High quality and relevance to local needs and conditions are fundamental. Material must reflect current trends and the evolution of society, as well as the memory of human endeavour and imagination.

Collections and services should not be subject to any form of ideological, political or religious censorship, nor commercial pressures.

Missions of the Public Library

The following key missions which relate to information, literacy, education and culture should be at the core of public library services:

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- 1. creating and strengthening reading habits in children from an early age;
- 2. supporting both individual and self conducted education as well as formal education at all levels;
- 3. providing opportunities for personal creative development;
- 4. stimulating the imagination and creativity of children and young people;
- 5. promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations;
- 6. providing access to cultural expressions of all performing arts;
- 7. fostering inter-cultural dialogue and favouring cultural diversity;
- 8. supporting the oral tradition;
- 9. ensuring access for citizens to all sorts of community information;
- providing adequate information services to local enterprises, associations and interest groups;
- 11. facilitating the development of information and computer literacy skills;
- 12. supporting and participating in literacy activities and programmes for all age groups, and initiating such activities if necessary.

Funding, legislation and networks

The public library shall in principle be free of charge.

The public library shall in principle be free of charge. The public library is the responsibility of local and national authorities. It must be supported by specific legislation and financed by national and local governments. It has to be an essential component of any long-term strategy for culture, information provision, literacy and education.

To ensure nationwide library coordination and cooperation, legislation and strategic plans must also define and promote a national library network based on agreed standards of service.

The public library network must be designed in relation to national, regional, research and special libraries as well as libraries in schools, colleges and universities.

Operation and management

A clear policy must be formulated, defining objectives, priorities and services in relation to the local community needs. The public library has to be organized effectively and professional standards of operation must be maintained.

Cooperation with relevant partners - for example, user groups and other professionals at local, regional, national as well as international level- has to be ensured.

Services have to be physically accessible to all members of the community. This requires well situated library buildings, good reading and study facilities, as well as relevant technologies and sufficient opening hours convenient to the users. It equally implies outreach services for those unable to visit the library.

The library services must be adapted to the different needs of communities in rural and urban areas.

The librarian is an active intermediary between users and resources. Professional and continuing education of the librarian is indispensable to ensure adequate services.

Outreach and user education programmes have to be provided to help users benefit from all the resources.

Implementing the Manifesto

Decision makers at national and local levels and the library community at large, around the world, are hereby urged to implement the principles expressed in this Manifesto.

The Manifesto is prepared in cooperation with the International Federation of Library Associations and Institutions (IFLA).

Latest Revision: July 16, 1998

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Appendix 2: Statement on free access to information

Object

To promote the free flow of information and ideas in the interests of all Australians and a thriving culture and democracy.

Principle

Freedom can be protected in a democratic society only if its citizens have unrestricted access to information and ideas.

Statement

There are several different levels at which the free flow of ideas can be impeded. At the societal level, legislative bodies of all kinds are expected to consider the legal and regulatory frameworks they put in place to support the free flow of information and ideas about the interests and concerns of citizens. At the institutional level, library and information services are expected to encourage the free flow of information and ideas within the scope of their roles and responsibilities. At the individual level, citizens are expected to make informed decisions in exercising their rights and responsibilities.

The Australian Library and Information Association believes that library and information services have particular responsibilities in supporting and sustaining the free flow of information and ideas including:

- 5 asserting the equal and equitable rights of citizens to information regardless of age, race, gender, religion, disability, cultural identity, language, socioeconomic status, lifestyle choice, political allegiance or social viewpoint;
- 6 adopting an inclusive approach in developing and implementing policies regarding access to information and ideas that are relevant to the library and information service concerned, irrespective of the controversial nature of the information or ideas;
- 7 ensuring that their clients have access to information from a variety of sources and agencies to meet their needs and that a citizen's information needs are met independently of location and an ability to pay;
- 8 catering for interest in contemporary issues without promoting or suppressing particular beliefs and ideas;
- 9 protecting the confidential relationships that exist between the library and information service and its clients;
- 10 resisting attempts by individuals or groups within their communities to restrict access to information and ideas while at the same time recognising that powers of censorship are legally vested in state and federal governments;

11 observing laws and regulations governing access to information and ideas but working towards the amendment of those laws and regulations which inhibit library and information services in meeting the obligations and responsibilities outlined in this Statement.

Related documents

Article 19 of the United Nations Universal Declaration of Human Rights http://www.un.org/Overview/rights.html.

Article 19 of the International Covenant on Civil and Political Rights

[http://www.unhcr.ch/refworld/refworld/legal/instrume/detent/civpot_e.htm]. International Federation of Library Associations and Institutions Statement on Libraries an Intellectual Freedom http://www.faife.dk.

Date of adoption: October 2001

Date of amendment: Replaces Statement on free library services to all and the Statement on freedom to read.

Collection development and information access policy

Appendix 3: Public Access Internet Policy

1. Preamble

The Internet provides a wide range of information resources that is vital for a developing and growing community. Access to the Internet is a key service at the Liverpool City Library.

This Policy document is based on a range of policies, principles and guidelines available in many publicly available documents including the *Public Internet Access Guidelines for Public Libraries* from the NSW MPLA Technology Forum, statements from ALIA, and the *UNESCO Public Library Manifesto*.

The aim of this policy document is to provide an open and clear statement for library staff and users.

1.1. Definitions

"The Library"

The Liverpool City Council Library Service

"Users"

Users of the Liverpool City Council Library Service

"Staff"

Staff at the Liverpool City Council Library Service

"PC" Personal Computer

2. Internet access guideline for parents and children

Parents and guardians are responsible for their children's access to the Internet. Public libraries have no control over what information is accessible on the Internet and cannot be held responsible for Internet content or its use.

The Library provides a document, *Internet Access Guidelines for Parents and Children*, which assist parents in providing guidance for their children using the Internet.

3. Values

3.1. Free access to information

Public Libraries must accept responsibility for providing free access to information sources on the Internet which, as stated in the *Public Internet Access Guidelines for Public Libraries*, is "part of their mission in meeting their widely acknowledged role to meet the information needs of their community".

3.2. Access to information free of censorship

The Library does not support the use of filtering or censorship technologies for Internet access. Public libraries have a role in promoting the free exchange of different points of view on current and historical issues, including controversial issues.

Collection development and information access policy

To protect other users from potentially offensive and harmful material on the Internet, staff may ask Internet users not to display such material on computer screens that are visible in public areas.

3.3. Assistance and training

Staff will provide assistance to Internet users to locate information in a professional manner according to the values and ethics articulated in the ALIA Statement on Professional Conduct.

The Library offers formal Internet training course in its role to promote Internet usage and computer literacy.

Staff are trained to use most of the commonly available Web browsers and Web based applications and may not be able to support many of the specialised and industry-specific applications now available on the Web.

3.4. Privacy

Staff will respect the user's right to privacy when assisting Internet users. However, the Library may provide Internet logs to officers legally empowered to investigate Internet usage where there is reasonable suspicion of illegal use.

4. Legal issues

4.1. Existing legislation

Content provided by the Internet Service at the Library is regulated by State and Commonwealth legislation. The current Acts that apply are:

- Broadcasting Services Act 1992 (Commonwealth)
- Classification (Publications, Films and Computer games) Enforcement Act

4.2. Illegal and inappropriate use

Users must not use the Internet to transmit, use or create material that is

- Illegal or an incitement to break the law
- Slanderous, libelous or defamatory
- Offensive, obscene or pornographic
- · Abusive or threatening violence
- · Harassment based on sex, race, disability or other protected status

4.3. Copyright

Users are responsible for complying with international and federal laws protecting copyrighted material.

Collection development and information access policy

5. Conditions of use

5.1. Membership

The Library prefer users of the Internet Service to be members of the Library but will allow temporary users who accept the stated conditions of use in the Library Membership Application Form.

5.2. Junior Internet users

Users under the age of 16 years must have signed permission from a parent or legal guardian to access the Internet Service in the Library.

5.3. Library responsibility

The Library cannot accept responsibility for information stored on user's floppy disk or user's email accounts held with Web email providers.

5.4. Misuse of resources

Users must not damage Library PC equipment, alter any PC or software settings, or knowingly propagate a computer virus or malicious software. User must not change the security settings that protect the PC operating system.

Users will notify staff immediately if they experience problems with Internet PCs.

5.5. Web plug-ins and other Internet applications

The Library can only support the commonly used web applications such as Acrobat reader and Flash plug-in and cannot provide users with specialised or industry-specific web applications or plug-ins.

The Library will regularly review trends in web technology to assess those applications that are accepted as standard.

5.6. Non-Roman fonts

The Library will install PC fonts for non-Romanised languages for the major non-English speaking communities of Liverpool. Languages not supported can be considered for future installations based on the proportion of users registered with the suggested language.

5.7. Infringement of conditions of use

Users who do not comply with the stated conditions and policies may have their sessions terminated or be denied future access to the service.

Collection development and information access policy

6. Fees

6.1. Council approved

Liverpool City Council approves all fees and charges at the Library.

6.2. Printing charge

Printing from Internet PCs will be charged on per page basis.

7. Bookings

7.1. Advance bookings

Users may book sessions in advance on the Internet PCs at any branch of the Library by phone or in person. Internet PCs will be available for bookings at all branches of the library service.

- 7.1.1. Bookings will be accepted for sessions up to one week (7 days) in advance.
- 7.1.2. Bookings will be limited to 2-hour sessions.
- 7.1.3. Concurrent sessions for the same user will not be accepted. Also, consecutive sessions for the same user will not be accepted.
- 7.1.4. Users will be limited to 2 bookings in a calendar week at a branch.

7.2. Booking cancellation

7.2.1. Bookings will be held for ten minutes after the scheduled starting time. After this, staff may cancel the booking and the booking fee will still apply.

7.3. Finishing time

Users will finish at the specified time, so as not to inconvenience the next user.

7.4. PCs reserved for bookings

PCs reserved for bookings only will be available at each branch of the Library.

8. Internet PCs

8.1. Availability at branches

Internet PCs that do not require bookings will be available at each branch of the Library.

8.2. Limited sessions

User sessions for Internet PCs will be limited to a fixed period to ensure fair access to all users. Where available, an electronic session timer will be used.

Staff may extend free Internet PC sessions for users during quiet periods.

Appendix 4: The IFLA Internet Manifesto

Unhindered access to information is essential to freedom, equality, global understanding and peace. Therefore, the International Federation of Library Associations (IFLA) asserts that:

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- Intellectual freedom is the right of every individual both to hold and express opinions and to seek and receive information; it is the basis of democracy; and it is at the core of library service.
- Freedom of access to information, regardless of medium and frontiers, is a central responsibility of the library and information profession.
- The provision of unhindered access to the Internet by libraries and information services supports communities and individuals to attain freedom, prosperity and development.
- Barriers to the flow of information should be removed, especially those that promote inequality, poverty, and despair.

Freedom of Access to Information, the Internet and Libraries and Information Services

Libraries and information services are vibrant institutions that connect people with global information resources and the ideas and creative works they seek. Libraries and information services make available the richness of human expression and cultural diversity in all media.

The global Internet enables individuals and communities throughout the world, whether in the smallest and most remote villages or the largest cities, to have equality of access to information for personal development, education, stimulation, cultural enrichment, economic activity and informed participation in democracy. All can present their interests, knowledge and culture for the world to visit.

Libraries and information services provide essential gateways to the Internet. For some they offer convenience, guidance, and assistance, while for others they are the only available access points. They provide a mechanism to overcome the barriers created by differences in resources, technology, and training.

Principles of Freedom of Access to Information via the Internet

Access to the Internet and all of its resources should be consistent with the United Nations Universal Declaration of Human Rights and especially Article 19:

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

The global interconnectedness of the Internet provides a medium through which this right may be enjoyed by all. Consequently, access should neither be subject to any form of ideological, political or religious censorship, nor to economic barriers.

Libraries and information services also have a responsibility to serve all of the members of their communities, regardless of age, race, nationality, religion, culture, political affiliation, physical or other disabilities, gender or sexual orientation, or any other status.

Libraries and information services should support the right of users to seek information of their choice.

Libraries and information services should respect the privacy of their users and recognize that the resources they use should remain confidential.

Libraries and information services have a responsibility to facilitate and promote public access to quality information and communication. Users should be assisted with the necessary skills and a suitable environment in which to use their chosen information sources and services freely and confidently.

In addition to the many valuable resources available on the Internet, some are incorrect, misleading and may be offensive. Librarians should provide the information and resources for library users to learn to use the Internet and electronic information efficiently and effectively. They should proactively promote and facilitate responsible access to quality networked information for all their users, including children and young people.

In common with other core services, access to the Internet in libraries and information services should be without charge.

Implementing the Manifesto

IFLA encourages the international community to support the development of Internet accessibility worldwide, and especially in developing countries, to thus obtain the global benefits of information for all offered by the Internet.

IFLA encourages national governments to develop a national information infrastructure which will deliver Internet access to all the nation's population.

IFLA encourages all governments to support the unhindered flow of Internet accessible information via libraries and information services and to oppose any attempts to censor or inhibit access.

IFLA urges the library community and decision makers at national and local levels to develop strategies, policies, and plans that implement the principles expressed in this Manifesto.

This Manifesto was prepared by IFLA/FAIFE.

Approved by the Governing Board of IFLA 27 March 2002, The Hague, Netherlands. Proclaimed by IFLA 1 May 2002.

Adopted unanimously without dissent or abstentions on Council meeting of the 68th IFLA General Conference and Council, August 23rd 2002, Glasgow, Scotland

Latest Revision: September 11, 2002 Copyright © International Federation of Library Associations and Institutions www.ifla.org

Appendix 5: Dewey classes

The ten main Dewey classes are:

000-099	Computers, information, & general reference
100-199	Philosophy & psychology
200-299	Religion
300-399	Social sciences
400-499	Language
500-599	Science
600-699	Technology
700-799	Art and recreation
800-899	Literature
900-999	History and geography

Appendix 6: The Liverpool City Art, Heritage and Local Studies Collection Policy

The Liverpool City Art, Heritage and Local Studies Collection Policy

For: Adoption by Liverpool City Council

Prepared by: Casula Powerhouse Arts Centre, Liverpool City Library and Liverpool Regional

Museum

Title

The Liverpool City Art, Heritage and Local Studies Collection Policy.

Definitions

1.1 Art

Art refers to the application of a human creative skill.7

1.2 Acquisition

Acquisition means the process by which a book or an object is obtained for the collection.

1.3 The Board

The Board means the Board of Management of Casula Powerhouse Arts Centre and Liverpool Regional Museum

1.4 Book

Book includes periodical, newspaper and any other printed matter and also includes map, music, manuscript, picture, photographic plate and film and any other matter or thing whereby words, sounds or images are recorded or reproduced.⁸

1.5 City

City means City of Liverpool.

1.6 Community

Community means all those living in the City of Liverpool.

1.7 Community Cultural Development

Community Cultural Development means an issue based community cultural development program that is a synergy between the principles and practices of art, heritage, and community. This definition applies to the Library, Powerhouse and the Museum.

1.8 Council

⁷ The Australia Oxford Concise Dictionary

⁸ Library Act 1939

Council means the Liverpool City Council.

1.9 Collection

Collection refers to the management of books and objects in the Liverpool City Art, Heritage and Local Studies Collection.

1.10 Collector

Collector refers to all facilities and employees of Liverpool City Council.

1.11 Donation

Donation refers to a book or object given to the collection.

1.12 Deaccessioning

Deaccessioning means the permanent removal of a book or object from the collection.

1.13 Diverse Cultures

Diverse Cultures means that the City consists of complex, multi-dimensional cultures and ethnic backgrounds.

1.14 Federal

Federal means the Australian Government.

1.15 Heritage

Heritage means anything that is considered worthy of preservation by Council. This may include natural, built, monuments, books and objects.

1.16 International

International means legislated documents that exclude Council, State and Federal Governments.

1.17 Land Councils

Land Councils means Gandangarra and Tharawal Aboriginal Land Councils.

1.18 Library

Library means the Liverpool City Library

1.19 Local studies

Local studies refers to the local studies research collection managed by, and housed in, the Liverpool City Library.

1.20 Museum

Museum means the Liverpool Regional Museum.

1.21 Object

Object means any medium, excluding books, that is part of the collection.

1.22 Place

Place refers to the development of meaning that connects the personal, geographical, and cultural, to the City.

1.23 Policy

Policy refers to the Liverpool City Art, Heritage and Local Studies Collection Policy.

1.24 Powerhouse

Powerhouse means the Casula Powerhouse Arts Centre

1.25 Provenance

The origin and/or subsequent history of the object, book or collection can be thoroughly documented and authenticated.⁹

1.26 State

State means the State Government of New South Wales.

2. Legislative Requirements

2.1 Commonwealth

Copyright Act 1968

2.2 State

The National Parks and Wildlife Act 1974 Heritage Act 1987 NSW Local Government Act 1993 Firearms Act 1996 Privacy Act 2000 NSW Library Act 1939 NSW State Records Act 1998 NSW Freedom of Information Act 1998

3. Purpose

- 3.1 To provide a rationale, principle and management structure by which Council undertakes to provide, maintain, and attract collections to enrich the art, culture and heritage of the City. This policy will apply to all Council staff and its' facilities.
- 3.2 To provide an accessible and comprehensive local studies research collection for the study of all aspects of the City, past and present.

4. Objectives

- 4.1 To ensure that books, objects and artistic representations of ethnic and cultural diversities of the City are protected, maintained, collected, displayed and available for research in consultation with relevant individuals and communities.
- 4.2 To acquire, preserve and provide access to local studies resources relating to the City.

⁹ National Museum of Australia, Collections Development Policy.

4.3 To assist Land Councils in the protection, maintenance and repatriation of objects, sites and facilities.

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- 4.4 To identify legal requirements that guides the development and maintenance of Liverpool's art, culture and heritage.
- 4.5 To ensure the collection educates, inspires and entertains.
- 4.6 To provide ethical practices for the risk management of the collection.
- 4.7 To ensure the residents of the City and its environment are served by the collection.
- 4.8 To ensure innovative, high quality research, production and presentation of the collection.

Policy Statement

5. Collecting Areas and Priorities

5.1 Art

The Library, Museum and Powerhouse may acquire artwork made for, or in, Liverpool by local, national and international artists. The Library, Museum and Powerhouse may acquire art works made by artists who have developed and presented, or been involved on public artwork for the City. The Library, Museum and Powerhouse may acquire from the Liverpool City Art Festival, Liverpool City Art Scholarship. The Library, Museum and Powerhouse may also acquire artwork that is recognised as a significant influence to the development of artists from Liverpool. All art acquisition purchases will be recommended to the Board. Purchases over \$25,000 may be subject to Council approval.

5.2 Local Studies

The Library collects, for the purposes of research, study and presentation into all aspects of the City, past and present, books relating to Liverpool.

- 5.3 Books and objects that the Library, Powerhouse or Museum deems as significant are acquired. Formats include:
 - Monographs
 - Pictures, including photographs, negatives and prints
 - Paintings and sketches
 - Newspapers
 - · Magazines and journals
 - · Community archives
 - Council archives (Liverpool and Nepean Councils)
 - · Family papers
 - Documents
 - Maps and plans

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- Mircoforms
- Memorabilia
- Oral histories
- Posters
- Natural objects
- Other printed and electronic objects
- Sculptures
- Jewellery
- Video, audio and multimedia products
- Ephemera, newspaper and magazine cuttings.

5.4 Community Cultural Development

The Library, Museum and Powerhouse collect books and objects from issues based Community Cultural Development programs. These programs aim to examine and present the various links Liverpool has to regional, national and international issues.

5.5 Diverse Cultures

The Library, Museum and Powerhouse collect books and objects that examine, reflect, and promote the diverse cultures of Liverpool and be responsive to the contemporary nature of the City either critical or non-critical.

5.6 Donations

All donations to the collection will be promoted and received in accordance with this policy and Council's Pecuniary Interest Policy. The Library, Museum and Powerhouse will accept books and objects by bequest. In the case of a bequest, which while valuable may not comply with the Policy, the Library, Museum and Powerhouse will consult with the estate on the best way to proceed.

5.7 Heritage

The Library, Museum and Powerhouse will only collect books and objects considered worthy of preservation for current and/or future generations.

5.8 Land Councils

The collection may assist in the acquisition and maintenance of the Land Councils' collections. Other areas of indigenous collection priorities will be the Community Cultural Development programs or activities related to the Museum and Powerhouse, the Mil-Pra Aboriginal Education Consultative Group Aboriginal Exhibition & Art Award and any other specified art and heritage exchanges by Council staff. Where necessary, the collection advocates indigenous self-determination and repatriation in respect of cultural heritage matters and indigenous involvement in management of the collection. At all times the policy will act according to the indigenous protocols set out by State and Federal legislation.

6. Collecting Practices and Ethics

6.1 Books and objects for the collection are acquired through purchase, copying and donation.

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- 6.2 The Library, Museum and Powerhouse will respect the moral rights of the creators of work acquired for the collection in line with Council principles and practices.
- 6.3 The Library, Museum and Powerhouse will consider acquiring, depending upon the terms of the conditions or the length of the embargo, books and objects conditionally or restricted by legislation.
- 6.4 The Library, Museum and Powerhouse may collect books or objects from, or represented in, other collections. This will apply where the owners of that material specifically wish it to be part of the collection and where the books or objects have a high value particular to the collection. Where material inappropriate to the collection is offered for acquisition, it is referred to complementary collections, such as the City of Liverpool and District Historical Society Inc.
- 6.5 The Library, Museum and Powerhouse will not seek to acquire, and will return, material where it has been proven to have been looted, stolen or otherwise improperly gained. The Library, Museum and Powerhouse will keep record of the provenance, where an object is offered for the collection, that, in the view of the Library, Museum or Museum, it would be appropriately located with other organisations, institutions, donors or vendors.
- 6.6 The Library, Museum and Powerhouse undertake the deaccessioning, disposal and repatriation of collection of books or objects in accordance with their deaccessioning and disposal policies. Deaccessioned material is offered to complementary collections before disposal.
- 6.7 The collection will be stored and preserved to National conservation standards. The collection will have a risk management strategy as per Council guidelines.
- 6.8 The Library, Museum and Powerhouse will respect confidentiality if formally requested by the donor or collector. The Library, Museum and Powerhouse will also respect community confidentiality.
- 6.9 The Director of the Museum and Powerhouse and the Manager Library Services are responsible for identifying potential books and objects for the collection as per the Museum and Powerhouse Acquisitions Policy and Procedures and the Library's Collection Development Policy. Recommendations of books and objects for acquisition can be made by the Local Studies Librarian, the curators of the Museum and Powerhouse, and community members.

7. Collection Education

7.1 The collection will educate through the interpretation and presentation of books and objects included in a critical, entertaining and inspiring program for the community, researchers and visitors to the City.

7.2 The Library, Museum and Powerhouse will seek to resource, develop and promote knowledge of the collection via publications, exhibitions, education programs and public programs.

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8. Collection Access

- 8.1 Intellectual access to the collection is provided through a catalogue, card indexes and special format databases, such as the photograph database, unless protected by the Council's confidentiality clause.
- 8.2 Books and objects are only available for use within the Library, Museum or Powerhouse. Materials are not available for individual loan, but may be copied in accordance with the Copyright Act 1968. Books and objects may be duplicated for public use. Where material has been duplicated, the public will not be able to access the original books and objects without permission from the Library, Museum or Powerhouse.
- 8.3 The collection may assist in tourism for the City provided its purpose is in line with the Policy and procedures, through the publicity and promotion of the collection.
- 8.4 The Library, Museum and Powerhouse will create partnerships with individuals and entities to enhance the collection's development, maintenance, profile and resources.
- 8.5 The collection may be loaned to individuals and organisations for the purpose of display or touring exhibitions/events.

9. Collections Management

- 9.1 The Library, Museum and Powerhouse will facilitate a coordinated citywide approach to collections management through a detailed collection management manual including;
 - Method for acquiring and disposing of books and objects procedure.
 - Handling books and objects procedure.
 - Control and accessing items procedure.
 - · Loan procedure.
 - Insurance procedure.
 - Conservation procedure.
 - Personnel procedure.
 - Record keeping procedure.
- 9.2 The Policy recognises that the Director of the Museum and Powerhouse and the Manager Library Services jointly manage the collection.
- 9.3 Where appropriate the Library, Museum and Powerhouse will seek to acquire all intellectual property rights associated with the collected books or objects. The Library, Museum and Powerhouse will conclude a clear agreement with the owners of objects or transferring party on the nature of the acquisition including the status of any intellectual property rights that are associated with the books or objects.

9.4 The Library, Museum and Powerhouse will not return collected objects whose title has been clearly obtained by the Library, Museum and Powerhouse for the collection to its former owners.

10. Disputes

10.1 All disputes arising out of this policy shall be submitted to mediation by qualified mediators.

Authorised by

Liverpool City Council

Effective from

TBC

Departments responsible

Casula Powerhouse and Liverpool City Library

Review date

14 March 2002

This policy has been developed in consultation with:

The Board.

The staff of the Library, Museum and Powerhouse.

The Corporate Team, Liverpool City Council

References

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2002 Business Plan, Casula Powerhouse Arts Centre & Liverpool Regional Museum.

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Museum Victoria Collection Policy and Strategy Development (Draft) 2001.

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The International Council of Museums Code of Professional Ethics (1986, 2001)

Previous Possessions, New Obligations: Policies for museums in Australia and Aboriginal and Torres Strait Islander people, Council of Australian Museums Associations 1993

National Conservation and Preservation Policy and Strategy Cultural Ministers Heritage Council, 1998.

National Association for Visual Arts