

SPRINGFIELD CENTRAL STADIUM PRECINCT

Development Areas 22A and 22B

Master Area Development Plan (MADP) - Volume 1

Purpose of Document

Master Area Development Plan (DA22A- 22B)

This document should be read in conjunction with the supporting document entitled: "Master Area Development Plan 22A-22B: Volume 2 Supporting Information" and the following documents:

- Springfield Town Centre Concept Plan (including the Springfield Town Centre North Overarching Master Planning Framework); and
- Springfield Open Space Master Plan

The Supporting information provided in Volume 2 does not form part of the Master Area Development Plan (MADP) but provides information required in accordance with the Springfield Town Centre Concept Plan (TCCP) to assist with the implementation of the Master ADP and has been utilised to support various outcomes detailed in this Master ADP.

The Master (initial) ADP, including any supporting information, does not in any way allocate construction or financial responsibility to Council or the Developer outside of that already outlined in the Springfield Infrastructure Agreement or Springfield Town Centre Infrastructure Agreement.

This MADP was prepared and submitted to Ipswich City Council by Springfield City Group (formerly Springfield Land Corporation) in accordance with the requirements of the Springfield Structure Plan (SSP) and Springfield Town Centre Concept Plan (TCCP).





Table of Contents

Volume 1 - MADP

1.	Intro	oduction	1
	1.1.	Purpose and Applicability of Document	1
	1.2.	Role of MADP for DA22A-22B	1
	1.3.	MADP Approval	1
	1.4.	Aims of MADP 22A-22B	2
2.	Site	Context and Analysis	7
	2.1.	Planning and Statutory Context	7
	2.1	.1 South East Queensland Regional Plan	7
	2.1	.2 Planning Scheme & Strategic Framework	7
	2.1	.3 Springfield Structure Plan	7
	2.1	.4 Springfield Town Centre Concept Plan	8
	2.1	.5 Area Development Plans	8
	2.1	.6 Springfield Infrastructure Agreement/ Springfield Town Centre Infrastructu	ıre
		Agreement	8
	2.1	.7 Springfield Indicative Phasing Concept Plan	9
	2.1	.8 Springfield Open Space Master Plan	9
	2.1	.9 Springfield Drainage Master Plan	10
	2.1	.10 Springfield Water Supply Master Plan	10
	2.1	.11 Springfield Sewerage Master Plan	11
	2.2.	Site Context	11
	2.2	.1 Regional Context	11
	2.2	.2 Locality & Development Area Context	11
	2.3.	Site Analysis	12
	2.3	.1 Development Area Boundaries	12
	2.3	.2 Settings, Views and Interfaces	13
	2.3	.3 Topography	13
	2.3	.4 Access and Connectivity	13
	2.3	.5 Drainage and Flooding	14
	2.3	.6 Cultural Heritage Assessment	15
3.	Mas	ster Plan - Vision, Principles and Elements	16
	3.1.	Vision	16
	3.2.	Master Plan Principles	18
	3.3.	Master Plan – Key Elements	19
	3.3.1	Key Issues	19
	3.3.2	Site Specific Opportunities	21

	3.3	3.3	Context	21
	3.3	3.4	Character	22
	3.3	3.5	Streets	22
	3.3	3.6	Access	23
	3.3	3.7	Topography	23
	3.3	8.8	Vegetation	23
	3.3	3.9	Drainage	23
	3.3	3.10	Minimum Level of Embellishment	24
	3.3	3.11	Phasing	24
	3.4.	De	sign Response	25
	3.4	1.1 L	ighting and Noise	28
4.	Ma	ster	Plan	29
	4.1.	Laı	nd Use	29
	4.1	1.1	Overall Structure	29
	4.1	1.2	Land Use Types	30
5.	De	sign	Theme Response	33
	5.1.	Pla	cemaking and Streetscapes	33
	5.1	1.1	Mobility Network & Overall Strategy	33
	5.1	1.2	Street Network and Circulation System	33
	5.1	1.3	Street Type	34
	5.1	1.4	Pedestrian and Cycle Network	34
	5.1	1.5	Access	34
	5.1	1.6	Public Transport	35
	5.1	1.7	Active Transport	36
	5.1	1.8	Permeability, Activity Areas and Active Frontages	37
	5.1	1.9	Event Management Plan	37
	5.2.	Pu	blic Realm Open Space	38
	5.3.	Bu	ilding Form Intent, Building Footprints, Landmark Buildings and Corner Site	es 38
	5.3	3 1	Building Height	38
		3.2	Landmark Buildings	38
			Fences and Walls	39
	5.4.		ilding Mass and Setbacks	39
	5.5.		ilding Elements and Detail	39
	5.6.		r Parking and Servicing	40
	5.6		Car Parking	40
			Servicing	41
	5.7.		blic Safety	41
	5.8.		blic Lighting and Noise	42
	5.9.		matic Design Considerations	42
	5.10		ndscape. Streetscaping. Signage and Advertising	42

5.10	.1 Landscape Intent	42
5.10	.2 Planting	43
5.10	.3 Plant Selection	44
5.10	.4 Streetscaping	44
5.10	.5 Signage and Advertising	44
6. Infrast	ructure	45
	Fit for purpose – DA22A Fit for Purpose – DA22B	45 45
6.3.	Embellishment – DA22A	46
6.3.1	Open Space Embellishment DA22A	46
6.3.2	2. Sewerage	46
6.3.3	B Electricity	47
6.3.4	Water	47
6.3.5	Roadworks	47
6.3.6	General General	48
6.4.	Embellishments – DA22B	48
6.4.1	Open Space Embellishment	48
6.4.2	Sewerage	48
6.4.3	Water	49
6.4.4	Roadworks	49
6.4.5	Electricity	50
6.4.6	General	50
6.5.	Stormwater	50
6.5.1	Stormwater Quantity Management	50
6.5.2	Stormwater Quality Management	51
6.5.3	Water Sensitive Urban Design	53
6.6. 7. Recor	Maintenance responsibilities within DA22A figuring a Lot	54 55
	ne 2 Supporting Information (1) Potential Embellishment Options	

- Annexure (2) Road Network Plans
- Annexure (3) Sewer Connections and Opossum Creek Trunk Sewer Alignment
 - a. Developer's Trunk responsibility
- Mountain Creek Realignment Plans (Council's Annexure (4) Responsibility)
- Annexure (5) Cultural Heritage

1. Introduction

This document reflects the principal considerations that underpin the master plan for Development Areas 22A and 22B (DA22A-22B), to be known as the Springfield Central Stadium Precinct, of the Springfield Town Centre North area.

1.1. Purpose and Applicability of Document

The Springfield Central Stadium Precinct will ultimately be established as a boutique Premier Sports Stadium Facility of regional and national significance which will be developed over time.

This Master Area Development Plan (MADP) document has been prepared in accordance with the Springfield Structure Plan (SSP) and the Springfield Town Centre Concept Plan (TCCP). The TCCP was first approved on 16 July 2002 and provides a conceptual framework for the whole of the Springfield Town Centre including DA22A-22B. The TCCP has been amended on several occasions since it was adopted.

1.2. Role of MADP for DA22A-22B

This MADP document intends to communicate the site characteristics, open space principles, conceptual master planning ingredients, development guidelines, and implementation measures appropriate for the construction of the Springfield Central Stadium Precinct on DA22A-22B of the Springfield Town Centre. Specifically, this MADP for DA22A-22B:

- · relates to the whole of the land identified as DA22A- 22B in the TCCP;
- is the mechanism whereby the master planning of the SSP and TCCP, including the Springfield Town Centre North Overarching Master Planning Framework (OMPF), is put into effect for DA22A-22B;
- illustrates the indicative master planning and design elements involved in the creation of the Springfield Central Stadium Precinct;
- describes the range of land uses and design guidelines;
- describes the indicative pattern and form of development that will be developed in stages over time; and
- functions as a subdivision proposal and/or potential land use proposal to produce an integrated master plan for development.

1.3. MADP Approval

Upon Council approval, this MADP will authorise the proposed development of DA22A-22B in accordance with this MADP. However, approval of the MADP does not limit evolution of the conceptual design illustrated in the Master Plan at the ADP stage.

Before development can occur on DA22A-22B or any part thereof, it will be necessary to apply to Council for a Development Permit approval for an ADP which authorises the

reconfiguration and/or use of all or part of DA22A-22B for the purposes shown or nominated on the ADP.

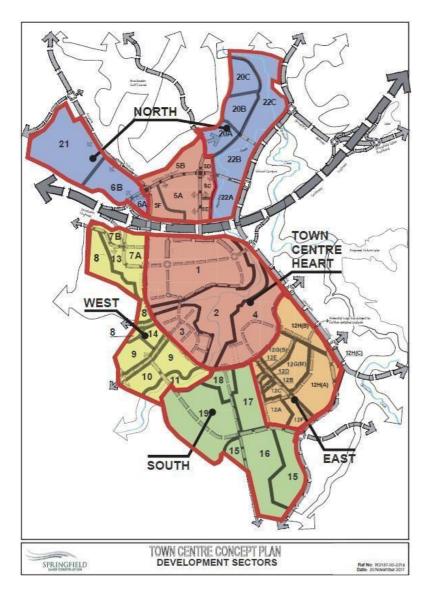


Figure 1.1- Development Sectors- (Town Centre Concept Plan) (as it relates to Development Sectors only)

1.4. Aims of MADP 22A-22B

DA22A-22B is located in the Town Centre Frame – Town Centre North (**Figure 1.1**) and includes the Recreation Precinct and Town Business Precinct (**Figure 1.2**) in accordance with the TCCP (as amended).

The TCCP states the intent of Development Areas 22A-22C as:

"These Development Areas are to comprise Citywide sporting facilities with complimentary commercial uses, Local sporting facilities, Citywide linear parkland and District recreation parkland incorporating the preferred dominant land uses of the Recreation Precinct and Town Business Precinct."

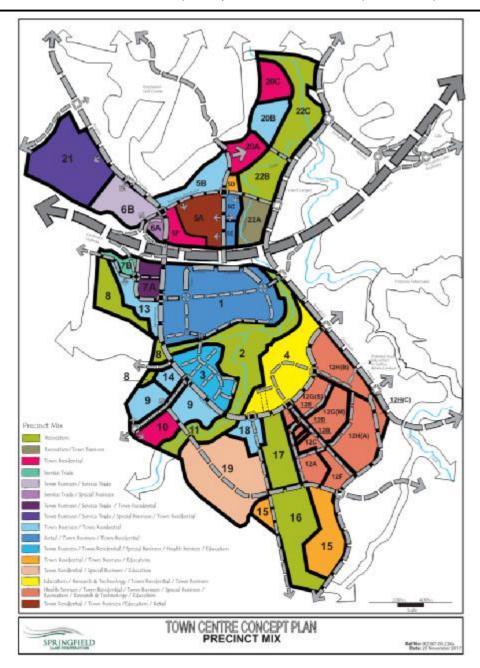


Figure 1.2- Precinct Mix (Town Centre Concept Plan) (as it relates to DA22A – 22C only)

Development Areas 22A and 22B forms an integral part of the Town Centre Frame for the Springfield community, linking the high intensity mixed use nature of the surrounding commercial, retail, educational and residential uses around a high-quality sporting corridor. The sporting facility represents a rare opportunity to incorporate a range of active and passive recreational opportunities that will act as a central focus of the development of the town centre.

The statutory obligations as originally planned in relation to Development Areas 22A and 22B relate to the delivery of a Citywide Sports Facility over the whole of the precinct. However, with the intention to deliver a boutique 'Premier Sports Facility' with stadium, the planning for the precinct is now envisaged as detailed below.

The minimum standard of facilities to be delivered within DA22A is to be the equivalent of one (1) citywide level sporting facility consistent with the desired standards of service for Citywide level sportsgrounds and courts as detailed in Ipswich City Council's Local Government Infrastructure Plan (LGIP: Public Parks Update 2016 and associated Schedule of Works and Desired Standards of Service and supporting information) to provide active and passive recreational opportunities. Such facilities will be supported by a range of recreation facilities including clubhouse, pedestrian and cycle facilities and linkages. A regionally or nationally significant facility of this nature will require co-investment and cooperation from all levels of Government and the commercial sector. However, for this infrastructure to be eligible for any trunk infrastructure offsets or funding, must for the perpetuity of the facility, provide freely accessible public open space to the community (in accordance with the park type and function outlined in Council's LGIP and associated supporting documentation). To this end, appropriate planning, community engagement (in accordance with Council Policy), design and operational consideration is needed to ensure a minimum level of public accessibility is preserved and appropriate measures in place to prevent limitations or removal of this accessibility in the future.

The minimum standard of facilities to be delivered within DA22B is to be the equivalent of one (1) local sports and courts facility as detailed in Ipswich City Council's *LGIP* to provide publicly and freely accessible active and passive recreational opportunities. Such facilities will be supported by a range of recreation facilities including clubhouse, pedestrian and cycle linkages.

However, the ultimate development form for DA22A is a boutique 'Premier Sports Facility', in accordance with the role and function outlined in Council's Local Government Infrastructure Plan (and associated supporting documentation and Implementation Guideline 27: *Guidance on Recreation Range and Opportunity Outcomes Arising from Embellishment of Public Parks*). DA22B is intended to provide local sporting facilities. These sporting facilities are to be known as the Springfield Central Stadium Precinct and will evolve over a long period of time. Stadium facilities with the potential to accommodate 30,000 people on DA22A will develop over time.

Development Area 22A will accommodate a stadium primarily designed for use by the AFL. Development Area 22B will accommodate local sporting fields. The facility on Development Area 22A may include a high-performance training and administration centre, which includes a broad range of land uses that will provide every opportunity for a sporting team participating in an elite national sport to be successful, both on field and off field. Subject to appropriate acoustic and lighting assessment (submitted as part of the relevant ADP application), both facilities may be designed to permit other community and entertainment activities such as concerts, festivals and extreme sports events on occasions.

Given the time required for the precinct to evolve and achieve its full development form, interim or intermediate options for the precinct may be developed. Consideration may also be given to a potential all-weather artificial hybrid playing surface on DA22B should suitable funding become available. The sports fields will be supported by a range of seating options, including covered grandstands on DA22A, open terraces and grassed areas, clubhouse and administration facilities, indoor and outdoor training and recovery areas, amenities, parking and plaza areas. Outdoor broadcast quality lighting may also be provided on DA22A where elite level sports are being played, subject to lighting assessment on amenity of sensitive receivers.

To achieve the long-term objective for a boutique 'Premier Sports Facility', the MADP seeks to maximise flexibility. Key elements/factors that may be considered in developing a sports facility include:

- Build an AFL stadium of national significance;
- Build a suitable training facility;
- Optimising facility functionality and flexibility;
- Ensuring that any private sporting club use is balanced with reasonable public access to the facility;
- Maximising relevant commercial and opportunities within the precinct and also capitalising on and enhancing public and community outcomes;
- · Identifying spatial needs of a football club and the community in 10-15-20 years' time; and
- Identifying a strategy for the 30+ year vision, which must include engagement with the community to develop a vision that responds to the needs of Ipswich.

This MADP document aims to communicate the intentions and elements that form the basis for the development of the Springfield Central Stadium Precinct as a recreational/sporting focus of the Springfield Town Centre. In illustrating an indicative master plan for the precinct, the document aims to provide a picture of the development and layout of the area towards achieving the desired outcomes while allowing flexibility during more detailed design stages.

Specifically, the Springfield Central Stadium Precinct:

- Offers the ability for the provision of a diverse variety of sporting facilities and recreation areas that provide formal and informal environments in which to pursue active and/or passive recreational activities, as well as ancillary commercial activities that promote gathering, interaction and a healthy outdoor lifestyle;
- Contributes to the connectivity and accessibility of the Springfield Town Centre through vehicular, cycle and pedestrian linkages between nearby activity precincts as well as the overall open space network;
- Will support the ongoing principle of encouraging non-vehicular modes of transport;
- Will enhance and support physical and visual interaction between the precinct and adjacent activity areas through legible and permeable external interfaces between the Mountain Creek riparian corridor, neighbouring Development Areas, the public open space corridor and the road network;
- Will provide for car and bus parking and set-down areas accessed via adjoining road frontages to minimise impacts on public road infrastructure along with providing a comprehensive integration with the adjacent Springfield Central railway station and associated public transport network.

To this end, this MADP seeks to:

- Identify the road network and other services necessary to service the Springfield Central Stadium Precinct within the context of the Town Centre;
- Outline the range of potential intended uses and activities for recreational outcomes and ancillary or complementary commercial development within the precinct;
- Ensure the creation of high quality and safe pedestrian and cycle friendly networks integrated with the overall movement network;
- Capitalise on the signature location of the Development Areas, through emphasis on a high quality and comprehensive offering of recreational and sporting opportunities for the Springfield community, with the potential to develop to a future level of regional and/or national significance which could conceivably facilitate a sporting team participating in an elite national sport;
- Create a relationship with the adjacent road frontages and adjoining Development
 Areas by activating frontages at strategic locations, creating specific access entry
 points, promoting strong landscaping features and encouraging community gathering
 and interaction with the sportsfields; and
- Ensure best practice water sensitive urban design (and necessary land area) is
 planned and implemented to support, integrate with and protect Mountain Creek,
 respond to stormwater management requirements and enhance public open space,
 amenity and livability.

This MADP also aims to outline the indicative phasing and implementation measures for the parkland development, including area staging and timing, embellishment and maintenance responsibilities.

2. Site Context and Analysis

2.1. Planning and Statutory Context

2.1.1. South East Queensland Regional Plan

The South East Queensland Regional Plan 2017 (Shaping SEQ) sets out a 50 year outlook for the development of the SEQ region, establishing a policy framework focusing on the next 25 years. Its aims are to ensure that this population can be accommodated and that adequate housing diversity, services, and infrastructure can be provided to ensure a quality urban environment and lifestyle is achieved.

The Springfield Structure Plan area represents a significant opportunity to accommodate a proportion of this future growth and provide appropriate and timely services and facilities. It is in this context that the MADP for DA22A-22B proposes Citywide and Local Sporting facilities to support the residential population growth within Ipswich, with the ultimate objective to develop over time a boutique premier stadium precinct of regional significance.

Development Areas 22A-22B, like the rest of the Springfield Structure Plan area, is able to utilise site specific master planning processes, such as in the form of this MADP, to realise the required scope and flexibly for development and ensure efficient use of 'development committed' greenfield land.

2.1.2. Planning Scheme & Strategic Framework

The Ipswich Planning Scheme under the *Integrated Planning Act* was adopted on the 5 April 2006. The Planning Scheme includes the SSP that includes the suburbs of Springfield, Springfield Lakes, Spring Mountain, Springfield Central, Augustine Heights (part) and Brookwater. The SSP area has a total area in the order of 2860 hectares.

The SSP area is a significant Urban Development Area for the City of Ipswich which contributes residential, commercial and civic infrastructure within local and regional contexts. The Ipswich Planning Scheme directs the development of the Springfield Master Planned Community to the SSP. This document provides the detailed classifications in relation to planning and development applications for the Springfield area.

The remainder of the Planning Scheme is overridden by the SSP, with the exception of any applicable codes and provisions where not in conflict with the SSP, Land Use Concept Master Plan, Precinct Plan or any Area Development Plan (ADP). These planning documents, among other relevant documents, are further outlined and discussed below.

2.1.3. Springfield Structure Plan

The SSP directs and controls the process of development for the Springfield area. The SSP sets out a flexible structure for development, outlining the intents for the area, planning and design controls, and a system for the progression of more detailed planning for land within the SSP area.

Development Areas 22A-22B are identified under the Town Centre Designation, and further classified as being within the Recreation Precinct and Town Business Precinct under the SSP as illustrated in **Figure 1.1**.

The intent of the Town Centre Designation Recreation Precinct is to:

"...reserve a large area within the Town Centre as a major parkland/recreational base with an emphasis on outdoor uses."

The Town Business Precinct provides additional support to achieve the outcomes for a boutique Premier Sports Facility of regional significance and its contribution to the 'civic, commercial and cultural heart' for the Springfield Town Centre as intended by the SSP. The designations in the SSP are indicative only and are subject to more detailed investigation under the MADP and ADP processes.

2.1.4. Springfield Town Centre Concept Plan

The TCCP was originally approved by Council on 16 July 2002 and has been amended over time (last amended in conjunction with the approval of this MADP). The TCCP guides development within the Town Centre in a progressive manner with appropriate interface between precincts and development areas. The TCCP delineates the development areas within the Town Centre in respect of which the initial Area Development Plans (MADPs) must be prepared by Springfield Land Corporation and approved by the Council, as well as indicate the applicable Precincts (as outlined in the SSP) for each development area. Additionally, the TCCP provides a set of guidelines and standards which directs and outlines requirements for development within the Town Centre.

2.1.5. Area Development Plans

ADPs function as reconfiguration or land use proposals to produce an integrated plan for the development of an area, putting into effect the previous master planning initiatives of the Land Use Concept Master Plan, TCCP and MADP for the site. ADPs are to be lodged subsequent to the approval of a MADP to approve a development proposal (i.e. Development Permit).

2.1.6. Springfield Infrastructure Agreement / Springfield Town Centre Infrastructure Agreement

The Springfield Infrastructure Agreement (SIA) was adopted in 1998 and sets out the criteria for the planning and provisioning of the relevant and required infrastructure for the whole of Springfield. The Springfield Town Centre Infrastructure Agreement (STCIA) was signed on 1 December 2015 in relation to the criteria for the planning and provisioning of infrastructure within the Springfield Town Centre. These criteria relate to the requirements for traffic and transport, water, sewerage, stormwater drainage, open space, community facilities and conservation. Subsequent documents include the Springfield Indicative Phasing Concept Plan, the Springfield Water Supply Master Plan, the Springfield Sewerage Master Plan, and the Springfield Open Space Master Plan.

This MADP is in accordance with the requirements of the STCIA, but also reflects the amendments to the master plans for water and sewerage which have been approved by Queensland Urban Utilities (QUU).

The STCIA requires the following:

- · The Developer must by 31 March 2016 either:-
 - a) construct at the Developer's cost an appropriate underground stormwater drain across the Northern Sportsgrounds from Springfield Greenbank Arterial road to the creek adjoining the Northern Sportsgrounds; or
 - b) pay to Council an amount agreed between the Developer and Council (both acting reasonably) as representing the cost of construction of that work.

The Developer completed these works by the nominated date.

- After these requirements are fulfilled, Council must:
 - a) Obtain vacant possession of the area on which the northern sportsfield facilities are to be located;
 - b) Remediate the area to a state which is suitable for commencement of embellishment of the northern sports field facilities; and
 - c) Notify the Developer when these requirements have been fulfilled.

At the time of approving this MADP, Council had commenced woks.

- The Developer must embellish the northern sports field facilities in accordance with the Amended Brookwater Precinct Plan by the date which is 2 years after the later of:
 - a) the date on which the last of the above requirements are met; and
 - b) the date on which Council gives notice.
- Embellishment is at the cost of the Developer.

In lieu of undertaking the embellishment works and in acknowledgement of the Northern Sportsfield area becoming part of the Town Centre (and being removed from the Brookwater Precinct Plan) following signing of the STCIA, agreements may be entered into whereby the Developer may make a cash contribution to the equivalent to a Level 1 sportsgrounds and courts facility towards the Development Area 22A area.

2.1.7. Springfield Indicative Phasing Concept Plan

The Springfield Indicative Phasing Concept Plan (IPCP) outlines the intended land uses, lot yields and the development sequence for the SSP area. The IPCP was approved by Council (2008) and is subject to future review in conjunction with Water and Sewer Master Plans.

This MADP proposes recreational uses as expected by the TCCP and no large scale residential or commercial development (apart from a broad range of complementary land uses which support a high-performance training and administration centre) are proposed.

It is noted that the TCCP represents the Precinct Indicative Phasing Concept Plan as required by the IPCP and the requirements outlined 1.2 of the IPCP.

2.1.8. Springfield Open Space Master Plan

The Springfield Open Space Master Plan (OSMP) has been devised to support the Springfield Infrastructure Agreement and outlines the requirements and principles for the

provision of open space within the Springfield Structure Plan area. Open space, and more specifically, access to open space opportunities, are to be generally provided in accordance with the OSMP, and allow for an integrated and complementary relationship between proposed developable areas and public open space within the catchment area.

This MADP has considered the potential and requirements for parkland opportunities for Citywide level Sportsgrounds and Courts as indicated by the OSMP and as outlined within the TCCP. Pedestrian permeability and access to recreational opportunities will be encouraged through the surrounding movement network of roads and open space connections, with detailed design and outcomes to be confirmed during the ADP process.

The development of this MADP and its conceptual master plan has necessitated the consideration of the spatial distribution of open space requirements (as identified by the TCCP) within the Springfield Central Stadium Precinct (i.e. across DA22A and DA22B). For the purposes of this MADP, the open space outcomes outlined within this MADP seek to achieve the overall intent of open space provision for Development Area 22A-22C, but only specifically applying to DA22A and DA22B in the first instance. Further details will need to be tabled for DA22C in the form of a separate MADP submission and incorporate the equivalent district recreation park facilities required pursuant to the STCIA.

2.1.9. Springfield Drainage Master Plan

The Springfield Drainage Master Plan (DMP) (2000) has been approved by Council and outlines the proposed drainage infrastructure and design criteria for stormwater infrastructure within the Springfield Structure Plan area. Drainage concepts, infrastructure and standards within the Springfield Central Stadium Precinct have been reassessed as part of this MADP in accordance with the DMP.

However, the entire Woogaroo Creek catchment has undergone significant changes since the DMP was approved in 2000 and it should be noted that the DMP has not been updated to reflect the changes in development over time. The Master Developer (Springfield City Group) is required to lodge with Council and obtain approval of an updated DMP. The updated DMP must ensure that the initial outcomes set in the approved DMP (2000) are still achieved and that the flooding and waterway impacts are clearly understood. An updated DMP must provide a clear baseline from where impacts for the creek realignment works can be satisfactorily quantified, assessed and where necessary mitigated/managed.

2.1.10. Springfield Water Supply Master Plan

The requirements of the Springfield Water Master Plan (WMP) (16 June 2015 update) are to be considered within this MADP and compliance with the desired level of service for water supply infrastructure under the approved Master Plan is to be achieved.

The equivalent populations for Development Areas 22A-22B generally accord with the current Water Supply Master Plan approved by QUU for the projected population and phasing illustrated in this MADP.

2.1.11. Springfield Sewerage Master Plan

The requirements of the Springfield Sewerage Master Plan (SMP) (16 June 2015 update) are to be considered within this MADP and compliance with the desired level of service for sewerage infrastructure under the approved Master Plan is to be achieved.

The equivalent populations for DA22A-22B generally accord with the current Sewer Master Plan approved by QUU for the projected population and phasing illustrated in this MADP.

2.2. Site Context

2.2.1. Regional Context

The Springfield Central Stadium Precinct (Development Areas 22A-22B) is located within the Local Government Area of Ipswich and is approximately 15km south east of Ipswich CBD and 25km south west of the Brisbane CBD (refer **Figure 2.1**). It lies within the western sub region, as outlined in the South East Queensland Regional Plan 2017, which is expected to accommodate in the order of 520,000 additional people by 2041. The Springfield community has been envisaged to accommodate a proportion of this growth expected within both Ipswich and the broader western corridor.

The Springfield Town Centre represents a Principal Regional Activity Centre under the SEQRP and as such is to accommodate a comprehensive range of land uses and activities to serve a sub-regional catchment. Springfield enjoys a strategic location within the region with major connections to nearby growth areas and major employment bases, as well as the surrounding Local Government Areas of Brisbane, Scenic Rim, Logan and the Gold Coast.

2.2.2. Locality & Development Area Context

Within the context of Ipswich City, the SSP area constitutes a greenfield development that is surrounded by established areas such as Forest Lake and Camira to the north-east and Bellbird Park and Redbank Plains to the north-west. The Springfield Town Centre also interacts with large greenfield opportunities and developing areas within the immediate locality such as Augustine Heights, Springfield Lakes, Spring Mountain and Redbank Plains (South).

The Town Centre capitalises on the major transport corridor of the Centenary Highway that inherently links the SSP area with these growth areas and reinforces the Town Centre as a gateway centre to the new communities of the western corridor and within Ipswich City. In addition to vehicular transport integration, the Centenary Highway corridor also provides passenger rail services adjacent to the Town Centre that will improve the ability to service significant growth areas as well as provide direct access to the overall rail transport network

Development Areas 22A-22B is located within the northern area of the Springfield Town Centre, and is adjoined by the Springfield Anglican College to the east, Springfield Central railway station and Orion Springfield Central to the south, Mountain Creek and future

Springfield Town Centre to the west and north. Development within DA22A-22B will provide a range of pedestrian and cycle linkages and connections to adjoining areas.

Details of the proposed pedestrian and cycle linkages must be submitted and approved as part of the first ADP application.

2.3. Site Analysis

2.3.1. Development Area Boundaries

Development Areas 22A-22B comprises land north of Springfield Central railway station and west of Springfield Greenbank Arterial with a total area of approximately 17.84ha. The boundaries of Development Areas 22A-22B have been identified having regard to:

- Existing road networks;
- Ultimate Mountain Creek alignment;
- Proposed road alignments;
- Existing adjoining development;
- Existing and proposed landform; and
- Fulfilment of the required facilities and embellishments for the Springfield Central Stadium Precinct (Development Areas 22A and 22B).

The boundaries of Development Area 22A-22B are indicated by the Master Plan and broadly defined by the alignment of Springfield Greenbank Arterial, future Roads 12, 20, the realignment of a portion of Mountain Creek and the Centenary Highway. The cadastral boundaries associated with this development will be finalised as part of the ADP process.



Figure 2.1- Regional and Locality Context

2.3.2. Setting, Views and Interfaces

Development Areas 22A-22B form part of the Open Space Parklands and Northern Sports Fields Precinct of Springfield Town Centre North. The development areas comprise part of an open space corridor, which includes Mountain Creek, Development Area 22C, linking Robelle Domain in the south to Brookwater in the north. This corridor provides a strong visual and physical linkage from the Town Centre Heart to the northern Open Space corridor.

The development areas incorporates a proposed realignment of a portion of Mountain Creek and earthworks to provide for the intended sporting facility functions and to integrate with the development levels of adjoining precincts.

2.3.3. Topography

This development area includes Mountain Creek. Subject to flooding assessment and impact to the Opossum Creek Wildlife Corridor, significant earthworks may be required to functionally accommodate the sporting facilities and the adjoining road network design levels.

Holistic and integrated urban design is required to respond to the sensitive flooding and environmental values of Mountain Creek, Opossum Creek and Woogaroo Creek. This requires careful consideration of the land form, profiles and interfaces on both the eastern and western sides of Mountain Creek.

2.3.4. Access and Connectivity

Development Areas 22A-22B address Springfield Greenbank Arterial and Eden Station Drive. Both roads provide key road connections to the region. Development Area 22A directly adjoins the Springfield Central railway station which provides convenient pedestrian access for future major sporting and community events. Subject to flood mitigation measures, the open space corridors along Mountain Creek and Opossum Creek, which include linear pathway networks and a dedicated, separated bicycle path, also provide uninterrupted linkages throughout the SSP area and offer an alternative mode of transport. This movement context is to be provided with the following characteristics:

<u>Connectivity:</u> Broad scale connectivity to pedestrian, cycle, open space and road networks within the Town Centre and the broader Springfield Central locality.

Permeability: Activation of all edges of the park and integrating them with the adjacent landuses and road corridors to create a permeable park that is well used by the community and that adds value to the surrounding areas. However, access to the stadium precinct will be limited on event/game days.

<u>Circulation:</u> The topography of the site presents a challenge to achieving a path network that is accessible to all. The circulation network of the park will connect it to the broader Springfield Central networks, ensuring that the park is an accessible destination for pedestrians and cyclists and contributes to the overall non-motorised circulation framework for the Springfield Town Centre.

<u>Visual:</u> The topography of the site creates opportunities for views across the site, and into the various spaces within it, encouraging visitors to explore the site further. Views should be enhanced within the park design that promote long distance connection to surrounding areas and short distance opportunities for surveillance to enhance the park safety.

Spatial: The relationship of the spaces within the site will be important in creating distinctive spaces that interrelate so that a variety of uses can be seamlessly accommodated within the park connected by a network of paths and cycleways.

2.3.5. Drainage and Flooding

Development Areas 22A-22B includes Mountain Creek. Mountain Creek has been proposed for realignment in order to accommodate the proposed sports facility including a boutique premier stadium precinct capable of accommodating regional scale events and thereby achieve 1% Annual Exceedance Probability plus climate change (AEP+CC) flood immunity with appropriate freeboard.

With the first stage of creek realignment works having been completed, should the intention in the first instance be for embellishment of DA22A with minimum Council infrastructure with the creek in its current alignment, further investigations are required with any future (Park) ADP submission to demonstrate that 1% AEP+CC flood immunity can be achieved. Ultimate creek realignment works have been envisaged to accommodate the ultimate stadium-based infrastructure.

A flood impact assessment is required to be provided as part of the submission of the first ADP over the site. The flood impact assessment, should demonstrate that the realignment of the creek post development can achieve a no worsening impact (on the pre-development condition) for all flood and stormwater events that exist prior to development and up to a 1% AEP+CC. Stormwater and flooding management for the proposed development must ensure no worsening or actionable nuisance to the surrounding land, caused by peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects.

The flood impact assessment should consider as a minimum, the following:

- (i) Earthworks details, including existing and proposed design levels and creek realignment works;
- (ii) Catchment analysis, including pre and post developed catchment plans, catchment sizing, and lawful points of discharge;
- (iii) Provide a hydraulic and hydrological analysis demonstrating the design flood peak discharges for the site and surrounding area for the pre and post development scenarios for all flood events up to and including a 1% AEP+CC:
- (iv) Mapping (afflux, water level/depth and velocity) should be provided to clearly illustrate the pre-development scenario, and the post development impacts for all relevant design events;

- (v) Catchment-wide flood impact assessments are required. This includes upstream and downstream towards Woogaroo/Brisbane confluence;
- (vi) AEPs to be investigated to include the 1% AEP+CC (20% additional rainfall/Representative Concentration Pathway [RCP] 8.5 conditions);
- (vii) All storm durations relevant for the site and catchment are to be modelled;
- (viii) Modelling outputs to include bed shear stress, stream power and hazard (handbook 7) components and associated comparison maps.

2.3.6. Cultural Heritage Assessment

The Cultural Heritage Conservation Plan provided in Supporting Documents was developed for the Springfield Estate in conjunction with the Environmental Protection Agency (Southern Region Cultural Heritage Program) based on the work of Satterthwait (1998) and reviewed by Alfredson (1999). The EPA's cultural heritage conservation planning initiative within the Springfield Structure Plan area is 'to ensure a good representative sample of the artefacts found on the Springfield development are retained on site'. It is confirmed that neither DA22A nor DA22B contain any known areas of cultural heritage significance.

3. Master Plan - Vision, Principles and Elements

3.1. Vision

The Springfield Central Stadium Precinct forms an integral part of the Town Centre Frame for the Springfield community, incorporating a range of active and passive recreational opportunities that will act as a central focus of the development of the Town Centre. Building on the appeal of Robelle Domain for quality recreational opportunities and park experiences, the Springfield Central Stadium Precinct provides opportunities to residents and workers to achieve a healthy and active lifestyle, within an environment integrated into the urban fabric of the Town Centre.

The Springfield Central Stadium Precinct will be a core landscape and recreational feature of the Springfield Town Centre that reinforces Robelle Domain in providing a wide spectrum of high quality sporting and recreation facilities for the Springfield community and region. It will have the capacity to accommodate functions ranging from local requirements up to regional activities, and reflects the regional nature of the Springfield Town Centre as a whole.

Central to the role of the precinct will be the development of a boutique premier sporting facility, capable of accommodating elite teams or clubs involved in sports such as AFL, cricket and/or athletics. Development Area 22A will accommodate a stadium primarily designed for use by the AFL. Subject to appropriate acoustic and lighting assessment (submitted as part of the relevant ADP application), the seating capacity of the facility will grow over time (depending upon demand and funding), however ultimately this facility may have capacity to potentially accommodate 30,000 spectators. Development Area 22B will accommodate local sporting facilities that will evolve over time. Subject to appropriate acoustic and lighting assessment (submitted as part of the relevant ADP application), the stadium will be designed to permit other community and entertainment activities, such as concerts and festivals on occasions.

The precinct will include a high-performance training and administration centre, encompassing a broad range of ancillary and complementary land uses, which will provide every opportunity for a sporting team participating in an elite national sport to be successful, both on-field and off-field. These uses may include Clubhouse, administration and storage facilities, indoor and outdoor training areas, rehabilitation and recovery facilities, gymnasium, sports medicine, aquatic centre, Child Care Centre, and catering areas capable of providing services to spectators, media and broadcasting facilities.

Supporting these major sporting facilities will be a range of active and passive recreational opportunities in a landscaped open space setting, offering areas for viewing and gathering in connection with the sporting activities, as well as facilitating the needs of participants and organised community clubs in the conduct of those various sports and events. Cafes, kiosks and concessionary areas provide opportunities for gathering and refreshment within the parkland environment, as well as the precinct as a destination for the walkers and cyclists who enjoy the network of pathways and cycleways of which the sportsfields form a key part.

The open space setting around the stadium responds to the needs of a wide spectrum of ages and interests, providing plaza areas and pathway networks capable of informal relaxation and programmed activities where children can be safely monitored. These areas are set within a landscaped environment of shaded and grassed embankments, formal gardens, vegetated areas and bleacher seating around the sportsfield that encourage gathering with family and friends as much as an active engagement in sporting activities.

Surrounding areas are able to embrace the adjoining central spine of Mountain Creek and Robelle Domain through an open interface that is integrated with the adjoining road networks in both circulation and landscape, as well as directly interfacing with key development sites and facilities such as Town Centre North area, commercial/retail opportunities and established schools.

Dependent upon pedestrian demands, additional pedestrian pathways and bridges may ultimately traverse Mountain Creek to connect the Stadium Precinct to Road 12 and into the Town Centre (DA5C and DA5E). Hardstand plaza areas will be located in high pedestrian areas, which will support the parkland setting adjacent to Mountain Creek and around the sports fields.

A 'green bridge' providing pedestrian and public transport access from Springfield Greenbank Arterial to Springfield Central railway station may be considered in the future subject to construction funding being sourced and an appropriate left in/left out intersection configuration being designed such that major roads are not impacted upon. Pedestrian connection via the existing bridge will be utilised to connect the rail station to DA22A. Pedestrian access will be provided across Springfield Greenbank Arterial to enable safe and equitable pedestrian access between the planned State Government multi-deck 'park and ride' facility (south of the Centenary Highway) to the Precinct and the rail station.

Springfield Greenbank Arterial will duplicated by Ipswich City Council as required under the STCIA and SIA. Eden Station Drive will ultimately be duplicated by Council and will include a four way signalised intersection to provide vehicular access to DA22A-DA22B. Interim access arrangements for DA22A and DA22B will be determined as part of the ADP process. The intersection of Springfield Greenbank Arterial and Eden Station Drive is currently signalised but will be upgraded in conjunction with the duplication of Eden Station Drive. A Transport Impact Assessment (TIA) will be required with an Area Development Plan application for 22A which will need to identify the trigger and extent of road and intersection upgrades required to support the proposed development outcomes.

On site at-grade car parking areas will be provided within both DA22A and DA22B. The car parking areas will be accessed off Eden Station Drive and located in close proximity to the clubhouses and training and administration facilities, to suit operational requirements of each site. This parking will be supported by significant off-site private car parking opportunities that may provide the necessary availability for the sporting facilities as well as the general parking demands within the Town Centre locality. The use of these private car parks will be subject to formal property owner agreement.

A multi-deck commuter 'park and ride' facility (in conjunction with the Springfield Central rail station) may be provided by the State Government on a parcel of land on the southern side of the Centenary Highway, adjacent to the off-ramp that intersects with Springfield

Greenbank Arterial. This car park facility is anticipated to provide approximately 1,000 car parking spaces, which will enable part of the current temporary commuter car park on DA22A to be removed.

The first ADP over DA22A or 22B shall investigate the potential use of the commuter 'park and ride' facility by visitors during sporting, community and entertainment events. Any use of the commuter 'park and ride' facility for events associated with DA22A or DA22B will be subject to a formal agreement with the State Government. The construction of this car park will incorporate construction of pedestrian links between the rail station and car park that also provides access to the stadium in DA22A. A Transport Impact Assessment will be required with the ADP application for DA22A that is to address the adequacy of the proposed parking provisions.

Given the time required for the precinct to evolve and achieve its full development form, interim or intermediate options for the precinct include the development of a boutique premier sports field for oval sports on DA22A and a multi-purpose playfield on DA22B, potentially with an all-weather artificial playing surface. The sports fields will be supported by a range of seating options, including potential for covered grandstands, open terraces and grassed areas, clubhouse and administration facilities, indoor and outdoor training and recovery areas, amenities, parking and hardstand plaza areas. Outdoor broadcast quality lighting will also be provided. It is expected these key supporting facilities, such as clubhouse, are co-located in central positions that can be recycled over time as the facility matures. It is intended that the facilities, while in Council ownership, may be leased to third parties to operate on a long term basis.

The minimum level / standard of facilities to be delivered within DA22A is to be the equivalent of one (1) citywide level sporting facility, consistent with the desired standards of service for Citywide level sportsgrounds and courts as detailed in Ipswich City Council's LGIP to provide active and passive recreational opportunities. The facilities will be supported by a range of recreation facilities including clubhouse, pedestrian and cycle facilities and linkages. This is a Developer obligation. The minimum level / standard of facilities to be delivered within DA22B is to be the equivalent of one (1) local sports and courts facility as detailed in Ipswich City Council's LGIP to provide active and passive recreational opportunities. The facilities will be supported by a range of recreation facilities including clubhouses, pedestrian and cycle facilities and linkages. This is a Council obligation.

3.2. Master Plan Principles

The following are the master plan principles that underpin the philosophy of creating a regional destination sport and recreation facility:

a) Create sportsfields that are of national significance — Development Areas 22A and 22B are capable of accommodating a wide range of sporting events, from nationally televised sporting competitions to regional level competition and weekly club gatherings. Ultimately the DA22A-22B Precinct is being planned to be a boutique premier stadium development with the ability to accommodate national level sporting competitions on a weekly basis, and subject to acoustic and lighting assessment (submitted as part of the relevant ADP application), other sporting/recreational or entertainment opportunities such as festivals or concerts on an 'as required' basis.

- b) A range of open space character and experience Variety in the character of the spaces created within the sportsfields to provide for a range of experiences and activities and creating opportunities for discovery of new experiences on each visit. Provision of formal and informal/active and passive spaces to accommodate all ages and interests.
- c) Creating a sense of place High standards for placemaking, legibility, safety, comfort and convenience are of importance for Development Areas 22A-22B. The range of users and uses is reflected in the variety of individual spaces provided. Crime Prevention Through Environmental Design (CPTED) principles applied to the design of the parkland will ensure its safe use by the community at all times.
- d) Establishing a quality environment and landscape Development Areas 22A-22B contributes, and preserves appropriate land area for environmental sustainability through protection and enhancement of Mountain Creek, urban greening, landscape character and treatments, subtropical character, efficient water use, and water quality management both within the sportsfields and its broader context.
- e) Facilitating movement and access Development Areas 22A-22B encourages people to move through and around the parklands and sportsfields, linking activity areas via direct connections and more casual connections created by the network of pathways incorporated into the open spaces. These pathways further connect to the overall open space network and cycleways, resulting in a constant use of the sportsfields and the adoption of non-motorised mobility options. The level of activity within the sportsfields, and occurring within the adjacent high-density activity areas, creates a safe and enjoyable facility within a quality town centre environment.

Details of the pathway connectivity must be provided as part of the first Area Development Plan application over the site.

f) Providing a quality built form and land use - The recreational and community focus of the parklands and sportsfields is supported through the inclusion of facilities such as a clubhouse, cafe/restaurant/kiosk, amenities blocks, service points for mobile concessions, and potential function facilities. The design of the parkland allows for changes in use over time in response to increasing density within the surrounding catchment and the needs and desires of the community. The structures and furniture within the parkland will form part of a distinctive family of elements. The scale and form of these facilities will evolve as the precinct achieves its intended function as a boutique premier sports facility.

3.3. Master Plan- Key elements

3.3.1. Key Issues

Key issues to note in the Springfield Central Stadium Precinct Master Plan include:

Equivalent provision of the facilities identified in the Planning Scheme LGIP,
 Springfield Open Space Master Plan and Springfield Town Centre Concept Plan provided as a minimum level of embellishment;

- Provision of alternative commuter car parking to replace the temporary commuter car parking within DA22A prior to the State Government's completion of a multi-deck commuter 'park and ride' facility on a parcel of land on the southern side of the Centenary Highway, adjacent to the off-ramp that intersects with Springfield Greenbank Arterial;
- Subject to Department of Natural Resources and Mines Waterway Barrier Works and Taking and Interfering with Water approval, realignment of a portion of Mountain Creek identified as key enabling infrastructure works. The environmental values and urban design outcome of Mountain Creek is fundamental to achieving a balanced planning outcome appropriate to a major urban centre. The creek design and associated corridor widths is subject to future application, which once developed will determine the adjacent interface levels, bank profiles and landscape treatments;
- Construction of Road 11 including traffic signals at the intersection with Eden Station Drive, Road 12 and a signalized intersection on Eden Station Drive at the DA22A-22B access:
- Boundary design that allows casual overlooking of the facilities, and enhance informal surveillance from the public domain that enhances internal safety aspects;
- Achieving legible integration with the existing schools and surrounding development in Development Area 5 and 20 directly adjoining the facilities;
- Incorporation of spaces and activities that appeal to all ages as well as catering for specific interests where possible (e.g. playgrounds, cycling etc);
- Direct pedestrian and cycle linkages between Town Centre Heart Precincts, the Springfield Central railway station and the sportsfield via the existing pedestrian bridge over Mountain Creek;
- Industry best practice design to ensure functional, safe and attractive off-street pedestrian and cycling routes and infrastructure are planned and delivered;
- Direct pedestrian connections to Robelle Domain and multi-deck commuter 'park and ride' facility along Mountain Creek within both linear open space and adjoining road network as required;
- Ancillary and complementary commercial opportunities that provide the social and lifestyle opportunities on non-game days; and
- Realising the collective nature of the Springfield Town Centre area in performing open space, sporting and recreational roles at a broader scale, appealing to and attracting visitors on a regional level initially and national level ultimately. This perception is created by the integration of regional urban activity centre activities and major institutions with the large scale high quality multi- function sportsfields, providing day and subject to acoustic and lighting assessment (submitted as part of the relevant ADP application) potentially night time sporting, recreational and open space opportunities for an enlivened urban centre.

3.3.2. Site specific opportunities

A number of other specific opportunities will be developed within the Master Plan such as:

- The creation of a Citywide/Regional/National sports facility that is admired and appreciated by a regional catchment and, in conjunction with Robelle Domain, reinforces the focus on achieving a 'Green and Active CBD';
- A hub for community organisations that will be based within clubhouses or ancillary buildings to be constructed adjacent to the sportsfields and courts or within the designated future community facilities site. Ultimately this precinct will be a hub for elite sporting teams;
- Subject to acoustic and lighting assessment (submitted as part of the relevant ADP application), the provision for potential outdoor activities or events within the parkland;
- Subject to acoustic and lighting assessment (submitted as part of the relevant ADP application), opportunity for the precinct, including a future stadium, to be used as a venue for concerts, or other outdoor entertainment events that complement the opportunities within Robelle Domain;
- Subject to acoustic and lighting assessment (submitted as part of the relevant ADP application), opportunity to utilise facilities for small-scale functions and receptions arranged on a hire basis with members of the public;
- Small scale ancillary provision of light refreshments through opportunities such as cafés/restaurants/kiosks, and concession areas (mobile vendors) can be developed, with the opportunity to expand the scale and form of these ancillary activities to support a premier stadium precinct including high performance training and administration centre; and
- Unique opportunity for the sportsfield to develop and evolve in parallel with the growth
 of the surrounding community, providing physical and social contributions to the
 locality. Community uses in conjunction with the on-site sporting activities maybe
 incorporated within the facility.

3.3.3. **Context**

The DA22A-22C precinct is intended to become a core feature of the Springfield Open Space Master Plan, providing major sporting and recreational facilities with high quality formal urban space setting within a landscaped environment with strong interfaces to adjoining Town Centre commercial and residential activities.

Development Areas 22A-22B will become a focus for both the Town Centre and the broader locality and as such, will provide a high degree of permeability within the site and connectivity to pedestrian and bikeway networks leading into and out of the Town Centre to form an integral part of the movement network.

The precinct will provide connectivity south to Robelle Domain (Town Centre Parkland) and Mountain Creek. DA22A-22B will provide pedestrian pathways to link the open space and

activity areas with the built environment of the Town Centre, train and bus stations, and Community Open Space parks (neighbourhood and local parks).

Connections will be physical, via pedestrian pathways and cycleways, and also visual, via views to and through the open space sportsfields environment. The uses provided within the park will have a sporting/recreation focus and will complement but not duplicate the uses provided within Robelle Domain.

The natural landform will be significantly altered to accommodate the intended uses. As a function of the uses, limited natural vegetation will be retained and preliminary bulk earthworks previously undertaken have cleared significant areas of these Development Areas to facilitate the initial level of embellishment for DA22A-22B.

3.3.4. Character

Presentation and maintenance standards

As a minimum, the Citywide level sportsgrounds and courts facility will have a premier field (1 x Oval) that is to be maintained to a high standard. A number of supporting facilities and informal play areas will be maintained to allow sporting activities to occur throughout the year. Quality vegetated and landscaped areas distributed around the periphery will provide a visually appealing park character linked with the broader open space network.

Evening and night time use

Subject to acoustic and lighting assessment to demonstrate compliance with amenity standards for current and future sensitive receivers (submitted as part of the relevant ADP application), lighting and the design of safe routes through the precinct will enable evening and night time use of areas of the park and the undertaking of events at these times. Concerts and other outdoor entertaining activities may be accommodated in this precinct from time to time, however night activities primarily occurring in the form of evening sport may occur on a regular basis.

Landform and landscape

The natural landform will be significantly altered to accommodate the proposed sports facilities and ancillary uses. Earthworks are required to realign a portion of Mountain Creek to ensure there are sufficient facilities to achieve the (ultimate aspirational) desired level of service. The precinct will achieve a 1% AEP+CC flood immunity whether 'interim' or 'ultimate' facilities are to be delivered.

3.3.5. Streets

The proposed street network around the precinct is comprised of existing and future streets. These are identified as follows:

- Springfield Greenbank Arterial Existing road defining the eastern boundary of DA22A 22B.
- Eden Station Drive Existing road that splits the precinct (Development Areas 22A & 22B).
- Road 11 Future road to the west of DA 22A-22B connecting Eden Station Drive to Trackstar Way.

- Road 12 Future road that defines the western boundary of DA22A, connecting Eden Station Drive to Sir Llew Edwards Drive.
- Refer to the Road Network Plans provided in Volume 2.

3.3.6. Access

Accessibility is a key component of making the Springfield Central Stadium Precinct useable to people of all ages and abilities and to maximise its patronage. A comprehensive network of pedestrian and cycle paths have been designed to work with the proposed levels and interfaces with adjoining roads and Mountain Creek to create a range of accessible routes and utilise the precinct for pedestrian and cycle circulation and access.

3.3.7. Topography

A significant amount of fill is required to be imported and, subject to Department of Natural Resources and Mines Waterway Barrier Works and Taking and Interfering with Water approval, a portion of Mountain Creek may be realigned to facilitate the (ultimate) sportsfield proposal to be constructed over DA22A in accordance with the this Master Area Development Plan.

Bulk earthworks has occurred over part of the site in accordance with Council approval(s). Further works will be undertaken to accord with the development levels of the Master Plan (subject to detailed design).

3.3.8. Vegetation

Due to the highly modified nature of the final ground level, little opportunity exists to retain existing vegetation cover in the area. The site development intends to achieve key focus areas for landscaping outcomes as well as peripheral and fill plantings, using a range of sustainable native species to provide ease of maintenance and a high-quality visual appeal within the precinct.

Volume 2 - Appendix 4 (a) contains relevant information associated with waterway stability and the ecological function of the Mountain Creek waterway.

3.3.9. Drainage

The Springfield Central Stadium Precinct will be designed and constructed to achieve drainage and flooding requirements within the site, as well as macro stormwater outcomes for the overall Springfield development in accordance with the Drainage Master Plan.

The drainage and flooding design criteria that are adopted with respect to the precinct (combined DA22A & 22B), and the surrounding areas are as follows:

- The sportsfield (DA22B) is to have 1% AEP+CC flood immunity to courts and all buildings;
- There must be no worsening of existing flooding as a result of the development;
- The proposed Premier Oval (DA22A) and buildings must have 1% AEP+CC flood immunity;

- No increase in peak flow at the northern end of the sports fields (relevant for future DA22C MADP).
- Must include outcomes provided from the Flooding Impact Assessment required in section 2.3.5 and revised DMP required in section 2.1.9.

Drainage for DA22A-22B will be managed on site and principally discharge to the proposed stormwater network provided along Mountain Creek to the west. All discharge, both quality and quantity, will be subject to the requirements of the parameters outlined in this MADP.

A detailed stormwater management plan, completed by an RPEQ, must be submitted as part of the submission for the first Area Development Plan over the site. The stormwater management plan must provide hydraulic calculations for all storm events up to and including the 1% AEP+CC event, in accordance with QUDM, Council's *Implementation Guideline 24 - Stormwater Management* and Council's *Planning Scheme Policy 3 - General Works*. In particular, the report must provide, *inter alia*, the following details:

- The hydrology used to inform the SMP;
- Increase in stormwater runoff that will be generated by the development;
- Nomination of a lawful point(s) of discharge associated with the required allotment drainage system;
- Management strategies to ensure no-worsening at the nominated lawful point(s) of discharge.

3.3.10. Minimum Level of Embellishment

As indicated previously, the minimum level / standard of embellishment to be delivered in Development Area DA22A is to comprise the equivalent of one (1) Citywide level sportsground and courts facility incorporating the preferred dominant land uses of the Recreation Precinct and Town Business Precinct. The minimum level / standard of embellishment to be delivered in Development Area DA22B is to comprise one (1) Local sports and courts facility incorporating the preferred dominant land uses of the Recreation Precinct.

Whilst this MADP relates to DA22A-22B (a separate MADP will be prepared for DA22C at some future time), overall the precinct is considered central to the overall open space network as described in the Framework Plan of the TCCP. Citywide level sporting and recreation facilities will spread along the spine. Pedestrian and cycle facilities and linkages will be part of the embellishment program for this area consistent with the principles of the OSMP.

3.3.11. Phasing

DA22A-22B is intended to be developed as either interim (i.e. Delivery of minimum prerequisite infrastructure) or ultimate (i.e. via assistance with third party funding arrangements) to create the Springfield Central Stadium Precinct. This will be confirmed as part of relevant ADP and Operational Works applications.

3.4. Design Response

The above issues, opportunities and elements are reflected by this design response and the Conceptual Master Plan for the Springfield Central Stadium Precinct. This Master Plan is conceptual only and subject to an updated Drainage Master Plan, detailed design and approval at the ADP stage. It is intended that this MADP be used to communicate the overall design intent and initiatives for the Springfield Central Stadium Precinct, in achieving desired outcomes and may therefore be subject to alternative design responses which are generally in accordance with this plan. The design will evolve over time as the precinct progresses towards accommodating national elite level sport.

The site's topography and community demand will be a driving factor in the creation of a multi-field facility catering to a number of sporting disciplines. Development Area 22A-22B will be developed to incorporate a wide range of sporting facilities to enable informal and formal gatherings, requiring large scale sporting ovals and fields suitable for the playing of organised sports. The fields will cater to the primary sports of AFL, cricket, soccer and/or rugby league as well as various forms of athletics. DA22A will primarily service AFL, whilst DA22B may accommodate a various of sporting and recreational pursuits.

These sporting facilities will be supported by clubhouse facilities within each portion that forms the primary structural focus of each Development Area and will adjoin the areas of onsite parking. The clubhouses will be designed with suitable orientation and structure to enable aspects and physical connection towards the adjoining sporting facilities, as well as accommodate viewing decks, team change rooms, ancillary outdoor dining and café facilities, public amenities and meeting rooms.

As identified above, while the Developer is responsible for the embellishment of a Citywide Sportgrounds and Courts facility, it is noted that the Developer has provided the required courts in the Southern Sportsfields (Development Area 16 and 17). Consequently, no courts are proposed in Development Area 22A and the respective embellishment value is to be adjusted.

In addition to the minimum embellishment standards, potential embellishment options have been included below in **Figures 3.1, 3.2** and in **Volume 2 - Annexure (1).** Subsequent options are subject to resolution of relevant funding provisions and future ADP approval(s) and will incorporate staging and designs not contemplated or illustrated in these figures. These options demonstrate that the Springfield Central Sporting Precinct is intended to ultimately accommodate a stadium capable of accommodating crowds in the order of 30,000 spectators, subject to acoustic and lighting assessment (submitted as part of the relevant ADP application).

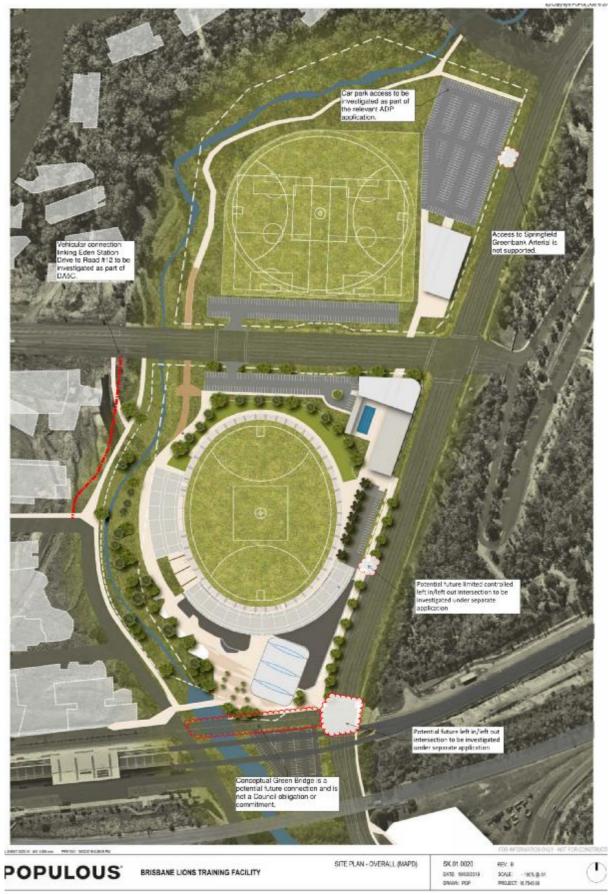


Figure 3.1 – Option 1

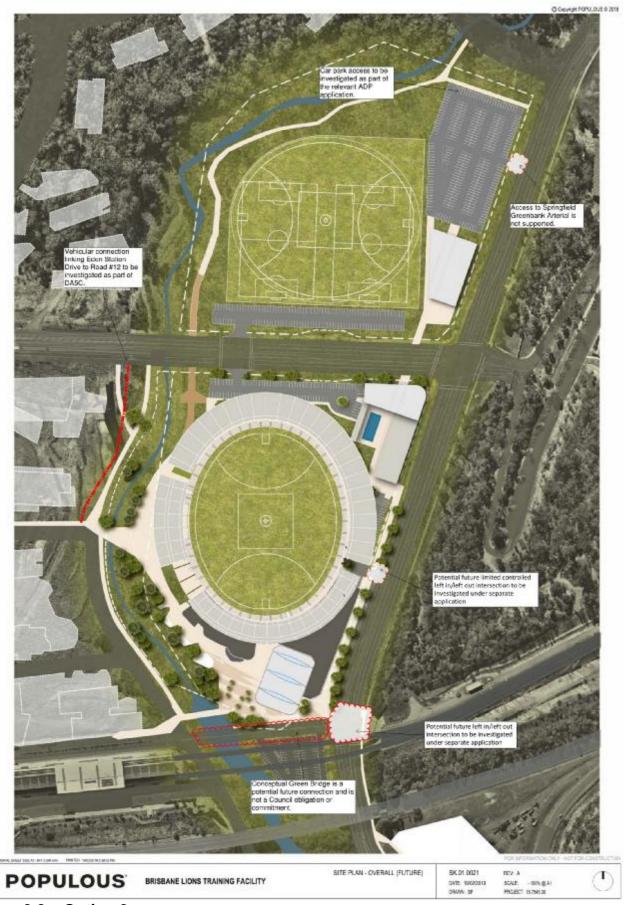


Figure 3.2 – Option 2

3.4.1 Lighting and Noise

Noise and lighting impacts will need to be considered as part of subsequent Area Development Plan applications. Noise and lighting impacts will need to be managed to ensure there is no adverse impacts on all sensitive receivers.

4. Master Plan

4.1. Land Use

4.1.1. Overall Structure

The Springfield Central Stadium Precinct is a public open space and sportsfields precinct comprised of the Recreation Precinct and Town Business Precinct under the Springfield Town Centre Concept Plan.

Development Areas 22A and 22B will ultimately be developed as a comprehensive sporting and recreation precinct designated as a 'Premier Sports Facility', as shown in **Figure 4.1**. The precinct will evolve over time. DA22A will accommodate a stadium primarily designed for use by the AFL, while DA22B will accommodate a local sports and courts facility for various sporting and recreational pursuits. Both facilities, subject to lighting and acoustic assessment (submitted as part of the relevant ADP application), will be designed to permit other activities such as concerts and community events on occasions.

The precinct may comprise the equivalent of Citywide sporting facility and ancillary structures for clubhouses and amenities, as well as public plaza, adjoining linear parkland and other publicly accessible open space.



Figure 4.1- Indicative Development Concept

4.1.2. Land Use Types

Development will be proposed in accordance with the dominant land uses of the Recreation Precinct and Town Business Precinct as identified in the Springfield Structure Plan. The indicative land uses are outlined in Table 4.1.

Indicative Dominant Land Uses

Indicative Dominant Land Uses are the broad land use categories that are indicatively designated in different parts of Development Areas in a MADP. The TCCP Indicative Dominant Land Uses and Development Yields assigns development yields for certain dominant land uses identified within Development Areas.

Development Areas 22A and 22B primarily comprise the Recreation Precinct. However an allocation of supporting Town Business Precinct is identified for Development Area 22A, to facilitate the establishment of commercial functions for the training and administrative centre and opportunities for the broader community resulting from the establishment of an elite stadium facility.

Land uses within Development Areas 22A-22B will initially perform roles which complement the recreational and open space use of the area. Limited commercial or other uses will be required within the parkland to support the open space opportunities and cater for the desirable range of activities during the initial stages of development of the parklands and sports fields. While the majority of these uses and activities will be accommodated under the dominant land use definition of "Park" under the Springfield Structure Plan, additional complementary land uses are appropriate for the area as outlined in the Table 4.1 for the Recreation Precinct and Town Business Precinct of the Springfield Town Centre.

However, to provide flexibility for the precinct to evolve over time, and to achieve its intended role and function, including becoming a sporting facility of regional and/or national significance, a broader range of complementary uses are intended to be accommodated within the precinct. Complementary uses will include training and administration facilities, Medical Centre and allied health services, Child Care Centre, Indoor Recreation (gymnasium and aquatic centre) and outdoor entertainment venue. These additional complementary land uses are appropriate for the area as outlined in the Table 4.1 for the Town Business Precinct of the Springfield Town Centre.

These land uses will be subject to the levels of assessment for the Recreation Precinct and Town Business Precinct as outlined in the Springfield Structure Plan.

For clarity purposes, the Park definition under the SSP will accommodate the majority of uses and facilities within the park including:

- Sporting ovals and fields
- Indoor sporting facilities
- Picnic places, viewing areas and trails
- Swimming pools

- Pedestrian and cycle tracks
- Kiosks and refreshment booths
- Parking spaces and footpaths
- Information and display areas
- Shelters and other public conveniences
- Children's play areas
- Clubhouses

In addition to development within the scope of the Park definition, Council may allow the development of complementary uses generally in accordance with the parameters outlined in this MADP. Complementary uses may comprise areas or structures that perform a commercial function and are suitably licensed by Council to operate within the area under the jurisdiction of Council.

For the purposes of this MADP, a concurrent amendment to the TCCP has been made allocating 16,000sqm of the 'Unallocated' Town Business (office) GFA listed under *Table 4* - *Indicative Dominant Land Use Development Yields* for Development Area 22A.

Recreation Precinct	ses in the Springfield Structure Plan) Town Business Precinct			
Caretakers Residence	Child Care Centre (1)			
Club (3)	Commercial Premises (1)			
Indoor Entertainment	Educational Establishment (1)			
Indoor Recreation	Medical Centre (1)			
Outdoor Recreation	Outdoor Entertainment (1)(2)			
Park	Produce / Craft Market			
Restaurant	Radio Station (1)			
Sports Complex (3)	Reception and Function Rooms (1)(3)			
Tourist Facility	Television Station (1)(2)			
(1) This land use is a complementary land use and is have a nexus to the open space function of the sit	This land use is a complementary land use and is not intended to be the dominant use of the site. Accordingly, any commercial use must			
(2) Special Development Area provisions of the Sprir lighting assessment submitted as part of the relev	ngfield Structure Plan allow for Outdoor Entertainment (subject to acoustic and /ant ADP application) and Television Station to be approved subject to the Code ctions may be considered compatible with the nature of the Premier Sports Facility			
(3) No gaming or gambling activities are permitted in				

In nominating the abovementioned 'complementary' land uses, it is recognised that the Springfield Central Stadium Precinct (i.e. combined DA22A & DA22B) is currently described as Lot 60 on SP221816 and is in Council ownership. This land was initially transferred on the basis of Council as trustee, whereby the land is ultimately intended for 'open space' purposes. This trust has been removed to facilitate the complimentary uses associated with these development areas. Notwithstanding that the trust has been removed, any future land uses / activities for DA22A-22B need to either contain or ultimately remain complimentary to the development of DA22A-22B maintaining an open space function and thereby directly benefiting

the wider community.

Unallocated Land Uses

Unallocated Land Uses are the following:

- Advertising Structure;
- Car Park;
- Community Building;
- Emergency Services Depot;
- Environmental Facility;
- Local Utility;
- Park;
- Place of Public Worship;
- Public Building;
- Public Utility

The unallocated uses are not subject to the development yields specified in the TCCP (Any floor area for unallocated uses is additional to the development yields).

5. Design Theme Response

5.1. Placemaking and Streetscapes

Development Areas 22A-22B will provide a public space that integrates with the adjoining road network and Springfield Central Train Station, and provides a road network that contributes to and reflects the requirements of the overall movement network for the Springfield Town Centre.

Any ADP for development within the precinct is to reflect the outcomes detailed in Design Theme 1 Placemaking and Streetscapes of Section 8.0 Design Guidelines of the Springfield Town Centre Concept Plan.

5.1.1. Mobility Network & Overall Strategy

The road system for Development Areas 22A-22B is to create a robust structure that in the long term as the area matures, provides a sustainable transport system based on modes of transport where walking, cycling and public transport dominate.

The overall movement network has been designed to provide high levels of internal and external connectivity for both pedestrian/cyclist and vehicle modes. Streets provide a high level of internal accessibility and good external connections for vehicle, cycle and pedestrian movements to the higher order road network and public transport services.

The connection to the Springfield Central railway station and the future commuter carpark from the railway station, is considered a critical component of the movement network, particularly for events with high pedestrian traffic. A dedicated pedestrian connection over Mountain Creek to connect the train station to the sportsfields has been provided. A future grade separated pedestrian connection over the Springfield Greenbank Arterial may be provided by the State Government providing access to the future multi-deck 'park and ride' facility.

5.1.2. Street Network and Circulation System

Streets provide the primary movement network for vehicles (including public transport), bicycles and pedestrians surrounding Development Areas 22A-22B, however pedestrian and cycling modes will be strongly enhanced through linkages within the parkland itself. Street development will be of a form whereby pedestrian movements are prioritised, supported by landscaped pedestrian verges on both sides and signalised intersections.

Signalised intersection crossings at the intersection of Eden Station Drive and Springfield Greenbank Arterial will facilitate safe access. A continuous pedestrian link to the Orion retail precinct, the Springfield Central train station and Robelle Domain will be provided via a pedestrian underpass under the Centenary Highway. A signalised intersection on Eden Station Drive, near Mountain Creek, will facilitate safe access for vehicles and pedestrian to and between DA22A and DA22B.

The Site Context Plans (Figures 3.1 & 3.2) contain the key elements of the mobility and access network as it relates to Development Areas 22A-22B and the surrounding context.

5.1.3. Street Type

Various road profiles for the street network will be employed based on the desired interfaces with Development Areas 22A-22B and their function as part of the overall Town Centre movement network. The proposed street network provides the principal circulation as part of the Town Centre and provides for both vehicles and on-road and off-road cycleways and footpaths for pedestrian movements, integrated with the parkland network.

5.1.4. Pedestrian and Bike Network

The Springfield Town Centre is proposed as a walkable urban environment providing convenient access to key public spaces, places, facilities and services. Pedestrian and cycle movement will be catered for through the provision of pedestrian routes along the road verges and dedicated on-road bicycle lanes within the carriageway. The surrounding roads will be provided as a commuter cycle road with a dedicated cycle lane provided on-road.

Footpaths are located on both sides of the street and lined with street trees to provide shade for comfortable pedestrian movement as required by the TCCP. Development Areas 22A-22B will provide end of trip facilities as required by the Ipswich Planning Scheme encouraging access and use for cycling, and to encourage anticipated modal shift.

The construction of a pedestrian connection across Mountain Creek, linking Development Area 22A to Road 12 may be considered to improve connectivity, should the pedestrian numbers warrant additional connecting linkages over Mountain Creek.

5.1.5. Access

The precinct is well positioned to capitalise on access to future public transport links. Pedestrian and cyclist pathways connect the sportsfields with adjoining activity areas, Springfield Central train station, and the bus interchange within Orion Springfield Central.

Pedestrian and cycle pathways have been designed within the masterplan to fulfil the following objectives:

- Provide routes to fulfil the mobility/accessibility requirements as outlined in the Springfield Growth Management Strategy and the primary corridors illustrated in the Framework Plan in the TCCP;
- Maintain accessible gradients (3% target with 5% maximum in some areas);
- Integrate with the pathways provided within adjoining road verges;
- Provide alternative route choices where practicable;
- Provide a quality north/south link via a commuter cycle link along Mountain Creek; and
- Provide practical access and proximity for emergency vehicles;

Vehicular access to Development Areas 22A-22B is via proposed and existing roads providing access to the distributed car parking areas. Limited controlled access from Springfield Greenbank Arterial may be considered as part of the relevant ADP

application. In the event that direct access is to be proposed, a deceleration lane is to be provided to facilitate direct access and is to be at no cost to Council.

5.1.6. Public Transport

Bus route services will be provided along all roads around Development Areas 22A-22B. Furthermore, high frequency bus services are to be provided at the Springfield Central train station. Direct and convenient pedestrian linkages from Development Areas 22A-22B to adjoining roads and Springfield Central train station are to be provided.

It should be demonstrated through the submission of appropriate supporting information as part of the first ADP application, the traffic generation impacts to the Springfield Central Station and how they will be mitigated. Any development should not adversely impact the operation of the State Controlled road network. In particular, consideration should be given to the safety and operation of the Centenary Motorway interchanges at Augusta Parkway (exit 33), Springfield Parkway (exit 31) and the off ramp at Springfield Greenbank Arterial (exit 32).

A Public Transport Impact Assessment should be provided as part of the first ADP application for DA22A. The report should be prepared in accordance with Austroads Guide to Traffic Management, Parts 1-13, to provide an assessment of the overall impact of the proposed development on all forms of public passenger transport such as urban bus services, passenger railway services, private/chartered buses, taxis and rideshare. The assessment should address the following:

- (i) Establish the existing context of Development Areas 22A and 22B identify the location (within or beyond a walkable catchment) and capacity (i.e. number of parking bays) of all existing public passenger transport infrastructure and all existing public passenger transport services (bus stops, bus routes, railway services, commuter car parking and taxi facilities etc) in relation to Development Areas 22A and 22B.
- (ii) Describe the development proposal with respect to:
 - The likely timing of the interim and ultimate stages;
 - The anticipated day to day operation (non-event mode) of the precinct in the interim and ultimate scenarios;
 - The event mode of the precinct in the interim and ultimate stages, including all anticipated event types (sporting and non-sporting events and their frequency and likely maximum attendance.
- (iii) Modal split Estimate the likely modal split of travel to and from the precinct supported by appropriate justifications in event and non-event modes. The modal split should differentiate between the different public transport modes, active transport modes and private vehicle travel.
- (iv) Demand analysis Assess the impact of the proposed development on all forms of existing and planned public passenger transport. The demand analysis should address day to day operation and non-event modes.
- (vi) Capacity assessment Assess the capacity of the existing public transport network to support the anticipated development impacts including demand during day to day operation and event modes. This should give consideration to, for example, consultation with relevant operators and Department of Transport and Main Roads and factors such as

bus size, public passenger transport timetables, demographics, existing available service capacity and impact of the development demand.

(vii) Recommendations – identify the necessary public passenger transport infrastructure (temporary and permanent) required to support the development (day to day operation and event modes) including the upgrade of existing facilities and/or provision of new facilities. This should consider how public passenger transport outcomes will be achieved across all stages of development, including compliance with relevant design requirements, such as the Department of Transport and Main Roads Public Transport Infrastructure Manual (2015), relevant Australian Standards, Disability Standards for Accessible Public Transport 2002 made under section 31(1) of the *Disability Discrimination Act 1992*, the Department of Transport and Main Roads Road Planning and Design Manual, 2nd edition, volume 3 – Guide to Road Design (March 2016) and other applicable requirements.

5.1.7. Active Transport

An Active Transport Impact Assessment and associated proposal plans must be submitted with the first ADP application for DA22A that demonstrate how direct, safe and convenient access to public passenger transport and also pedestrian/ cycle access to the Precinct will be achieved in day to day operation and event modes. This should:

- Generally give highest priority to active transport facilities with less priority to private vehicles with the aim to decrease private vehicle trips and increase active transport trips.
- Endeavour to separate transport modes, with an increased emphasis on building active transport facilities.
- Ensure consistency and good connectivity to the existing and future public transport network.

In particular, the Active Transport Impact Assessment should address the following:

- The existing and planned active transport infrastructure servicing the Precinct, for example, pedestrian paths, crossing arrangements, shared/ bicycle paths, cycle lanes/dedicated cycle paths.
- Anticipated cyclist and pedestrian demand generated by the development proposal based on the modal split to walking and cycling and a walkable catchment of 800m and cycling catchment of 2km.
- Gaps and deficiencies in existing active transport provision within and the surrounding area in relation to the demand generated by the development.
- Potential safety risks to visitors, employees, spectators, patrons etc. walking or cycling to the Precinct including vehicular/ pedestrian conflict and crossing arrangements of roads.
- Identify the necessary active transport infrastructure (temporary and permanent) required to support the development including the upgrade of existing facilities and/or provision of new facilities. This should consider how public passenger transport

outcomes will be achieved across all stages of the development in both day to day operation and event modes.

5.1.8. Permeability, Activity Areas and Active Frontages

The focus for Development Areas 22A-22B will be on ensuring the ability to provide large scale sporting facilities including sportsfields and other recreational opportunities. The interfaces between the sportsfields and parklands and the adjoining road network will ensure visual and physical permeability to encourage entry into the sportsfields and connection to the internal movement networks.

The major structures to be provided will comprise the clubhouses within each development area and these will aim to achieve a presentation to street frontages as part of their design and siting within the sportsfields. These structures, while primarily supporting the sporting activities, will provide the opportunity for small scale commerce (i.e. cafés).

Additional activity and gathering areas will be distributed throughout the sportsfields, including concessionary areas (i.e. for mobile food and drink opportunities) located adjacent to roadways which will support temporary structures in the provision of refreshments within the sportsfields as well as enliven the streetscape.

However, as the precinct evolves, the nature and scale of the buildings and structures will increase commensurate with its role as a regional and nationally significant sports precinct. These structures will include grandstands, training and administration facilities, medical and allied health services for recovery and rehabilitation, a Child Care Centre, as well as a range of function, entertainment, catering, merchandising and retail offerings. These activities may be physically separate to the stadium structures and therefore provide greater opportunity to directly address adjoining road frontages.

Any Area Development Plan for development within the precinct is to reflect the outcomes outlined in Design Theme 2 Permeability, Activity Areas and Active Frontages of Section 8.0 Design Guidelines of the TCCP.

5.1.9. Event Management Plan

An event management plan is to be prepared and must include input from relevant stakeholders including *inter alia* Council, Queensland Rail, Translink, Orion Springfield Central and the Springfield Anglican College. It is to include the following information:

- Stakeholder Summary;
- Survey of transport options to be managed;
- Summary of logistical requirements for event;
- Calculation of predicted vehicle and pedestrian movements;
- Scheduling of delivery and equipment loading/unloading;
- Preparation of plans describing general logistics traffic management plus any special plans for unique vehicles (ie. Crane arrival);

- Detail of traffic management strategy for event (pre-during-post);
- Detail communication strategy; and
- Set benchmarks for timeliness of restoring usual traffic around each management plan.
- Emergency management;
- Acoustic and lighting management.

5.2. Public Realm Open Space

The proposed development within Development Area 22A represents an equivalent Citywide level sporting facility and forms part of the open space network identified by the Springfield Open Space Master Plan. Development Area 22B comprises a local level sports and courts facility.

Any ADP for development within the precinct is to reflect the outcomes outlined in Design Theme 3 Public Realm Open Space of Section 8.0 Design Guidelines of the TCCP.

5.3. Building Form Intent, Building Footprints, Landmark Buildings and Corner Sites

The development of DA22A-22B will initially comprise the provision of small-scale structures that support the primary sporting and recreation activities of the parkland.

The number, bulk and height of buildings within the precinct are to reflect an integrated design character and a high-quality appearance for both the internal context and to the external streetscape with a legible character and presentation that communicates their function and their contribution to the amenity of the precinct.

Design of the precinct must reflect the outcomes outlined in Design Theme 4 Building Form Intent, Building Footprints, Landmark Buildings and Corner Sites of Section 8 Design Guidelines of the TCCP.

5.3.1. Building Height

Within the Development Area building heights will generally reflect the 2-3 storey range initially, however the construction of a stadium will ultimately result in building heights that exceed this initial range. Future building heights associated with any stadium-based facilities are to be addressed in further detail against the TCCP and related Council requirements / expectations in conjunction with relevant built form proposal details submitted with the ADP. For clarity, the height of the lighting structures is not subject to the height range identified.

Given the nature of the proposed development within the precinct, being large in scale and footprint, the Table 4.1 of the TCCP is not considered to apply to development within DA22A and DA22B.

5.3.2. Landmark Buildings

Buildings provided within Development Areas 22A-22B are required to achieve a legible communication of their function within the sportsfields (i.e. clubhouse, amenities, sheltered

seating etc.). As such, they are expected to achieve high visibility and contribute to the overall legibility of Development Areas 22A-22B and represent landmarks within the context of the Springfield Central Stadium Precinct.

5.3.3. Fences and Walls

In a general sense fences and walls to the periphery are not intended to be provided to ensure that an open and permeable interface with the surrounding road network is achieved.

However, due to the earthworks required and the potential for providing batters, retaining structures and/or drainage infrastructure within the parkland, fences and walls may be used for practical and safety reasons where necessary. Additionally, due to the nature of the facility for key recreation and entertainment functions, secure thresholds will be required in places throughout the site that legibly delineate areas that are not to be publicly accessible for operational and security reasons. In such cases, the fencing to be provided is to be of an open (i.e. visually permeable) construction and is to be confirmed as part of the ADP process.

5.4 Building Mass and Setbacks

The development of Development Areas 22A-22B will initially comprise the provision of small-scale structures that support the primary sporting and recreation activities of the parkland. Future development associated with any stadium-based facilities are expected to be more significant. There are no particular requirements for building mass and setbacks for the development within the precinct.

Design of the precinct must reflect the outcomes outlined in Design Theme 5 Building Mass and Setbacks of Section 8 Design Guidelines of the TCCP.

5.5. Building Elements and Detail

The visual framework of the Development Areas will respond to its location along a primary movement corridor and its visibility to and from other areas within the Town Centre. The development of Development Areas 22A-22B will generally comprise the provision of small-scale structures that support the primary sporting and recreation activities of the parkland, with future development for stadium-based facilities to be more significant in scale.

The design of buildings and structures within the precinct are to reflect an integrated design character and a high-quality appearance for both the internal context and to the external streetscape with a legible character and presentation that communicates their function and their contribution to the amenity of the precinct.

The buildings and structures within the Springfield Central Stadium Precinct, in general are to:

- Reinforce a central node that supports the sporting functions of the sportsfields as well as highlighting potential for small scale complementary commercial activities (i.e. cafes); and
- Define and reinforce the activity areas to which they are adjacent as well as highlight primary pedestrian entries and networks.

Building elements and details must reflect the outcomes identified in Design Theme 6 Building Elements and Detail of Section 8.0 Design Guidelines of the TCCP.

5.6. Car Parking and Servicing

5.6.1. Car Parking

Car parking on site will be provided as a combination of formal sealed car parking areas and informal grassed overflow parking areas.

Given the proximity to significant car park opportunities and major transport networks, it is envisaged that in addition to the on-site parking provision, car parking may be made available by utilising the existing car parking areas in proximity to Development Areas 22A-22B (subject to landowner's agreement) as well as limited on street parking along adjoining roads.

Parking for coaches will be facilitated within the development area. Coach parking facilities are to be centrally located and in proximity to primary entries. Details will need to be provided as part of the Area Development Plan application demonstrating appropriate access and areas for coach parking.

The requirements for parking have been considered with regard to the achievement of the Desired Standards of Service contained within Local Government Infrastructure Plan for car parking. The carparks provided or available for Development Areas 22A-22B are shown in the Conceptual Master Plan and are provided to collectively service the precinct.

Development Areas 22A-22B Conceptual Master Plan illustrates the total provision of approximately 590 seal spaces, 100 overflow spaces and 2 coach spaces.

The car parking areas have been designed to enable detailed design to:

- Avoid large extent of hard paving in a single car parking area and minimise vehicle intrusion into Development Areas 22A-22B;
- Avoid conflicts with pedestrians;
- Provide arrival points near the attractive destinations such as clubhouses, formal areas and informal play;
- Locate car parking near key junctions in the pedestrian / bikeway system;
- Distribute parking through the sportsfields with clear primary and secondary parking areas;
- · Allow the clustering of car parking areas with other built items including amenities blocks;
- Enable car parking to be successfully integrated with proposed landform without the need for extensive earthworks;
- Enable screen planting to carparks but maintain good sightlines to access roads and adjoining public areas to maximise CPTED principles;
- Provide car parking spaces for disabled users throughout the parking areas with close proximity to entries of key focal points or structures.

As part of the first Area Development Plan application, the applicant will provide a traffic impact assessment, and parking layout plans, prepared by a traffic engineering professional (RPEQ) that provides commentary on how the proposed access driveways, aisles and parking configuration meets Australian Standards, and recommends any required mitigation measures. The traffic impact assessment is required to include the following detail:

- (i) An assessment (including SIDRA analysis) of the interaction between the Eden Station Drive/Stadium entrance intersection and the Eden Station Drive/SGA intersection for, at the year of opening, + 10 years post development and ultimate development;
- (ii) A detailed assessment of the pedestrian and cycle provisions;
- (iii) Demonstrate where pick-up and drop-off areas are proposed;
- (iv) Demonstrate the provision for coaches (internally and externally);
- (v) Details of the controlled limited car parking access from Springfield Greenbank Arterial;
- (vi) Details of queuing and storage within the carparks to provide safe and efficient access to the signalised intersection in Eden Station Drive and limit impacts on the signal operation at this intersection;
- (vii) Vehicle swept paths for a coach; and
- (viii) Details of proposed servicing areas, refuse vehicle swept paths and information on how service and refuse vehicles will access the site.

Car parking will be provided in accordance with Design Theme 7 Car Parking and Servicing of Section 8.0 Design Guidelines of the TCCP.

5.6.2. Servicing

Service access and loading areas will be provided as part of car parking areas and located adjacent to relevant on-site facilities (ie. clubhouses). Service and refuse collection areas are not to be visible from the street or public realm spaces and are to be contained or screened to the satisfaction of Ipswich Waste Services and is to be addressed at the ADP stage.

Service areas are grouped together where possible to mitigate visual impacts of these facilities. Proposed access points will provide logical points of access with minimal pedestrian and vehicle conflict.

Servicing is to be provided in accordance with Design Theme 7 Car Parking and Servicing of Section 8.0 Design Guidelines of the TCCP.

5.7 Public Safety

Crime Prevention Through Environmental Design (CPTED) principles have been incorporated to ensure that the Springfield Central Stadium Precinct can be used safely by all ages and abilities during both day and night, as follows:

- Promotion of views into the parklands from adjacent developments to enable passive surveillance:
- Creation of strong view corridors across the site and through its spaces to enhance passive surveillance and promote a feeling of security;

- · Elimination of any dead ends within the circulation system;
- Planting of low level vegetation to allow for good visibility across spaces, while using screen planting where access is discouraged;
- Ample night lighting for afterhours usage and thoroughfare;
- Activation of the parkland through a strong pedestrian and cycle circulation system, commercial concessions, and a program of events;
- Highly accessible building and structure entries that are well lit;
- Night time alarm communication posts and other operational security measures are capable of being accommodated;
- clubhouses, toilets and other amenities incorporating both CPTED and accessibility design to the current Australian standards.

Such considerations will be addressed at the detailed design stage. All development is to consider the requirements outlined in Design Theme 8 Public Safety of Section 8.0 Design Guidelines of the TCCP.

5.8. Public Lighting and Noise

Lighting and noise emanating from the proposed facility is to be managed in such a way as not to detrimentally impact on proposed or existing sensitive land uses such as, *inter alia*, residential, hotels and schools. Suitable acoustic and lighting assessment will be provided at the ADP stage.

5.9. Climatic Design Considerations

Buildings are, as much as practical and economical, to achieve an industry standard with respect to climatic response, energy efficiency and acoustic design. Building design will facilitate the provision of shade and gathering spaces in conjunction with their function as the primary nodes for the sportsfields.

All development is to comply with the requirements outlined in Design Theme 9 Climatic Design Considerations of section 8.0 Design Guidelines of the TCCP.

5.10. Landscape, Streetscaping, Signage and Advertising

5.10.1. Landscape Intent

The landscape response will be determined by the site conditions which will be highly modified by earthworks. As such, it is expected that the entirety of the sportsfields with respect to landscape outcomes will beformed as part of the site development.

The sportsfields should include areas of planting that facilitate passive and active recreation areas in addition to the primary facilities for active and organised sports.

Landscape themes and choice of plant material will respond to the desired function and

character of spaces within the sportsfields, ameliorating local climatic conditions, providing ease of maintenance, and reinforcing pedestrian movement and activity through shade and shelter provision. Planting will include native species unless otherwise approved by Council at the detailed design stage of development.

The overall design will provide for the development of zones or use areas within the overall park which are differentiated by the character of the built and natural environments and intended use of that area.

The landscape character is established by utilising the following principles:

- Produce a high-quality environment which complements the primary sporting (and spectating) activities within the precinct;
- Facilitate the creation of spaces for passive recreation or relaxation in soft landscaped environments;
- Promote an environment that creates an affinity with the community and a real sense of place and public ownership;
- Incorporating landscaped focus points where possible including feature trees, deep planting and extensive use of shrubs and ground covers;
- Utilising local plant species that will perform in the expected landscape conditions;
- Integrating irrigation requirements for sportsfields; and
- Taking advantage of the topography and terraced structure to maintain views across the Precinct.

In addition, the precinct will be designed to incorporate:

- a high standard of accessibility for people of all ages and mobility;
- ramp and walkway alternatives where steps are located;
- clear path delineation and hazard identification;
- · accessible signage and interpretation throughout the site; and
- disabled parking facilities.

Landscaping measures are to be implemented as defined in Design Theme 10 Landscape, Streetscape, Signage and Advertising of Section 8.0 Design Guidelines of the TCCP.

5.10.2. Planting

Plants used are suited to the harsh conditions of an urban environment, being tolerant of:

Physical abuse – an ability to grow back;

- Desertified and compacted soils;
- Reflective heat and glare;
- Chemicals toxins, dust and smog; and
- Local humid subtropical climate conditions.

The planting is to reflect the landscape intent provided in Section 5.10.1 and be in accordance with Council's Streetscape Design Guidelines.

5.10.3. Plant Selection

The majority of plants species are indigenous to the locality and where approved by Council may be supplemented with some exotic species which enhance the landscape and feature appeal of the open space.

5.10.4. Streetscaping

Streetscaping will be provided generally in accordance with Design Theme 10 Landscaping, Streetscaping, Signage and Advertising of Section 8.0 Design Guidelines of the TCCP and Council's Streetscape Design Guidelines.

Streetscape planting and materials should, where possible, be integrated into the frontage landscaping and design of the adjacent open space areas and movement networks. This will reinforce the verge provided for adjoining road corridors and the blending of the interface in facilitating pedestrian and cycle movements such that the streetscape is enhanced to the benefit of both the open space and road networks.

Streetscape elements will be selected that contribute to a distinctive local character and that perform exceptionally well utilising high-quality materials, design and ease of maintenance.

5.10.5. Signage and Advertising

Signage and advertising will be provided in a form consistent with the outcomes expected of a national level sporting and entertainment facility.

6. Infrastructure

Infrastructure provisions, as detailed in this section, are in general accordance with the SSP, TCCP, the Springfield Water Supply Master Plan, Springfield Sewerage Master Plan, the SIA, STCIA and previously approved requirements resulting from existing approved MADPs from adjoining Development Areas.

The infrastructure provisions outlined in this section do not extinguish any obligations under the SIA or STCIA.

6.1. Fit for purpose – DA22A

- Council to complete the fit for purpose earthworks to the ultimate footprint of Development Area 22A. The site shall be delivered to a level which has an appropriate freeboard to regional Q100 flows and meeting the following specifications. These works are to be completed by within 6 months of the completion of the revised flood study reference in Section 2.3.5.
- The Developer is to realign Opossum Creek Trunk Sewer in accordance with Annexure (3), including ensuring Commonwealth approval is achieved in the event clearing within the Opossum Creek Wildlife Corridor triggers a controlled action. Suitable remediation and rehabilitation works to reinstate native vegetation with structural complexity. These works are to be undertaken in conjunction with the realignment of Mountain Creek but are to occur no later than December 2019.
- Council to realign Mountain Creek to provide sufficient area to accommodate the 'Premier' sports facility. The realigned creek is to be generally in accordance with the sketch incorporated in Annexure (4). These works are to occur in conjunction with the realignment of the Opossum Creek Trunk sewer and must be completed within 6 months of the completion of the revised flood study reference in Section 2.3.5. Council or its nominated agent will be responsible for these works and no Open Space credits are applicable.
- All works must be in accordance with the revised flood study referenced in section 2.3.5 of this MADP.

6.2. Fit for purpose - DA22B

- Council to complete the fit for purpose earthworks to the ultimate footprint of Development Area 22B. The site shall be delivered to a level which has an appropriate freeboard to regional Q100 flows for any clubhouses, buildings or courts. These works are to be completed within 6 months of the completion of the revised flood study reference in Section 2.3.5.
- If necessary, Council to realign the creek to provide sufficient area to accommodate the Local Sports and Courts facility. The realigned creek is to be in accordance with the sketch incorporated in Annexure (4). These works are to occur in conjunction with the realignment of the Opossum Creek Trunk sewer and must be completed within 6 months

of the completion of the revised flood study reference in Section 2.3.5. Council or its nominated agent will be responsible for these works and no Open Space credits are applicable.

 All works must be in accordance with the revised flood study referenced in section 2.3.5 of this MADP.

6.3. Embellishment – DA22A

6.3.1 Open Space Embellishment

- The development of DA22A represents public realm open space as indicated. This is comprised of one (1) equivalent Citywide Sportsgrounds/Courts facility (excluding the requirement for eights courts as these are located in the Southern Precinct being Development Area 16 and 17) as identified in the Local Government Infrastructure Plan. The equivalent facility will be delivered as a Premier facility.
- Developer to complete embellishment works for the equivalent of a 'Premier' Citywide sports facility in accordance with the Springfield Town Centre Infrastructure Agreement, unless the Developer provides an equivalent financial contribution to Council for the facility.
- Where an equivalent financial contribution is made, the Developer is relieved of their embellishment obligations and that obligation is transferred to Council.
- Open space embellishment credits will accrue up to the maximum embellishment value identified in Council's Local Government Infrastructure Plan for one (1) Citywide (Level 1) sportsground less the value of the relocated courts. Credits accrued may be used to satisfy an obligation to pay contributions in accordance with the provisions of the Springfield Town Centre Infrastructure Agreement.
- Council is required to stabilise and landscape the realigned creek corridor to meet the requirements of flood conveyance, embankment stability and achieving the necessary environmental considerations for the designated fish passage.
- The Developer is required to dedicate the additional land to allow the ultimate footprint for the 'premier' facility and creek realignment at no cost to Council. No open space credits are applicable for the additional land.

6.3.2 Sewerage

- Development Area 22A will be serviced in accordance with the Greater Springfield Sewer Master Plan updated by Cardno 16 June 2015 and approved by Queensland Urban Utilities.
- The site discharges into the Opossum Creek Trunk Sewer.
- Development Area 22A will utilise 200EP at the interim development stage. More EP will be allocated by the Developer to the site to facilitate the ultimate development scenario as

required.

- The Developer is to realign the Mountain Creek Trunk Sewer in accordance with the plans contained in Annexure (4). These works are to occur in conjunction with the realignment of the Mountain Creek and must be completed within 6 months of the completion of the revised flood study reference in Section 2.3.5.
- Subject to the financial contribution being made in accordance with section 6.3.1, Council
 is to provide a sewerage connection to Development Area 22A which connects with the
 realigned Opossum Creek Trunk Sewer. Alternatively, the Developer is to provide the
 sewerage connection.
- The nominated connection point is identified in Annexure (3).

6.3.3 Electricity

Subject to the financial contribution being made in accordance with section 6.3.1, Council to provide suitable electrical transformers to ensure the development can proceed. Alternatively, the Developer is responsible for electricity provision.

6.3.4 Water

- Development Area 22A will be serviced in accordance with the Greater Springfield Water Master Plan updated by Cardno 16 June 2015 and approved by Queensland Urban Utilities.
- The existing trunk main in the Springfield Greenbank Arterial are part of the Springfield Low Level Supply Zone capable of serving areas up to RL80.0m.
- Internal mains will provide minimum fire flows at ground level.
- Development Area 22A will utilise approximately 200EP.
- Subject to the financial contribution being made in accordance with section 6.3.1,
 Council to provide a water connection to Development Area 22A. Alternatively, the Developer is responsible for the water connection.
- Subject to the financial contribution being made in accordance with section 6.3.1, Council may provide a connection to the recycled water main.

6.3.5 Roadworks

- Council to duplicate Springfield Greenbank Arterial between Eden Station Drive and Springfield Parkway with construction commencing in the 2020/2021 financial year and construction being completed within the 2021/2022 financial year.
- Council to duplicate Springfield Greenbank Arterial between Main Street and Eden Station Drive, with construction commencing in the 2021/2022 financial year and construction being completed within the 2022/2023 financial year.
- Council to duplicate Eden Station Drive between Springfield Greenbank Arterial and Mark Herringe Bridge, in accordance with the SIA and at a date when traffic demands as

determined by Council requires duplication.

- Council to construct an all movement signalised intersection on Eden Station Drive to provide access to Development Areas 22A and 22B with the future duplication of Eden Station Drive, unless required earlier as part of an ADP for Development Area 22A or 22B.
- Developer to construct Road 11 from Trackstar Drive to Eden Station Drive including an all movements signalised intersection on Eden Station Drive if required by the Public Transport Impact Assessment detailed in Section 5.1.6.
- Developer to construct Road 12 from Eden Station Drive to Sir Llew Edwards Drive, including a left in/left out intersection on Eden Station Drive if required by the Public Transport Impact Assessment detailed in Section 5.1.6.

6.3.6 General

Subject to the financial contribution being made in accordance with section 6.3.1, Council is to demolish / remove any existing structure, roadways, overland flow paths and underground services which will encumber development of the site into a premier sporting facility.

6.4. Embellishments - DA22B

6.4.1 Open Space Embellishment

- The development of DA22B represents public realm open space as indicated. This is comprised of one (1) Local Sportsground and Courts facility in accordance with Council's Local Government Infrastructure Plan.
- The embellishment of these facilities is to be completed by Council upon receipt of sufficient infrastructure contribution payments associated with residential development within the Springfield Town Centre, or earlier if alternative funding arrangements can be sourced by Council.

6.4.2 Sewerage

- Development Area 22B will be serviced in accordance with the Greater Springfield Sewer Master Plan updated by Cardno 16 June 2015 and approved by Queensland Urban Utilities.
- The site discharges into the Opossum Creek Trunk Sewer.
- Development Area 22B will utilise approximately 15EP at the interim development stage.
 More EP will be allocated by the Developer to the site to facilitate the Ultimate Development scenario as required;
- The Developer is to realign the Mountain Creek Trunk Sewer in accordance with the plans contained in Annexure (4), including ensuring Commonwealth approval is achieved in the event clearing within the Opossum Creek Wildlife Corridor triggers a controlled action. Suitable remediation and rehabilitation works to reinstate native vegetation with structural complexity. These works are to occur in conjunction with the

realignment of the Mountain Creek and must be completed by December 2019.

Subject to the financial contribution being made in accordance with section 6.3.1,
 Council is to provide a sewerage connection to Development Area 22B which connects with the realigned Opossum Creek Trunk Sewer. The nominated connection point is identified in Annexure (3). Alternatively, the Developer is responsible for providing the sewerage

6.4.3 Water

- Development Area 22B will be serviced in accordance with the Greater Springfield Water Master Plan updated by Cardno 16 June 2015 and approved by Queensland Urban Utilities.
- The existing trunk main in the Springfield Greenbank Arterial are part of the Springfield Low Level Supply Zone capable of serving areas up to RL80.0m.
- Internal mains will provide minimum fire flows at ground level.
- Development Area 22B will utilise approximately 15EP. More EP will be allocated by the Developer to the site to facilitate the Ultimate Development scenario.
- Subject to the financial contribution being made in accordance with section 6.3.1,
 Council to provide a water connection to Development Area 22B. Alternatively, the Developer is responsible for providing the water connection;
- Subject to the financial contribution being made in accordance with section 6.3.1,
 Council may provide a connection to the recycled water main.

6.4.4 Roadworks

- Council to duplicate Springfield Greenbank Arterial between Eden Station Drive and Springfield Parkway with construction commencing in the 2020/2021 financial year and construction being completed within the 2021/2022 financial year.
- Council to duplicate the Springfield Greenbank Arterial between Main Street and Eden Station Drive with construction commencing in the 2021/2022 financial year and construction being completed within the 2022/2023 financial year.
- Council to duplicate Eden Station Drive between the Springfield Greenbank Arterial and Mark Herringe Bridge in accordance with the SIA when traffic demands the duplication works as determined by Council.
- Council to construct an all movement signalised intersection on Eden Station Drive to provide access to Development Areas 22A and 22B with the future duplication of Eden Station Drive, unless required earlier and delivered by the Developer as part of an ADP for Development Area 22A or 22B.
- Developer to construct Road 11 from Trackstar Way to Eden Station Drive including an all movements signalised intersection on Eden Station Drive if required by the Public Transport Impact Assessment detailed in Section 5.1.6.

 Developer to construct Road 12 from Eden Station Drive to Sir Llew Edwards Drive, including a left in/left out intersection on Eden Station Drive if required by the Public Transport Impact Assessment detailed in Section 5.1.6.

6.4.5 Electricity

Subject to the financial contribution being made in accordance with section 6.3.1, Council to provide suitable electrical transformers to ensure the development can proceed. Alternatively, the Developer is responsible for electrical provision.

6.4.6 General

Subject to the financial contribution being made in accordance with section 6.3.1, Council is to demolish / remove any existing structure, roadways, overland flow paths and underground services which will encumber development of the site into a premier sporting facility. Alternatively, the Developer is to undertake such works.

6.5. Stormwater

The drainage assessment for the Northern Sportsfields (i.e. combined embellishment of DA22A & DA22B) has been prepared with regard to the relevant provisions set out in:

- Springfield Drainage Master Plan September 2000 (SDMP 2000);
- Springfield Town Centre Drainage Master Plan (Flooding) November 2010 (STCDMP 2010);
- Section 5 of the Springfield Town Centre Concept Plan (TCCP);
- Ipswich City Council Implementation Guideline No. 24 Stormwater Management (September 2011);
- Spring Mountain Precinct Stormwater Management Strategy; and
- Springfield Town Centre Water Quality Master Plan October 2003 (STCWQMP 2003).

Development Areas 22A and 22B are located adjacent to Mountain Creek. The major drainage catchment from this precinct discharges at Mountain Creek. The drainage assessment is to be amended as necessary to incorporate the amended DMP required in Section 2.1.9 and the Flooding Impact Assessment required in section 2.3.5, with an AEP to include 1% AEP+CC.

6.5.1 Stormwater Quantity Management

The main intent of the site's (Development Areas 22A and 22B) proposed drainage design is to ensure that the buildings, fields and courts drain effectively and efficiently. Where possible, excess rainfall will be directed to landscaped areas via grass and vegetated swales. This will maximise retention and infiltration of stormwater before discharge at appropriate locations.

Dependent on the irrigation regime and treatment of the playing surfaces, opportunities may exist to harness, reuse and recycle underground water sources in conjunction with

other surface detention and stormwater treatment devices. It is proposed to utilise the playing fields as detention for storm events greater than 5% AEP+CC event, to offset the impact of development on the peak flow discharged from the site for a range of storm events up to and including the 1% AEP+CC event. Buildings and playgrounds are to be located above the 1% AEP+CC event. Detailed and site-specific stormwater management plans are to be submitted with each Area Development Plan application that demonstrates compliance with the aforementioned stormwater reports and Council's requirements.

A detailed stormwater management plan, completed by a RPEQ, will be submitted by the applicant as part of the submission for the first Area Development Plan over the site. The stormwater management plan will provide hydraulic calculations for all storm events up to and including the 1% AEP+CC event, in accordance with QUDM, Council's *Implementation Guideline 24 - Stormwater Management* and Council's *Planning Scheme Policy 3 - General Works*. In particular, the report will provide the following details:

- The hydrology used to inform the SMP;
- Increase in stormwater runoff that will be generated by the development;
- Nomination of a lawful point(s) of discharge associated with the required allotment drainage system;
- Management strategies to ensure no-worsening at the nominated lawful point(s) of discharge.

6.5.2 Stormwater Quality Management Water Quality Objectives

The STCWQMP (Water Studies, 2003) refers to concentration-based water quality objectives set in Ipswich City Council (ICC) Planning Scheme Policy 3 (ICC, 2004). Since the STCWQMP was written, ICC has moved away from concentration-based objectives to annual load-based reduction targets, in accordance with best practice standards. These load-based reduction targets are in line with the Healthy Waterways Design Objectives for Water Sensitive Urban Design in South-East Queensland (HW, 2006). There is no correlation available linking concentration-based objectives and load based reduction targets. As a result, the load-based reduction targets have been adopted as water quality objectives for this study.

The stormwater objectives for Development Areas 22A and 22B are separated into the construction phase and operational phase of the development. Table 6.1 identifies the pollutants expected during the development's construction phase.

Table 6.1 – Pollutants Typically Generated During Construction Phase		
POLLUTANT	SOURCES	
Litter	paper, construction packaging, food	
	packaging, cement bags, off-cuts	
Sediment	unprotected exposed soils and stockpiles	
	during earthworks and building	
Hydrocarbons	Fuel and oil spills, leaks from construction	

	equipment
Toxic Materials	cement slurry, asphalt prime, solvents,
	cleansing agents
PH altering substances	acid sulphate soils, cement slurry
	and wash waters

Source - Healthy Waterways (2006)

The operational phase of the development will adhere to the load-based approach established by Healthy Waterways to be consistent with best practice. It has been shown that the Healthy Waterways (2006) load based objectives are far more stringent than previous standards. Therefore, these load based objectives will be adopted. The load-based water quality objectives will be adopted for the total discharge from:

- The entire site;
- Each ADP; and
- Each stage within the ADP.

Table 6.2 gives the best practice load based objectives set out in Healthy Waterways Design Objectives for Water Sensitive Urban Design in South East Queensland (2006).

Table 6.2 - Operational Phase Water Quality Objectives		
POLLUTANT TYPES	WATER QUALITY OBJECTIVES	
Gross Pollutants	90% Reduction	
Total Suspended	80% Reduction	
Solids (TSS)		
Total Phosphorous (TP)	60% Reduction	
Total Nitrogen (TN)	45% Reduction	

Potential Stormwater Treatment Measures

Water quality management for Development Areas 22A and 22B will be implemented as follows:

- Each ADP application will be treated in isolation. The developer of each ADP is given the
 option of adopting 'deemed to comply' treatments as defined in the SMP (without further
 water qualitymodelling). Alternatively, if the deemed to comply options are not adopted,
 the developer of each ADP must undertake further water quality analysis and modelling.
- · Roads and open space will be treated as precinct-wide 'regional' treatment areas.

Stormwater treatment measures will be selected on the required level of treatment and characteristics of the stormwater runoff from the catchment. Best practice treatment of stormwater runoff is achieved by way of a treatment train of devices, ranging from near the source, to larger more regional measures in lower portions of the catchment. Potential treatment measures for each type of pollutant source-area may include either a combination or singularly where appropriate, the following:

Roof Areas

Roof areas will undergo deposition and collection of atmospheric pollutants (dust) containing fine sediments and bound nutrients. In addition to this, the material type of the roof can contribute contaminants to stormwater runoff. Capture of the first flush is an effective method to address this contamination and possible measures may include:

- First-flush capture (e.g. in the downpipe collector) with trickle irrigation-release to adjacent vegetation areas;
- · Runoff quantity reduction by using roof-water tanks;
- Separation, where appropriate, of roof-water from surface stormwater, as roof-water (especially after first-flush capture) will be of a relatively clean nature.

These treatment measures would be located at all the source (roof) area of each building. The (clean) roofwater would be discharged directly to the stormwater drainage system to avoid it mixing with (dirty) runoff from ground-areas.

Roadway and Carpark (Trafficable) Areas

The impervious nature of trafficable areas means that contaminants collect on the ground surface are displaced and transported by scoured flows. The contaminants of concern from trafficable areas are suspended sediments (which will have nutrients, oils and metals absorbed), nutrients and litter. Potential treatment measures may include:

- Runoff reduction achieved by way of permeable pavements, roof water tanks;
- Bioretention trenches and devices;
- Stormwater 360 devices;
- Vegetated buffer swales;
- Vegetated swales;
- Infiltration trenches and or pipes;
- Wetlands:
- Gross pollutant traps (trash racks);
- Erosion control devices: and/or
- · Waterway bank stabilisation and erosion control works.

6.5.3 Water Sensitive Urban Design

In general, the principles for water sensitive urban design will:

- Protect natural systems by protecting and enhancing natural water systems within and adjacent to the Springfield Town Centre;
- Integrate and preserve sufficient land area for stormwater treatment into each stage of development as part of the landscape design;

- Encourage a range of applications for the integration of water-sensitive urban design concepts and technologies into the Springfield Town Centre;
- Reduce run-off and peak flows by reducing peak flows from Spring Mountain and Development Areas 22A and 22B through local and sub-catchment detention measures, minimising impervious areas, and encouraging on-site infiltration; and
- Add value while minimising development costs by minimising the drainage infrastructure cost of development.

6.6. Maintenance responsibilities within DA22A

Maintenance works will be the responsibility of the Council, subject to Acceptance on Warranty by Council, unless otherwise agreed.

Reconfiguring a Lot

The Springfield Central Stadium Precinct (DA22A-22B) is predominantly described as Lot 60 on SP271657 and is in Council ownership. There are also some parts of Lot 64 on SP291400 and Lot 1 on SP251824, under the current ownership of SLC No. 2 Pty Ltd that forms part of the precinct. The draft reconfiguration plan identifies the intended reconfigured boundaries.

To remove any doubt, a review of the Springfield Structure Plan boundaries associated with the creation of the lots in Figure 7/1 will be required. South of Eden Station Drive, the boundaries of Mountain Creek will be defined by proposed Lot 2.

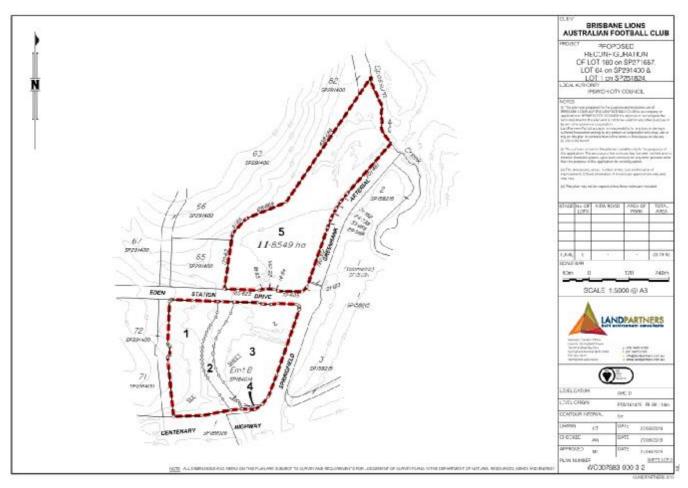


Figure 7.1- Draft Reconfiguration Plan