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Best Practice

Open Space

in Higher Density

Developments

Project

03

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The Project was managed by the City of Charles Sturt through Allison Miller (Bretones), Manager Open Space and Recreation.

An across government reference group played a key role throughout the project by attending planning sessions and providing feedback. The members of the Reference Group were as follows:

City of Charles Sturt ___ Mark Withers
City of Charles Sturt ___ Adam Mrotek
City of Charles Sturt ___ Henry Inat
Dept of Premier and Cabinet ___ Tim Horton
Dept of Premier and Cabinet ___ Heath Edwards
City of Port Adelaide Enfield ___ Kristin Goonan
City of Port Adelaide Enfield ___ Rosa Gagetti
City of Port Adelaide Enfield ___ Brett Hill
City of Salisbury ___ Nichola Kapitz
City of Onkaparinga ___ Andrew Smith
City of Onkaparinga ___ Clint Watchman
City of Marion ___ Amy Liddicoat
City of Marion ___ Brett Grimm
Dept of Planning and Local Govt (DPLG) ___ Matt Lang
Urban Renewal Authority (formally LMC) ___ Kirsten Potoczky
Office for Recreation and Sport ___ Phil Freeman
Dept of Families and Community (DFC) ___ Geoff Claridge
City of Adelaide ___ Marty Reeve

The consultant team members for the project were as follows:

Suter Planners (Lead Consultant)

Suzanne Suter
Emily Moskwa

WAX Design

Warwick Keates
Mark Jackson
Corey Brown
Matt Baida
Amanda Balmer

URS

Brenton Burman
Paul Vivian

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Introduction

The Best Practice Open Space in Higher Density Developments Project aims to assist local government to plan for best practice open space in higher density development areas. The project is a proactive response to the 30 Plan for Greater Adelaide and aims to provide a practical resource for Local and State Government based on sound research and consideration of best practice.

The Project was instigated and guided by the City of Charles Sturt and reflects Council's commitment to ensuring future development in the City is appropriately planned and designed. The City of Charles Sturt has a number of potential Transit Oriented Developments (TOD's) and transit corridors and the principles and guidelines developed through the Project will be highly valuable to the Council.

The Project has involved developing:

- Best practice open space principles and guidelines for higher density developments
- A Planning Guide to assist Councils and developers to plan for an appropriate provision and quality of open space

In addition, the project provides detailed research and case study findings that form the basis of the principles and guidelines.

This Planning for Charles Sturt report draws on the recommended approaches and information in the principles and guidelines to provide directions for growth areas and specific development areas in the City of Charles Sturt. The report includes:

- Background on the typology of growth areas in the City of Charles Sturt
- A demand and supply analysis relating to the growth areas in the City of Charles Sturt
- Initial planning for two key development areas including the AAMI development area and the Kilkenny site (as planning examples)
- Suggestions for achieving community support for higher density development areas

Whilst the Planning for Charles Sturt report is intended to relate to and benefit the City of Charles Sturt the approach is likely to be of value to other Councils.

The Planning for Charles Sturt report is a guide for future planning and it should be implemented within the broader context of the best practice principle and guideline documents.



“There should be a good provision of open space within higher density areas to compensate for reduced private open space, enhance the quality and function of the development and support an increase in open space use by the community”



Urban Typologies

The City of Charles Sturt has various potential types of urban development. It is anticipated that the majority of Higher Density Developments will occur within these areas including:

1. **Large Brown Field Developments**
2. **Industrial Regeneration Sites**
3. **Large Scale Urban Infill**
4. **Transport Corridors (such as along Woodville Road and Port Road)**
5. **Small Scale Infill Developments**

Higher density development could occur within each of these developments and open space will need to be appropriately planned for accordingly. The potential characteristics and the open space opportunities associated with each of the development types is considered below.

1. **Large Brown Field**

(Bowden Urban Village and Cheltenham)

- Single ownership providing greater control
- Contains existing buildings and infrastructure that may impact on open space provision
- No defined open space allows for greater control of provision
- Large development area within which to configure both built form and open space to meet demand
- Opportunities to meet and exceed the 12.5% provision
- Opportunities to meet 3 ha/1000 people open space provision
- Opportunities to establish an open space hierarchy that is aligned to open space demand
- Potential to address open space demands both internally (within the site) and externally (existing urban fabric surrounding development site)
- Potential to establish links and accessways to reinforce community activity and access to open space
- Control of surrounding built form and urban fabric (micro climate) to assist with the quality and activation of open space
- Potential for contamination issues that may impact on open space
- Significant opportunities for WSUD development and integration
- Potential for the delivery of formal recreation (sport facilities) in the development



2. Industrial Regeneration

(Kilkenny)

- Potential for multiple ownership (more difficult to control site)
- Contains existing building or infrastructure which may impact on open space delivery
- Likely to be no or little existing open space provision
- Some opportunities for alternation of the urban fabric to meet open space demand
- May be potential to meet 12.5% open space provision through site development
- Potential for site contamination effecting open space provision
- Potential to establish links (internal and external) to open space
- Moderate potential to achieve 3ha/1000 people open space provision (likely to be below best practice requirements)



3. Large Scale Urban Infill

(Woodville West/Seaton/Ray Street)

- Potential for single ownership (more significant control of development)
- May contain existing buildings that will impact on the development character of the site
- May contain existing open space that will need review of reconfiguration
- Potential for open space provision to be connected to existing open space or created with the existing urban fabric
- Potential for site to be located within residential land uses that require additional open space provision and access to recreation land use (response to existing need)
- Potential to meet the 12.5% open space provision depending on project size and land holding configuration

4. Transport Corridors

(Woodville Road)

- Located and associated with major arterial road corridor and responding to the development intent of the 30-Year Plan
- Linear spatial arrangement associated with the road corridor which will dictate the provision, location and form of open space
- Fragmented ownership resulting in fragmented approach to open space development (potential for no open space provision instead contributions to the open space fund)
- Inability to deliver 12.5% open space provision or potentially any open space which will result in a need to explore other opportunities in the surrounding urban fabric or streetscape
- Need to establish strong connections to and from the transport corridor or development to increase potential access to open space
- Provision of open space may require Government (Local or State) purchase of land or the development of innovative solutions to deliver open space (roof gardens/share community space/use of front gardens with road corridors/green walls)
- Inability to control edge treatments along transport corridor and the potential impact on open space
- May require development of transport connections to more distant open space and sports facilities to meet demand
- Opportunities for Link and Place principles to be considered to increase open space provision as part of a shared use or integrated design approach

5. Small Scale Infill

- Located within existing urban fabric
- Small scale redevelopment with no ability to deliver 12.5% open space
- Increased significance of connections to existing open space
- Need to review existing open space provision and seek to deliver (purchase land) open space that meets demand



Demand and Supply for Potential Higher Density Growth Areas

Demand and Supply Focus

An analysis of demand and supply has been undertaken for future City of Charles Sturt development areas with a particular focus on potential higher density development areas. The analysis has involved:

- A potential sport and recreation participation analysis for populations linked to growth areas. This analysis provides an indication of the potential future requirements for sporting ovals, fields, outdoor courts and other sport and recreation facilities linked to population growth. The analysis is based on a total population of 15,000 people linked to growth areas as follows.

Potential Growth Areas	Indicative Projected Population
AAMI Stadium Site	2,600 to 3,600
Bowden Urban Village	3,500
Kilkenny	600
Seaton Housing SA site	3,000
Woodville Village and St Clair	3,400
Woodville West	1,000
TOTAL	14,100 to 15,100 (approx)

Source: City of Charles Sturt Strategic Planning (February 2012)

Note that population growth figures are not currently available for transit corridors

- An initial analysis of potential demand and supply for three development areas that could include higher density development, including the AAMI Stadium, Kilkenny and Woodville Village sites. The analysis has not been undertaken for Bowden Urban Village (BUV) or the St Clair development site as detailed planning has already occurred for these sites. Woodville West is a large infill area rather than a higher density area.

The demand and supply information aims to provide background information to assist the City of Charles Sturt with future planning for the development areas.



Sports Facility Demand

The analysis of potential sports requirements is based on Australian Bureau of Statistics and Australian Sports Commission participation data. The analysis considers what the number of participants and teams would be if participation were the same as state and national participation levels. The facilities required to meet the needs of the potential participants is then determined taking Council's accepted usage levels into consideration.

The analysis has been undertaken for a total indicative growth area population of 15,000 based on current population projections provided by the City of Charles Sturt. A breakdown of the demand findings is provided for each development area on the following page.

Potential Sports Demand and Facility Requirements for Total Growth Areas

Sport	Potential Players		Potential Teams		Indicative Facility Requirements For 33,299 population
	Juniors	Seniors	Juniors	Seniors	
Athletics	49	102	n/a	n/a	Access to 1 athletics track and field
Australian Rules	129	573	5	24	3 ovals (allowing for juniors in the mornings)
Baseball	6	12	0	1	No facility required
Basketball	111	318	14	40	1 indoor court
Cricket	78	344	5	23	3 cricket pitches (ovals linked to Australian Rules Football)
Hockey	31	63	2	4	Access to 1 field
Lawn Bowls	n/a	344	n/a	n/a	1 lawn bowls club
Netball	126	484	11	44	4 netball courts (for competition and training)
Rugby League	13*	12	1	1	No facility required
Rugby Union	7*	25	0	1	No facility required
Soccer	138*	344	9	23	3 soccer fields
Softball	21	25	2	2	Access to 1 diamond (could be provided in the wider district)
Tennis	118	522	20	87	9 tennis courts
Touch Football	10*	51	1	5	Access to 1 field (could be provided in the wider district)

- Analysis is based on 8% 5-14 year olds and 88% 15 years and over to reflect potential higher density development age profile

- Juniors relates to out of school hours participation

- Seniors refers to 15 years + and relates to organised participation

- Juniors are based on national figures (ABS data 2009) and seniors are based on SA figures (ERASS Australian Sports Commission data 2010).

*National figures for Rugby codes reduced to 25%, Soccer reduced to 70% and Touch Football reduced to 40% to indicatively reflect SA participation (State data is not available for children).

A breakdown of potential sporting requirements for each development area is provided below for the ovals, fields and courts.

Potential Sports Demand and Facility Requirements for Individual Growth Areas

Sport	Total Required Provision	AAMI	Bowden Urban Village	Kilkenny	Seaton Housing SA site	Woodville/ St Clair	Woodville West
	15,000 people	3,500 people	3,500 people	600 people	3,000 people	3,400 people	1,000 people
	% of total demand	23.3%	23.3%	4.0%	20.0%	22.7%	6.7%
Australian Rules	3 ovals	0.70 of 1 oval	0.70 of 1 oval	0.12 of 1 oval	0.60 of 1 oval	0.68 of 1 oval	0.20 of 1 oval
Cricket	3 cricket pitches	0.70 of 1 pitch	0.70 of 1 pitch	0.12 of 1 pitch	0.60 of 1 pitch	0.68 of 1 pitch	0.20 of 1 pitch
Hockey	Access to 1 field	0.23 of 1 field	0.23 of 1 field	0.04 of 1 field	0.20 of 1 field	0.23 of 1 field	0.07 of 1 field
Netball	4 netball courts	0.93 of 1 court	0.93 of 1 court	0.16 of 1 court	0.80 of 1 court	0.91 of 1 court	0.27 of 1 court
Soccer	3 soccer fields	0.70 of 1 field	0.70 of 1 field	0.12 of 1 field	0.60 of 1 field	0.68 of 1 field	0.20 of 1 field
Softball	Access to 1 diamond	0.23 of 1 diamond	0.23 of 1 diamond	0.04 of 1 diamond	0.20 of 1 diamond	0.23 of 1 diamond	0.07 of 1 diamond
Tennis	9 tennis courts	2.1 courts	2.1 courts	0.36 of 1 court	1.80 courts	2.04 courts	0.60 of 1 court
Touch Football	Access to 1 field	0.23 of 1 field	0.23 of 1 field	0.04 of 1 field	0.20 of 1 field	0.23 of 1 field	0.07 of 1 field

Note that cricket pitches would be overlaid on Australian Rules Football ovals or soccer fields

The analysis highlights that no one development area justifies the provision of a whole additional oval or playing field in its own right. However, planning for sport should be undertaken at a regional and district level and combining some of the development area requirements will justify additional facilities. Catering for the additional requirements could involve the following:

- The provision of an oval that is accessible to the community within the AAMI site on the basis that this facility could cater for the AAMI development area and Seaton Housing SA site populations. To meet community needs and strengthen the diversity and function of the sportsground a flexible playing field could also be included (subject to land availability).
- The provision of an additional oval and playing field in the Woodville area to cater for the St Clair, Woodville Village and Woodville West populations.
- Access to an oval and playing field in the Adelaide Parklands to cater for the Bowden Urban Village and Kilkenny future populations.
- Connecting rather than spreading the outdoor courts across development areas to assist with management, use and viability. This could include increasing the number of courts at existing sports complexes.

Providing additional ovals and fields could be achieved through the development of a new sportsground, the expansion, modification or upgrade of an existing sportsground or access to ovals and fields through schools as part of a shared-use arrangement.

Recreation Demand

Key recreation activities that could influence the demands for open space in a development area include walking, bike riding, running and skate, scooter and rollerblading as shown below. These are higher participation activities that justify appropriate recreation open space provision.

Potential Participation in Key Recreation Activities

Recreation Activity	Participation %		AAMI site		Bowden Urban Village		Kilkenny site		Seaton Housing SA site		Woodville/ St Clair		Woodville West	
	%		3,500 people		3,500 people		600 people		3,000 people		3,400 people		1,000 people	
	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs	5-14 yrs	15+ yrs
Walking (for fitness)	n/a	39.2%	n/a	1,207	n/a	1,207	n/a	207	n/a	1,034	n/a	1,172	n/a	345
Bike riding	60.4%	11.5%	169	354	169	354	29	61	145	303	164	344	48	101
Running/ jogging	n/a	9.6%	n/a	295	n/a	295	n/a	51	n/a	253	n/a	287	n/a	84
Skate, rollerblade, scooters	49.3%	0.2%	138	6	138	6	24	1	118	5	134	6	39	2

- Based on national ABS data 2009 for 5-14 year olds and SA ERASS Australian Sports Commission data 2010 for 15 years and over

- Based on 8% 5-14 year olds and 88% 15 years and over to reflect potential higher density development population profile

The data reinforces the need for walking and cycle pathways linked to linear open space, connections to surrounding areas through linear networks and paved areas that support scooters and roller activities. There is particularly high potential demand in the AAMI, Bowden, Seaton and St Clair development areas for linear open space.

In addition, there is likely to be a need for play spaces to support children living in the development areas as well as children visiting grandparents and other relatives. Places for gatherings and relaxing that include picnic areas, shady seating and activity opportunities will also be important to compensate for small and no backyards and to contribute to encouraging social integration.



Demand and Supply for Potential Higher Density Development Areas

Potential demand and supply considerations are provided for the following development areas:

- **AAMI Stadium Site**
- **Kilkenny Site**
- **Woodville Village**

These areas represent potential Transit Oriented Developments (TOD) that will require planning for in the future and could include higher density development.

Considerations are not provided for other growth areas for the following reasons:

- Planning for the Bowden Urban Village and St Clair site has already progressed beyond an initial assessment of demand and supply.
- The transit corridor considerations will be more complex and population figures are not known for these developments as yet.
- Woodville West is an infill area and that will generally focus on higher density development.

The information provided on the following pages is intended for use in the Open Space Provision Framework planning recommended in the Planning Guide for Open Space in Higher Density Development Areas.

This information also provides a context for Open Space Planning examples for AAMI Stadium and Kilkenny Industrial sites that have been selected to demonstrate how the Planning Guide will operate.



AAMI Stadium Site

Demand Considerations

- The population size is estimated to be between 2,600 and 3,600. This is a relatively good number that will justify accessible sport and recreation open space within and beyond the development.
- The development could attract larger proportions of older people given the existing character of the West Lakes area (16.31% 45-54 year olds, 19.03% 55-64 year olds and 23.7% 65 years and over). This could result in high demand for lower impact and informal activities such as walking, bike riding and lawn bowls.
- There is potentially demand for one oval and one playing field which should also cater for the Seaton Housing SA development population. In particular there could be demand to cater for Australian Rules Football, cricket and soccer. Any oval or field should be accessible to the broad community for recreation as well as sporting use.
- Regardless of the population age there is likely to be strong demand for linear and other open space that supports walking, jogging, bike riding and other activities.
- Recreation open space that supports gatherings and social connection is likely to be required. This space could be connected to the sporting open space.
- Play spaces and hard surfaces are likely to be required to cater for grandchildren and visitors as well as children living within the development.
- Recreation open space that caters for workers and users of the Westfield West Lakes complex could also be required.

Supply Considerations

- The site includes a large existing oval with grandstands and seating (AFL facility). The oval should be retained to cater for sport and broader community demands. Whilst there are other sportsgrounds nearby (Grange Recreation Reserve and Semaphore Park sportsground) the demand for another oval and field would be difficult to cater for at these sportsgrounds. The grandstands could be reviewed and the space utilised for alternative development.
- Large grassed areas exist that are currently used for sport and part of the grassed area could be retained for open space. There will be a need for informal recreation open space within the development as well as sporting open space.
- Golf courses surround the development area (Grange, Royal Adelaide and Riverside golf clubs). These facilities could attract retired people to the development.
- The West Lakes bowling club is located on Bartley Terrace and this should aim to cater for the population growth.
- There is potential to link to lakefront reserves on the eastern and western side of the boating lake.
- Establishing and maintaining linear connections to the lake and to surrounding west lakes areas will be important.
- The beach and beach foreshore areas are only 1.2km from the development area. Potential connections to Coast Park and through to the River Torrens Linear Park should be considered.



Kilkenny Site

Demand Considerations

- The future population in the development site is estimated to be around 600 people. This number will not justify a high provision of open space for sport and recreation activities in itself.
- The inner city location could be an attraction to younger people and this could create demand for walking, jogging and bike riding facilities linked to linear open space.
- The transport and inner city focus of the Kilkenny development could create demand from beyond the development area for linear connections through to the transport node.
- There is no justification for sporting open space within the development area.
- Based on the existing Kilkenny population (5.81% 0-4 years and 12.0% 5-14 years) there could be good numbers of children living in the area which will create demand for play spaces (depending on the character of the housing).
- The population could potentially be quite active and this could include demand for local open space with physical activity opportunities. Specific opportunities such as exercise equipment, volleyball and ping pong would need to be identified when the population is becoming established.

Supply Considerations

- There is no existing open space within the development area.
- McInerney Reserve located to the north of the development (north of the railway line) is a key reserve that could provide a focus for the population.
- Opportunities to link open space to the Kilkenny Primary School and utilise the school grounds for community use should be considered.
- The site is surrounded by significant barriers including Port Road, Kilkenny Road and the Port Adelaide railway line. This highlights the need to provide usable recreation open space within the development area to provide a focus for the residents and alleviate the urban impacts (noise, traffic, pollution etc).
- Creating linear connections beyond the development area could be difficult due to the barriers, unless there can be a linear connection along the railway line or Port Road to the Adelaide Parklands.
- There are a few sportsgrounds around the development area that could possibly be enhanced to increase capacity and support the new population including Woodville Oval, Sam Johnson Sportsground and St Clair sports fields. The potential to increase capacity should be considered in future planning for these sites.
- The potential use and connection of the Adelaide Parklands for sport and recreation should be considered.



Woodville Village

Demand Considerations

- The estimated population of the Woodville Village is relatively small at 1,000 people.
- The development area in itself does not justify sporting open space. However, there will be demand for sport from the wider area.
- Given the link to transport the population could be relatively young and potentially quite active.
- There is likely to be strong demand for walking and cycle paths and related linear open space from the development area and the surrounding areas due to the transport connection.
- There could be demand for recreation open space to cater for workers in the commercial centre (places for activity such as walking and yoga and to relax and have lunch).
- The surrounding Woodville population has a mix of age groups including particularly large proportions of middle aged adults. This could create demand for walking tracks and lower impact fitness spaces from the surrounding area.
- The nearby St Clair population (projected to be around 2,400) could create demand for open space and public realm around the Woodville Village including plaza's, cafes and spaces that support gatherings and activities.

Supply Considerations

- Wetlands and informal recreation open space will be incorporated within the St Clair urban development. Linear connections between Woodville Village and the St Clair development should be established including open space connections.
- Sporting open space will be retained as part of the St Clair urban development and this should aim to service the Woodville Village residents.
- Some open space should be retained around the Woodville Village to provide accessible recreation and public realm spaces that directly service residents and workers.
- Linear connections to the railway station and other transport nodes will be essential.



Planning Examples for Potential Higher Density Development Areas

The Best Practice Open Space in Higher Density Developments Project involved developing a Planning Guide that can be used by local councils and developers to guide the future provision of open space in higher density development areas.

The Planning Guide recommends three planning stages as follows:

Planning Stage 1 - Open Space Provision Framework:

Determine the broad requirements and fundamental principles for open space specific to the development area, taking the existing provision (within and around the development area) and potential demands into consideration. This will provide a Framework for further planning.

Planning Stage 2 – Open Space Precinct Plan:

Plan for base Primary Open Space (12.5%), including key parks, connections and plaza's once the transport nodes and destinations (recreation, social, commercial) are known. The emphasis should be on ensuring the main public open space is defined, available and appropriately located at the time of development.

Planning Stage 3 – Open Space Master Plan:

Plan for Contributory Open Space including smaller parks, secondary connections, communal and private open space and open space for stormwater management to achieve a good provision of open space. The amount of additional open space required will depend on a number of factors including the character of the development area, the projected size of the population and the provision of open space in adjoining areas.

The Open Space Provision Framework (Planning Stage 1) includes 'advanced planning steps' and these have been used to undertake initial planning for two development areas for the City of Charles Sturt. The development areas selected as planning examples include the AAMI Stadium site at West Lakes and the Kilkenny site. A visual presentation of the initial planning findings and opportunities is provided on the following pages for these two development areas.

STEP 1: Consider the potential of the existing open space provision in the development area.

1. How much open space is provided in the development area and how does this compare with the 12.5% legislative requirement?
2. What is the current use of the existing open space, including by residents in the surrounding areas?
3. How appropriate is the location, size, type and quality of the existing open space? Consider profile, access and potential usability.
4. Does any existing open space have a linear or habitat corridor connection that should be retained?
5. Does any existing open space have biodiversity or other environmental value that requires protection and may constrain usability for recreation?
6. If any existing open space has a sporting focus, what is the current capacity for additional use (giving consideration to existing use and demands)?
7. What is the potential destination focus of the existing open space (taking the size, location, character and potential link to future housing into consideration)?
8. Which existing open space parcels should be retained and what is the potential function of each parcel of open space?

STEP 2: Consider the existing or proposed open space provision in the surrounding areas.

1. What public open space is provided in the surrounding areas and what is the potential value of the open space to the development area (from a recreation, social and environmental perspective)? Consider whether there is an oversupply or an under supply based on the existing population size and in relation to 12.5% of the land area. Also consider the role and hierarchy of the open space and the potential to service the development area population.
2. Is there any State Government or private open space that could be of value to the future development area, e.g. schools or universities that are surplus to needs and could be retrofitted as open space?
3. How accessible and usable is the surrounding open space to the future development area population? Are there any constraints to access (main roads, railway line, distance to residents etc)?
4. If any existing open space in the surrounding areas has a sporting focus (including a school), what is the current capacity for additional use (giving consideration to existing use and future demands in the District)?
5. Consider whether the surrounding areas are lacking district or other 'destination' open space and whether there is a need and potential for the development area to provide the destination (e.g. the potential to link a park or connection to commercial, transport or community components within the development area).

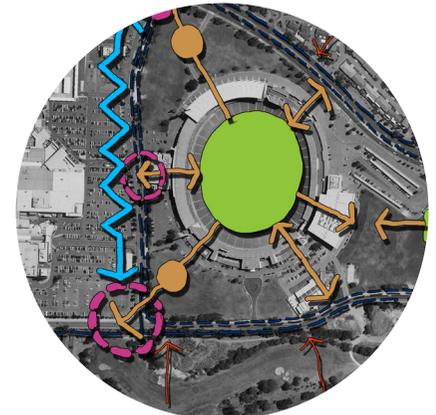
STEP 3: Broadly consider the potential fabric and character of the development area and region.

1. What is the shape and size of the development area and what is the appropriate spread of open space. Consider whether there is need for a central park (e.g. if the development area has a consistent radius) or a spread of key parks (e.g. if the development is long and narrow such as along a transit route).
2. What is the character and fabric of the region and how will this influence the character and role of open space in the development area?
3. What is the potential built form character in the development area and how can the open space enhance the development (taking potential building height, spread and area into consideration)?
4. Are there any features that should be protected or have high value as open space, including:
 - Natural areas, biodiversity, natural corridors
 - Viewing areas
 - Heritage features
 - Landscape features (trees and unique landscapes)
 - Watercourses, including culverts that could be transformed to open space
 - Deep soil zones (corridors)

STEP 4: Determine the fundamental principles for open space provision.

Taking the Step 1, 2 and 3 findings into consideration:

1. Consider the types and hierarchy of open space that could be required, e.g. large parks, smaller parks, connections, streetscapes, natural settings.
2. Consider the general location principles (central large park, spread of smaller parks etc).
3. Consider the connection principles, e.g. which main roads or facilities should have an open space connection, the need for connections between open space parcels, the need for connections to open space in surrounding areas etc.
4. Develop principles relating to the potential fabric and character of the development, e.g. the need to connect open space to transport nodes or commercial centres, the need to retain cultural features, the required link between key open space and transport nodes and commercial centres etc.
5. Develop an Open Space Provision Framework document that clearly outlines the principles and potential approach to open space provision, including the need to rezone land or consider land acquisition. The document should include mapping and sketches.



Existing Open Space Provision - Step 1

1. No existing open space provision contained within existing development site
2. Consider impact of existing linear transport corridor and opportunities to provide open connections
3. Critical need to capitalise on existing open space provision to east of site (MJ McNerny Reserve)
4. No sporting focus within site or the adjoining open space.
5. Maintain significance of linear transport corridors for access
6. Limited existing habitat value surrounding (associated with transport corridors)
7. Focus on generous open space provision that integrates existing open space and provides a link public realm.



Kilkenny Site

Open Space Provision in the Surrounding Areas - Step 2

1. Significant areas of under provision of open space to north, east and west
2. Explore opportunities to connect with and provide access to existing open space at Kilkenny Primary School
3. Evaluated connectivity of existing open space to develop areas - consider impact of rail corridor (3a)
4. Develop links and transport connects (public) sports grounds to offset lack of provision within surrounding areas (Woodville Oval, BASA complex and Bonython Park)
5. Establish variety of open space types and destinations
6. Increase provision, function and amenity of existing open space (MJ McInerney Reserve)



Kilkenny Site

Potential Fabric and Character of the Development Area - Step 3

1. Ensure open space connections and provision responds to existing residential edge to north and east
2. Consider open space provision within the development site to increase connections both internal and external
3. Develop open space opportunities that respond to the public realm qualities of Port Road and Kilkenny Road.
4. Respond to the connection opportunities and barrier provided by the existing rail corridor
5. Maintain connections to existing open space.
6. Consider open space opportunities that capitalise on existing built form and the potential adaptive reuse for community or commercial purpose



Kilkenny Site

Principles for Open Space Provision - Step 4

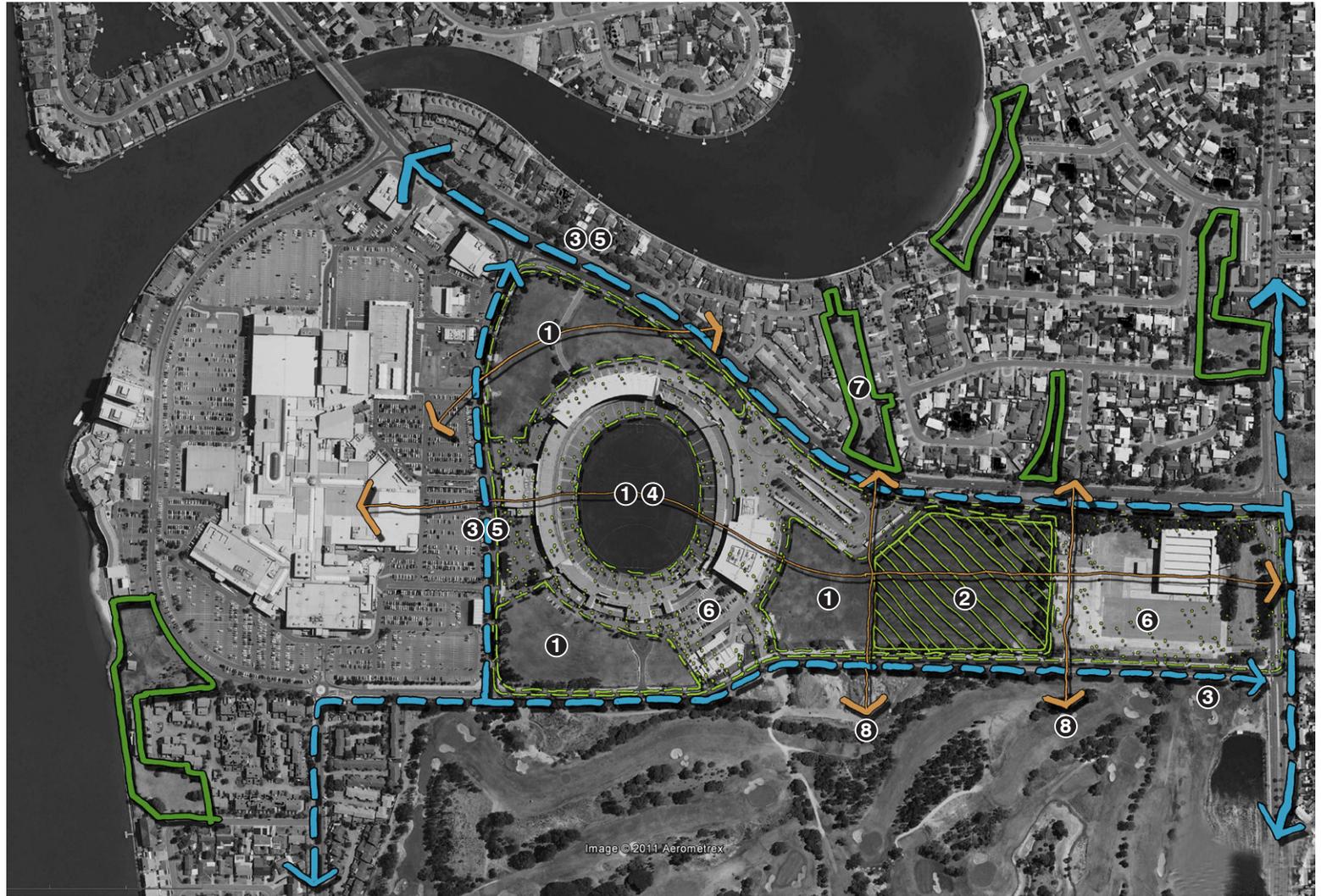
1. Establish strong connection with existing urban fabric Reflect in grain and public realm design.
2. Establish required base open space provision (based on 12.5%)
3. Develop existing reserve as a significant space for both development and existing residential areas
4. Locate key transport destination (select based on urban precinct plan open space opportunities)
5. Create open space and public realm responses that capitalise on main street/commercial destinations
6. Identify key open space links and corridors that connect destinations
7. Establish strong internal links that create interconnected open space provision.
8. Provide strong connections to port road.
9. Increase links with Kilkenny primary school and establish civic/community location
10. Capitalise on connection, habitat and amenity potential of rail corridor particularly in relation to crossing points within the development.



Kilkenny Site

Existing Open Space Provision - Step 1

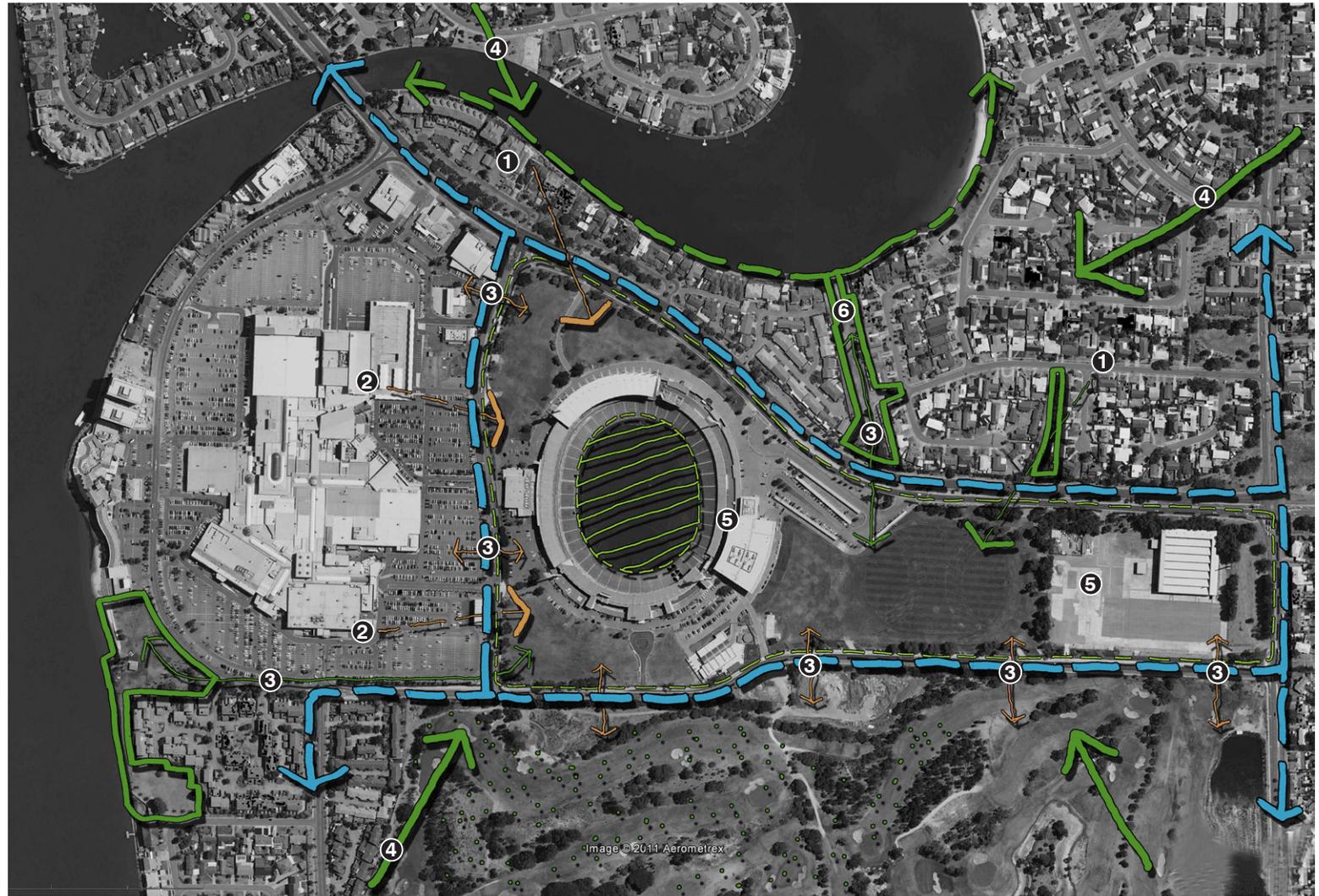
1. Significant existing open space provision across entire site
2. Required 12.5% open space provision.
3. Significant containment of site by main arterial roads provide both a constraint and connection opportunity.
4. Opportunities to retain existing sports open space while balancing demand for other forms of open space and need to develop a generous open space provision.
5. Maintain significance of linear transport corridors.
6. Limited existing habitat value within the site or surrounding landscape areas.
7. Opportunities to integrate existing open space to provide additional provision as well as connections to West Lakes.
8. Potential to capitalise on open space amenity (visual) provided by golf course.



AAMII Stadium Site

Open Space Provision in the Surrounding Areas - Step 2

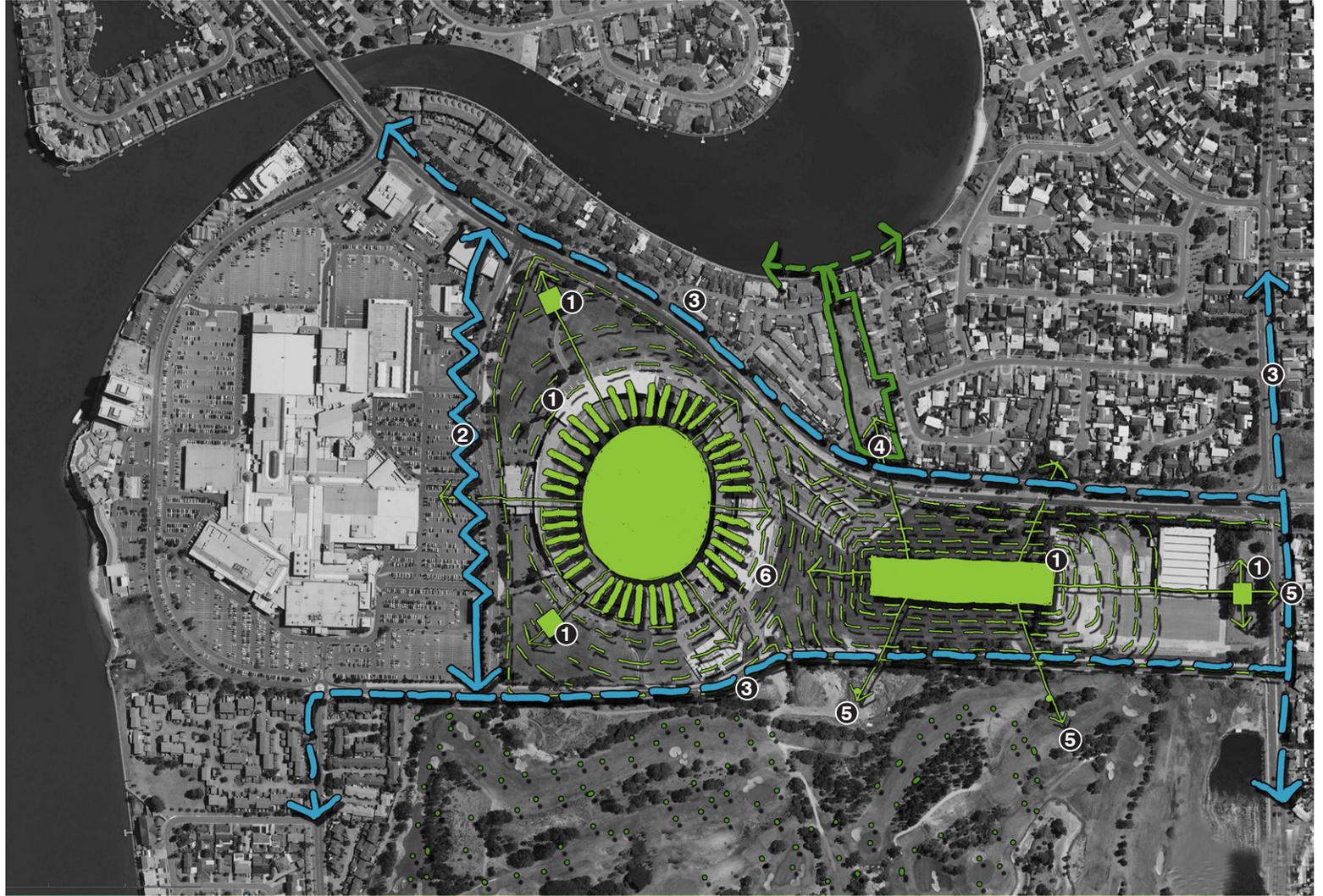
1. Opportunity to enhance open space provision (quality and variety) within existing residential areas to the North.
2. Absence of open space provision within shopping centre.
3. Opportunities to provide connection to surrounding open space, public realm and private open space (golf course)
4. Opportunity to provide links to site for sport and develop as a regional sports ground, building on existing function of AAMI Stadium site.
5. Establish a variety of open space types and destinations.
6. Increase linkages to West Lakes through Maramba Reserve.



AAMI Stadium Site

Potential Fabric and Character of the Development Area - Step 3

1. Consider open space opportunities that respond to the existing open space provision within the site.
2. Develop open space opportunities that respond to public realm / shopping centre character of West Lakes Centre.
3. Minimise impact of arterial roads (barriers) while increase potential connectivity to edge of site (public transport)
4. Maintain connections to existing open space particularly Pedlar Reserve and Maramba Reserve.
5. Maintain links and visual connections to the golf course (explore potential access longer term)
6. Consider open space opportunities that capitalise on existing built form (the stadium) and provision of open space.



Principles for Open Space Provision - Step 4

1. Establish strong connections with existing urban fabric.
2. Establish required open space provision (Base on 12.5% and existing open space character)
3. Develop links to existing open space.
4. Identify key entrance nodes and interfaces with adjoining land uses.
5. Create open space and public realm responses that capitalise on potential of West Lakes Shopping Centre as a destination.
6. Develop specific open space responses that build on the existing sports focus of AAMI Stadium site.
7. Establish strong interval links that create an interconnected open space provision through the centre of the site.
8. Identify critical open space links and corridors that connect destinations, residential areas and open space.
9. Increase visual permeability of southern edge of development to capitalise on amenity of golf course.
10. Recognise the connective potential of surrounding road corridors.



AAMI Stadium Site

Gaining Support from Communities for Higher Density Developments

Changing Perceptions

The perception of higher density can be negative with fears that building heights will impact on the character and amenity of suburbs, buildings will be poor quality and poorly designed, and developments will attract lower socio-economic residents who could be renters rather than owners and have a limited sense of community. Developments of this kind have certainly been established in the past in Australia and internationally.

However, the Best Practice Open Space in Higher Density Developments Project has identified many best practice approaches to higher density development where building heights are managed, building design and infrastructure is good quality, building offsets and pathways create a sense of space and there is a good provision of quality open space.

Quality open space including a good amount of usable open space, innovative and functional design, quality landscapes and infrastructure, and the inclusion of unique natural and built features is essential for achieving best practice higher density developments. In larger developments this could include establishing some higher profile parks, linear connections and public realms that are accessible to and benefit the broader community. For example, the AAMI Stadium development site provides an excellent opportunity to create a large sport and community space through the existing oval that is accessible to the broad community for activity and events. If higher density developments and associated open space are appropriately designed, located, managed and accessible, the broad community perception of higher density can potentially be more positive.

The most obvious way to change perceptions in the City of Charles Sturt is by Council committing to achieving high quality developments with excellent open space provision and quality. This will require a proactive approach to working with developers and encouraging best practice developments.

The Open Space Principles and Guidelines and Planning Guide developed through the Best Practice Open Space in Higher Density Developments Project should be used by the City of Charles Sturt and developers working with Council to achieve best practice. This could include establishing development controls and agreements that reflect the best practice open space principles and guidelines.

Following the development of one or two best practice higher density developments, communities can then make better informed judgments based on experience rather than perception and this should increase the general support for higher density developments.



Promoting Best Practice Commitments

Gaining potential developer support for best practice approaches to higher density development in the City of Charles Sturt will be essential to achieving quality developments. This can be undertaken through one on one meetings and a higher profile approach could also be adopted such as invitations to special events including the launch of the open space best practice principles and guidelines. Positive and open communication will be the necessary to work through the desired quality outcomes with developers.

To achieve community support for higher density developments it will be important for communities in the City of Charles Sturt to be aware of the principles relating to best practice and Council's commitment to achieving quality developments by encouraging best practice. Promoting a commitment to establishing quality open space and public realm that is accessible to and will benefit the wider community will also be important. The promotion could involve:

- Promotion of Council's commitment to the best practice principles and guidelines through a launch and media releases
- Promotion of proposed developments that incorporate the best practice principles and guidelines through brochures and information linked to media releases, mail outs, shopping centre displays, field days and events.

One opportunity to gain both developer commitment to best practice and positive community awareness could be to hold events and promotions where Council could present proposed higher density development areas and best practice commitments and developers could promote their approaches to best practice and future developments. This could be through a special 'field day' that also promotes other Council services and planning or it could be connected to existing events and promotions.

Following the development of the first best practice higher density development in the City of Charles Sturt a community event could be held within the development area that highlights the features of the development and the opportunities for broader community access and enjoyment. The availability and value of community spaces will need to be promoted for people to gain a full understanding of the broad community value of such developments. An event within the Bowden Urban Village could be an option although higher density is limited within this development.

Awareness, accurate information and experience will be the key to gaining broad community support for higher density developments and this will require coordinated and consistent approaches and messages relating to quality and best practice by the City of Charles Sturt.



