FORMER MATILDA BAY BREWERY SITE STRUCTURE PLAN

STIRLING HIGHWAY CORNER MCCABE STREET
NORTH FREMANTLE
WAPC REF: FREM/2016/1

OUR REF: 8191

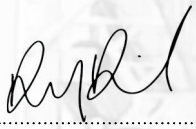
DOCUMENT CONTROL

Printed 8 September 2020 8191_20sep01R_rd.docx

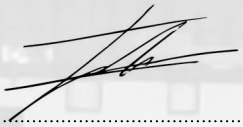
Version	File Name	Prepared by	Approved by	Date
1	8191_15jul01R_cr.docx	Claire Richards	Alan Stewart	30/10/2015
2	8191_20jun01R_ad	Reyne Dial	Greg Rowe	03/07/2020
3	8191_20sep01R_rd.docx	Reyne Dial	Greg Rowe	08/09/2020

This report has been authorised by;

Greg Rowe
Principal and Managing Director



Reyne Dial
Senior Urban Planner



Jamie Baxter
Quality Control

p 9221 1991 e info@rowegroup.com.au **w** rowegroup.com.au **a** 3/369 Newcastle Street, Northbridge 6003

ENDORSEMENT PAGE

This Structure Plan is prepared under the provisions of the City of Fremantle Local Planning Scheme No. 4.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS ADOPTED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

6-OCTOBER 2020 ..... Date

Signed for and on behalf of the Western Australian Planning Commission:

.....

an officer of the Commission duly authorised by the Commission pursuant to section 16

of the *Planning and Development Act 2005* for that purpose, in the presence of:

..... Witness

6-OCT-2020 ..... Date

6-OCT-2030 ..... Date of Expiry

TABLE OF AMENDMENTS

Amendment No.	Summary of Amendment	Amendment Type	Date approved by WAPC

TABLE OF DENSITY PLANS

Density Plan No.	Area of density plan application	Date endorsed by WAPC

EXECUTIVE SUMMARY

This Structure Plan relates to the former Matilda Bay Brewery Site (herein referred to as the 'Structure Plan area') located on Stirling Highway between McCabe Street and Coventry Parade, in North Fremantle.

The Structure Plan provides for the comprehensive redevelopment of the land for medium and high-density residential uses and a limited range of complementary commercial and retail land uses, communal facilities and public open space. Residential development is primarily proposed in the form of multi-storey apartments (multiple dwellings) and low scale townhouses (grouped dwellings).

The form of development proposed under the Structure Plan will contribute to the City of Fremantle's housing diversity and infill targets identified under the Western Australian Planning Commission's ('WAPC') Directions 2031 infill requirements for the City of Fremantle.

The preparation of this Structure Plan has been informed by consultation with the City of Fremantle, the Town of Mosman Park, the North Fremantle Community Association and various State Government agencies.

STRUCTURE PLAN SUMMARY

Item	Data		Structure Plan Ref (section no.)
Total area covered by the Structure Plan	3.32 hectares		1.2.2
Area of each land use proposed:	Hectares	Lot Yield	
Residential	2.3802 hectares	N/A	3.3.1
Mixed Use	0.5711 hectares	N/A	3.3.2
Total estimated lot yield	N/A		
Estimated number of dwellings	500		3.3.1
Estimated residential site density	___ dwellings per site hectare		3.3.1
Estimated population	1,015 people		N/A
Number of high schools	0 high schools		3.8
Number of primary schools	0 primary schools		3.8
Estimated commercial floor space	N/A		3.9
Estimated area and percentage of public open space given over to:			
Regional open space	0.0 hectares	0.0%	3.4
District open space	0.0 hectares	0.0%	
Neighbourhood parks	0.1 hectares	3.3% parks	
Local parks	0.0 hectares	0.0% parks	
Estimated number and area of natural area and biodiversity assets	0.0 hectares 0.0 %		2.1

Note: All information and areas are approximate only and are subject to survey and detailed design

TABLE OF CONTENTS

DOCUMENT CONTROL 2

ENDORSEMENT PAGE 3

TABLE OF AMENDMENTS 4

TABLE OF DENSITY PLANS 4

EXECUTIVE SUMMARY 5

STRUCTURE PLAN SUMMARY 5

PART ONE: IMPLEMENTATION SECTION **11**

1. Structure Plan Area 12
2. Structure Plan Content 12
3. Operation 12
4. Staging 12
5. Subdivision and Development Requirements 13
6. Local Development Plans 15
7. Additional Information 15

PART TWO: EXPLANATORY SECTION **18**

01 Planning Background **19**

1.1 Introduction and Purpose 19

1.2 Land Description 19

1.2.1 Location 19

1.2.2 Area and Land Use 19

1.2.3 Legal Description and Ownership 19

1.3 Planning Framework 22

1.3.1 Zoning and Reservations 22

1.3.1.1 Metropolitan Region Scheme 22

1.3.1.2 City of Fremantle Local Planning Scheme No. 4 22

1.3.2 Regional and Sub-Regional Strategies/Structure Plans 25

1.3.2.1 Directions 2031 and Beyond (August 2010) 25

1.3.2.2 Central Metropolitan Perth Sub-Regional Strategy (August 2010) 25

1.3.2.3 Draft Central Sub-Regional Planning Framework (May 2015) 25

1.3.3 Planning Strategies 25

1.3.3.1 City of Fremantle Local Planning Strategy (2001) 25

1.3.4 Planning Policies 26

1.3.4.1 Liveable Neighbourhoods 26

1.3.4.2 Statement of Planning Policy 2.6 - State Coastal Planning Policy 26

1.3.4.3 Statement of Planning Policy 3 - Urban Growth and Settlement 27

1.3.4.4 Statement of Planning Policy No. 3.1 - Residential Design Codes 28

1.3.4.5 Statement of Planning Policy 3.5 - Historic Heritage Conservation 28

1.3.4.6 Local Planning Policy 1.6 - Preparing Heritage Assessments 28

1.3.4.7 Local Planning Policy 2.9 - Residential Streetscape Policy 28

1.3.4.8 Local Planning Policy 3.11 - McCabe Street Area, North Fremantle - Height of New Buildings 29

1.3.5 Other Approvals and Decisions 29

1.3.5.1 MRS Amendment 1168/57 - Minor Amendment 29

1.3.5.2 City of Fremantle Scheme Amendment 12 30

1.3.5.3 MRS Amendment 1210/41 - Major Amendment 30

1.3.6 Pre-Lodgement Consultation 30

02 Site Conditions and Constraints 32

2.1 Biodiversity and Natural Area Assets 32

2.1.1 Flora 32

2.1.2 Fauna 33

2.2 Landform and Soils 34

2.2.1 Topography 34

2.2.2 Geology 35

2.2.3 Contaminated Sites 36
2.2.4 Hydrology 36
2.2.4.1 Wetlands 36
2.2.4.2 Acid Sulfate Soils 36
2.2.4.3 Surface Water 36
2.2.4.4 Groundwater 37
2.3 Servicing 37
2.3.1 Water 37
2.3.2 Wastewater 38
2.3.3 Gas 38
2.3.4 Power 38
2.4 Heritage 38
2.4.1 Aboriginal Heritage 38
2.4.2 Cultural Heritage 39
2.5 Access 41
2.5.1 Surrounding Road Network 41
2.5.2 Pedestrian and Cycle Movement 42
2.5.3 Parking 43
2.5.4 Public Transport 43
2.6 Context and Other Land Use Constraints and Opportunities 43

03 Land Use and Subdivision Requirements 47

3.1 Design Objectives 47
3.2 Indicative Development Concept Plan 52
3.3 Land Use 53
3.3.1 Residential 53
3.3.2 Mixed Use 54
3.3.3 Building Height 54
3.3.4 Local Development Plans 55
3.4 Public Open Space 55
3.5 Movement Networks 56

3.5.1 Traffic Assessment 56
3.5.2 Proposed Movement Network 57
3.5.3 Parking 58
3.6 Heritage 58
3.7 Water Management 59
3.8 Education Facilities 60
3.9 Activity Centres and Employment 60
3.10 Infrastructure Coordination, Servicing and Staging 60
3.10.1 Water 60
3.10.2 Wastewater 60
3.10.3 Gas 61
3.10.4 Power 61
3.10.5 Communications 61
3.10.6 New Infrastructure, Upgrades and Modifications 61
3.11 Developer Contribution Arrangements 61
3.12 Staging 61

PART THREE: TECHNICAL APPENDICES **62**

Appendix Number	Document Title	Nature of Document	Referral/Approval Agency	Summary of Document Modifications
1.	Certificates of Title	Supporting document	N/A	N/A
2.	Heritage Impact Statement	Supporting document	No	To be considered by the City of Fremantle
3.	Preliminary Geotechnical Report	Supporting document	No	To be considered by the City of Fremantle
4.	Sampling and Analysis Plan	Technical report	Department of Environment Regulation	Supported
5.	Local Water Management Strategy	Technical report	No	To be considered by the City of Fremantle and the Department of Water
6.	Engineering Report	Supporting document	No	To be considered by the City of Fremantle
7.	Transport Assessment	Technical report	No	To be considered by the City of Fremantle and Main Roads WA
8.	Landscape Concept Plan	Supporting document	No	To be considered by the City of Fremantle

Figures

Structure Plan (Plan 1) 15

1. Regional location plan 19

2. Local location plan 19

3. Site plan 20

4. Metropolitan Region Scheme zoning plan 21

5. Local Planning Scheme No. 4 zoning plan 22

6. Approved 'One Steel' Structure Plan 23

7. Approved 'Taskers' Structure Plan 23

8. Coastal setbacks 26

9. Local Planning Policy 3.11 Plan No. 2 - Building Height Zones Plan 28

10. Feature survey 33

11. Aboriginal heritage site location plan 37

12. Indicative Development Concept Plan 51

13. Proposed Structure Plan 52

14. Main Roads WA design concept plan 56

Tables

Table 1: Lot Details 21

Table 2: Development Area 18 Development Control Provisions 30

Table 3: Pre-Lodgement Consultation Summary 31

Table 4: Cultural Heritage 39

Table 5: Classification of roads surrounding the Structure Plan Area 41

Table 6: Design Objectives 51

PART ONE:
IMPLEMENTATION SECTION

1. Structure Plan Area

This Structure Plan (herein referred to as the 'Structure Plan') shall apply to the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan Plan map (Plan 1).

2. Structure Plan Content

This Structure Plan comprises:

- Part One - Implementation section containing the Structure Plan map and planning requirements;
- Part Two – Non-statutory (explanatory) section to be used as a reference guide to interpret and justify Part One; and
- Appendices – Technical reports and supporting plans and maps.

3. Operation

The Structure Plan comes into effect on the date the Structure Plan is approved by the Western Australian Planning Commission ("WAPC").

4. Staging

4.1 It is envisaged that the Structure Plan will be implemented in stages as follows:

1. the construction of a dedicated internal link road connecting McCabe Place and Thompson Road/Coventry Parade over of Lots 253, 221 and portion of 220;
2. the future development of Lots 5, 12 and portion of 220 located west of the new road;
3. the future development of Lots 218, 219, portion of 220 and 314, located east of the new road;
4. the future development of Lots 8 – 11 and 100.

4.2 Contribution/s to the upgrading of road and related infrastructure (including pedestrian, cycle and public transport facilities) may be required for each stage of future development under the Structure Plan as per funding arrangements specified by the City of Fremantle, in consultation with MRWA, the PTA, the Town of Mosman Park and the WAPC.

5. Subdivision and Development Requirements

5.1 Zones and Reserves

5.1.1 The Structure Plan Map (Plan 1) outlines zones and reserves applicable within the Structure Plan Area.

5.1.2 When determining subdivision and/or development applications within the Structure Plan area, a decision maker is to give due regard to the Structure Plan and the land-use permissibility and development standards applicable to the Residential and Mixed Use zones under the City of Fremantle Local Planning Scheme No. 4, until such time that the local planning scheme is amended to rezone the land.

5.2 Residential Development

5.2.1 Density Target

5.2.1.1 The objective is to provide at least 500 dwellings within the Structure Plan Area.

5.2.2 Residential Density Code

5.2.2.1 The residential density coding that applies to the Residential Zone in the Structure Plan is R160.

5.2.3 Open Space

5.2.3.1 An area of public open space shall be provided as shown on the Structure Plan Map (Plan 1) which will be accessible to the general public and ceded to the Crown to be vested in the City of Fremantle as a recreation reserve. The area will include retained mature vegetation.

5.2.4 Mixed Use Development

5.2.4.1 Residential development in the Mixed Use Zone is subject to a residential density code of R160.

5.3 Building Height

5.3.1 Maximum building heights in the Structure Plan Area shall generally be in accordance with the City of Fremantle Local Planning Policy 3.11 - McCabe Street Area, North Fremantle - Height of New Buildings, as adopted by the Council of the City of Fremantle at its meeting on 26 August 2015.

5.4 Heritage

5.4.1 Development is to comply with the Heritage Impact Statement prepared for the Structure Plan Area.

5.5 Internal Link Road

5.5.1 The internal link road connecting McCabe Street and Coventry Parade shall generally be located in accordance with Plan 1.

5.5.2 The internal link road is to be provided within the first stage of development and ceded to the Crown to be vested with the City of Fremantle as a local road reservation.

5.5.3 The following information is to accompany any development application for land within the Structure Plan area, as relevant, to the satisfaction of the City of Fremantle:

(a) Design details for the internal road linking McCabe Place to Thompson Road/Coventry Parade, including street parking and vehicular and pedestrian access from this road are

to accompany any development application for Stage One, to the satisfaction of the City of Fremantle.

(b) Design details for pedestrian access to both McCabe Street and Coventry Parade (footpath leading to existing network) including width and profile.

(c) Access arrangements, including easements as required.

(d) Traffic management for the duration of construction works with a view to retaining all work related obstructions, including fences and vehicles, within a development site.

5.6 Road Widening - Stirling Highway

5.6.1 The Structure Plan area is subject to road widening in accordance with the Metropolitan Region scheme along Stirling Highway, McCabe Street and Coventry Parade as specified by Main Roads Western Australia, in consultation with the City of Fremantle, to the satisfaction of the Western Australian Planning Commission.

5.6.2 The area of road widening located at the intersection of Stirling Highway and Coventry Parade shall be provided within the first stage of development and ceded to the Crown to be vested with Main Roads WA as a regional road reservation.

5.6.3 The area of road widening located at the intersection of Stirling Highway and McCabe Street shall be provided by the owners of the affected land at a time agreed between the City of Fremantle and the WAPC.

5.7 Vehicular Access

5.7.1 There shall be no vehicular access from Stirling Highway or McCabe Street to future development within the Structure Plan area.

5.7.2 Vehicular access to lots that front Stirling Highway or McCabe Street is expected to be provided from the internal road linking McCabe Place to Thompson Road/Coventry Parade. This may be facilitated by access easements on Certificate of Title.

5.8 Traffic Management

5.8.1 Prior to the subdivision and/or development of land, the applicant is to provide a Transport Impact Assessment and Parking Strategy for the whole structure plan area to determine the potential traffic impact on the surrounding land uses and transport network. This is to provide for the ultimate development and must:

(a) include traffic modelling for all trip generation from all lots and/or development within the structure plan as well as known, proposed and projected trip generation from other existing, proposed and potential developments in the area bound by the Stirling Highway, Swan River, Solomon St and Wellington St;

(b) include consideration of pedestrian and cycle infrastructure and movements; and

(c) identify any relevant upgrades needed to the road network including intersections for all modes of traffic as well as pedestrian and cycle infrastructure upgrades.

5.8.2 The Transport Impact Assessment and Parking Strategy will be prepared in accordance with WAPC Traffic Impact Assessment Guidelines and shall be completed in consultation with MRWA, Town of Mosman Park, WAPC and PTA.

5.8.3 The internal link road is to be constructed at the time of development to ensure accessibility and road permeability.

5.8.4 Prior to subdivision and/or development, further works may be required to implement the recommendations of a Transport Impact Assessment and Parking Strategy and to ensure that the road network functions satisfactorily and provides necessary connectivity.

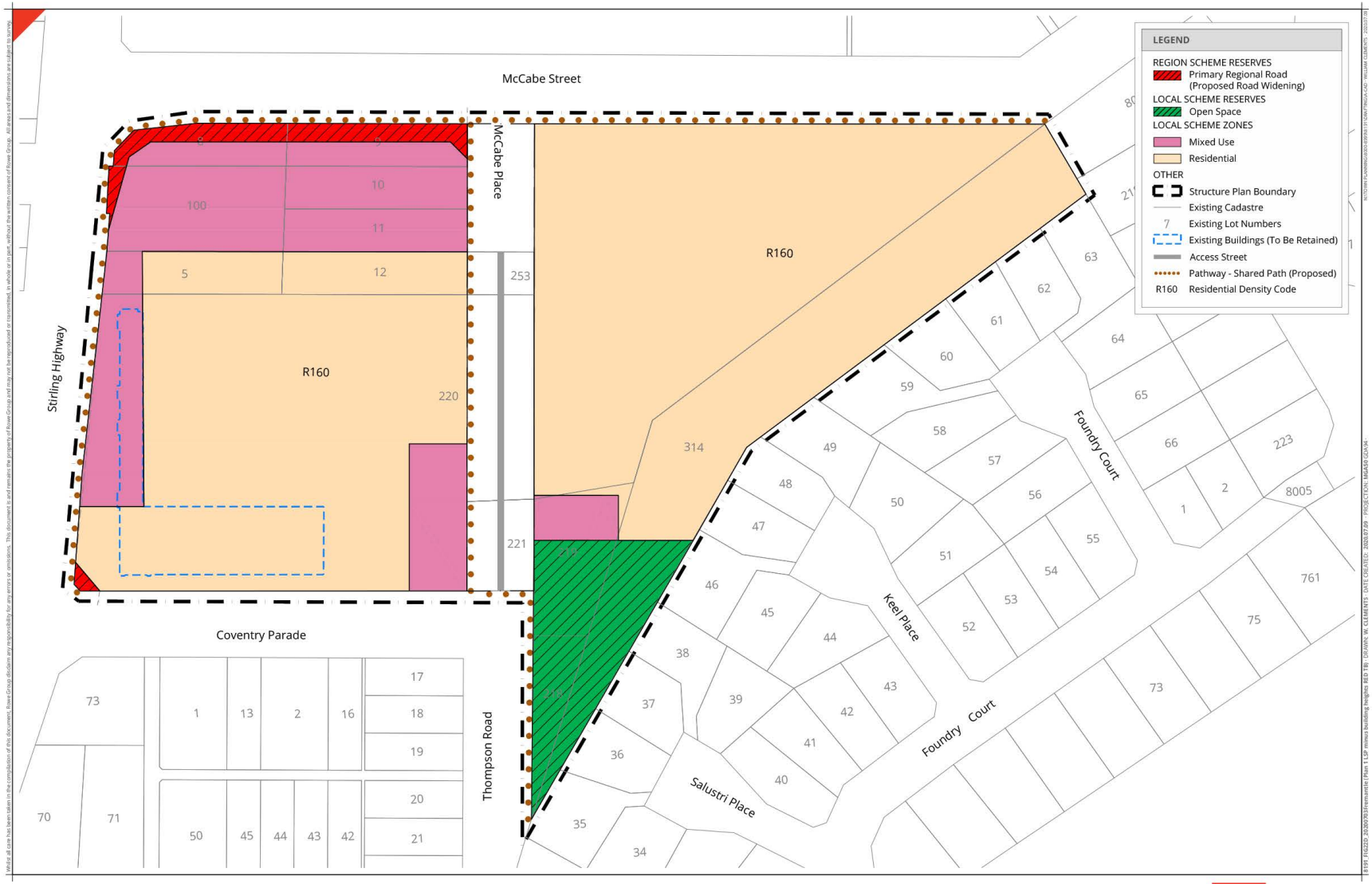
6. Local Development Plans

6.1 A Local Development Plan may be prepared for any part of the Structure Plan Area, prior to the City of Fremantle approving development or recommending subdivision within the Structure Plan Area.

7. Additional Information

7.1 The following information is to be provided at the Subdivision and/or Development Application stage as applicable.

Additional Information	Approval Stage	Consultation Required
Details for the upgrading of road and related infrastructure.	Development	No
Engineering drawings and details of internal road linking McCabe Place to Thompson Road/Coventry Parade to the specifications of the City of Fremantle.	Subdivision	No
Measures to identify and protect any on-site vegetation worthy of retention to the specifications of the City of Fremantle.	Development/ Subdivision	No
Detailed Stormwater Management Plan to the specifications of the City of Fremantle.	Development/ Subdivision	No
Detailed Site Contamination Investigation to the specifications of the City of Fremantle and Department of Environment Regulation.	Development/ Subdivision	No
Landscape Plan to the satisfaction of the City of Fremantle.	Development	No
Updated Heritage Impact Assessment to the satisfaction of the City of Fremantle.	Development	No



STRUCTURE PLAN - PLAN 1

STIRLING HIGHWAY, CORNER MCABE STREET AND COVENTRY PARADE
NORTH FREMANTLE

Structure Plan (Plan 1)

PART TWO:
EXPLANATORY SECTION

01 Planning Background

1.1 Introduction and Purpose

The objectives of the Structure Plan are to facilitate the comprehensive redevelopment of the Structure Plan Area for residential purposes and a limited range of complementary commercial and retail land uses, communal facilities and public open space.

1.2 Land Description

1.2.1 Location

The Structure Plan Area is located within the municipal district of the City of Fremantle, approximately 12km south-west of the Perth Central Business District and 3.5km north-east of the Fremantle City Centre. The Structure Plan Area falls within the locality of North Fremantle which is located on a narrow section of land bound by the Indian Ocean on the west and the Swan River on the east. The Town of Mosman Park municipal boundary is located a short distance to the north and east of the Structure Plan Area.

The Structure Plan Area is located on Stirling Highway and is generally bound by McCabe Street to the North, Coventry Parade to the south and an existing residential area to the east. The 'One Steel Site' is located to the immediate north of the Structure Plan Area and the 'Taskers Site' is located to the north-east.

Refer Figure 1 – Regional Location Plan and Figure 2 – Local Location Plan.

1.2.2 Area and Land Use

The Structure Plan Area measures approximately 3.32 ha in area, maintaining a frontage of approximately 140m to Stirling Highway, 270m to McCabe Street and 130m to Coventry Parade.

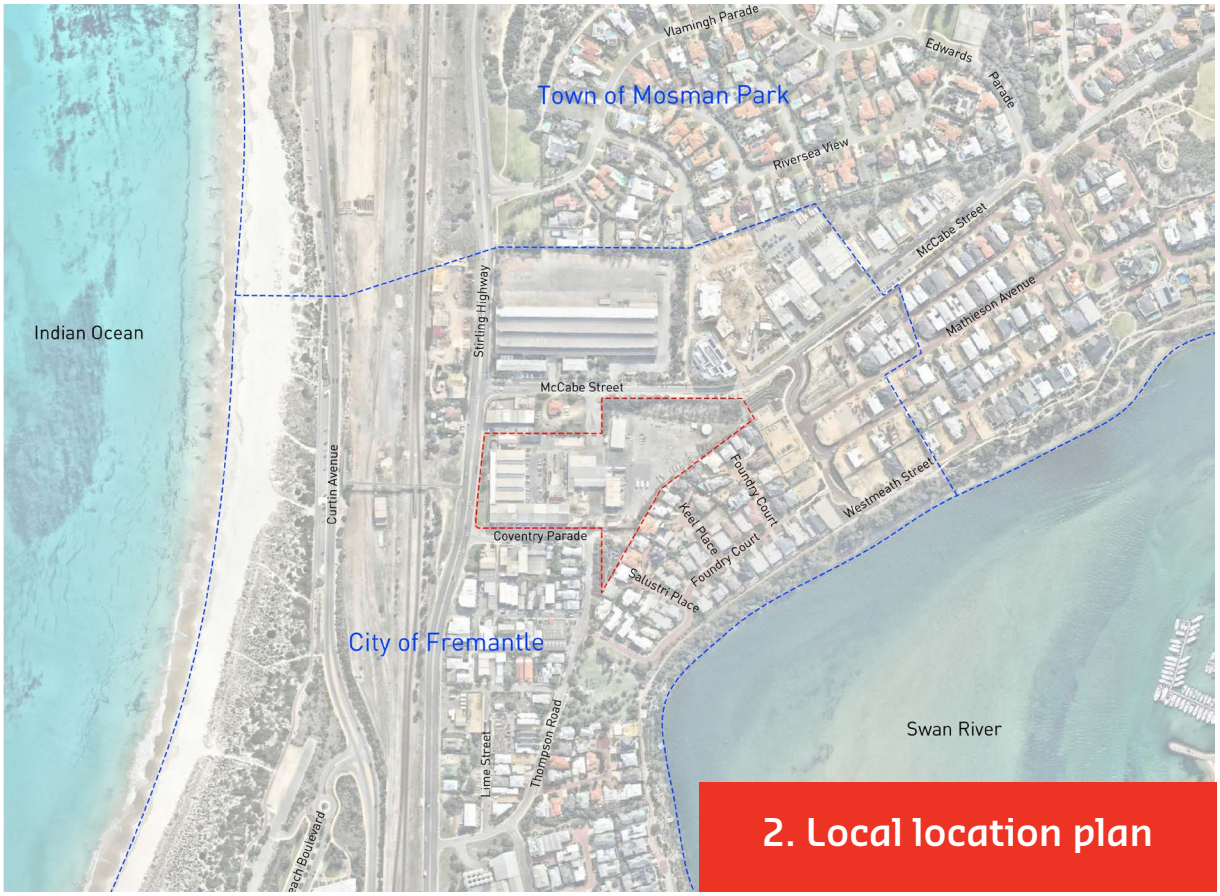
Historically, the Structure Plan Area has been used for a range of industrial and manufacturing land uses. Existing buildings associated with its previous industrial and manufacturing uses are located on the eastern 'half' of the Structure Plan Area and are currently used for office and warehousing purposes. The eastern 'half' of the Structure Plan Area predominantly comprises bitumen hardstand.

1.2.3 Legal Description and Ownership

The Structure Plan Area comprises eleven (11) seperate land parcels. Details of each land parcel are provided in the table below. Copies of each Certificate of Title are enclosed at Appendix 1.

The Structure Plan has been prepared on behalf of 3 Oceans Property Pty Ltd.

1. Regional location plan

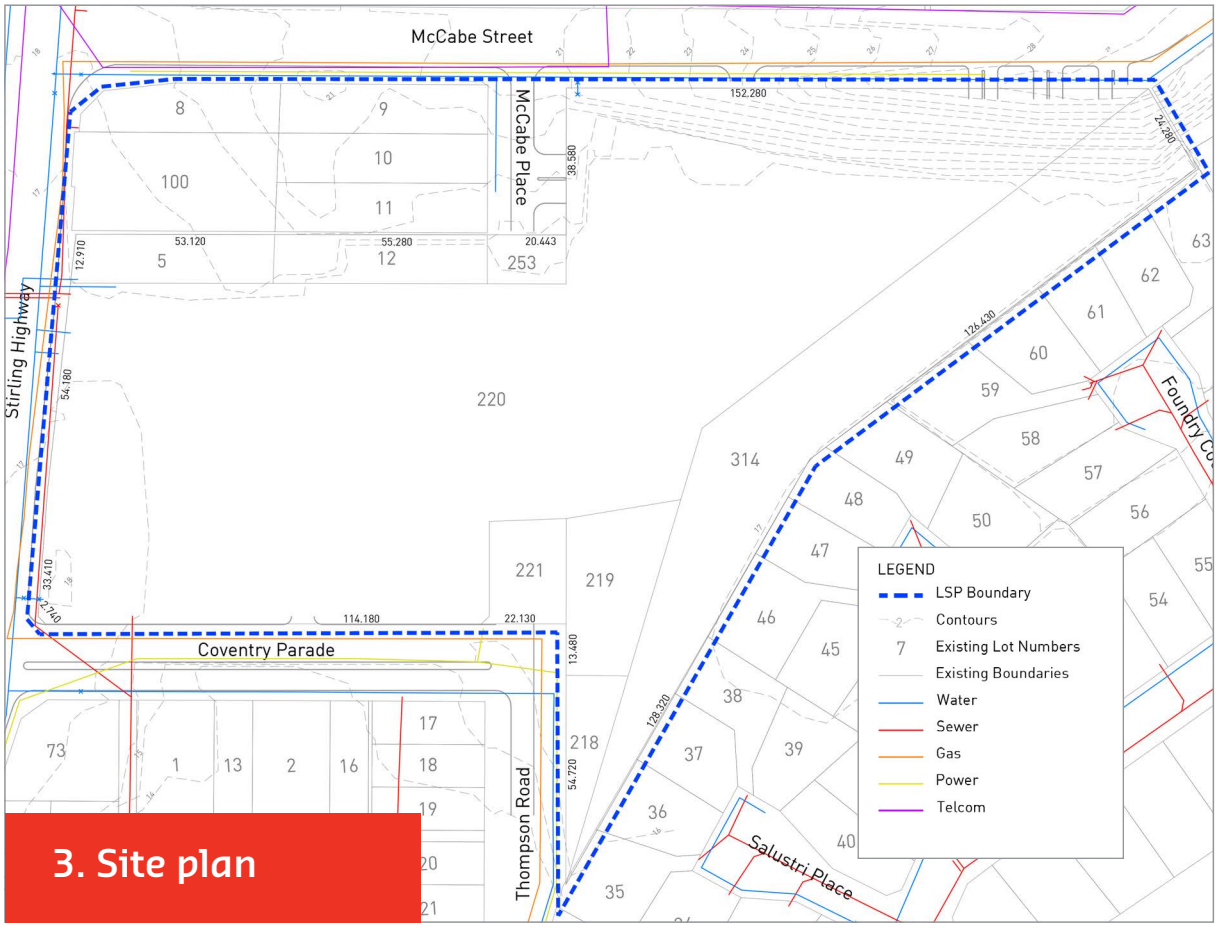


2. Local location plan

Lot Number	Plan/Diagram	Street Address	Certificate of Title Volume / Folio	Registered Landowner
5	D2098	130 Stirling Highway	1787 / 518	3 Oceans Property Pty Ltd
8	D2098	138 Stirling Highway	1644 / 571	Jonathon Fogarty
9	D2098	2-4 McCabe Place	2155 / 345	H.L.M. Holdings Pty Ltd Silverwood WA Pty Ltd
10	D2098	2-4 McCabe Place	2155 / 345	H.L.M. Holdings Pty Ltd Silverwood WA Pty Ltd
11	D2098	Lot 11 McCabe Place	1450 / 624	H.L.M. Holdings Pty Ltd Silverwood WA Pty Ltd
12	D2098	Lot 12 McCabe Place	1787 / 517	3 Oceans Property Pty Ltd
100	D56985	136 Stirling Highway	SP7860	Unknown
218	DP152548	Lot 218 Thompson Road	1174 / 649	3 Oceans Property Pty Ltd
219	DP152548	Lot 219 Thompson Road	1174 / 649	3 Oceans Property Pty Ltd
220	DP152588	Lot 220 Stirling Highway	1007 / 711	3 Oceans Property Pty Ltd
221	DP152548	Lot 221 Thompson Road	1016 / 529	3 Oceans Property Pty Ltd
253	DP152588	Lot 253 McCabe Place	1025 / 872	3 Oceans Property Pty Ltd
314	P162056	Lot 314 McCabe Street	1174 / 649	3 Oceans Property Pty Ltd

Table 1: Lot Details

The Structure Plan has been prepared on behalf of 3 Oceans Property Pty Ltd.



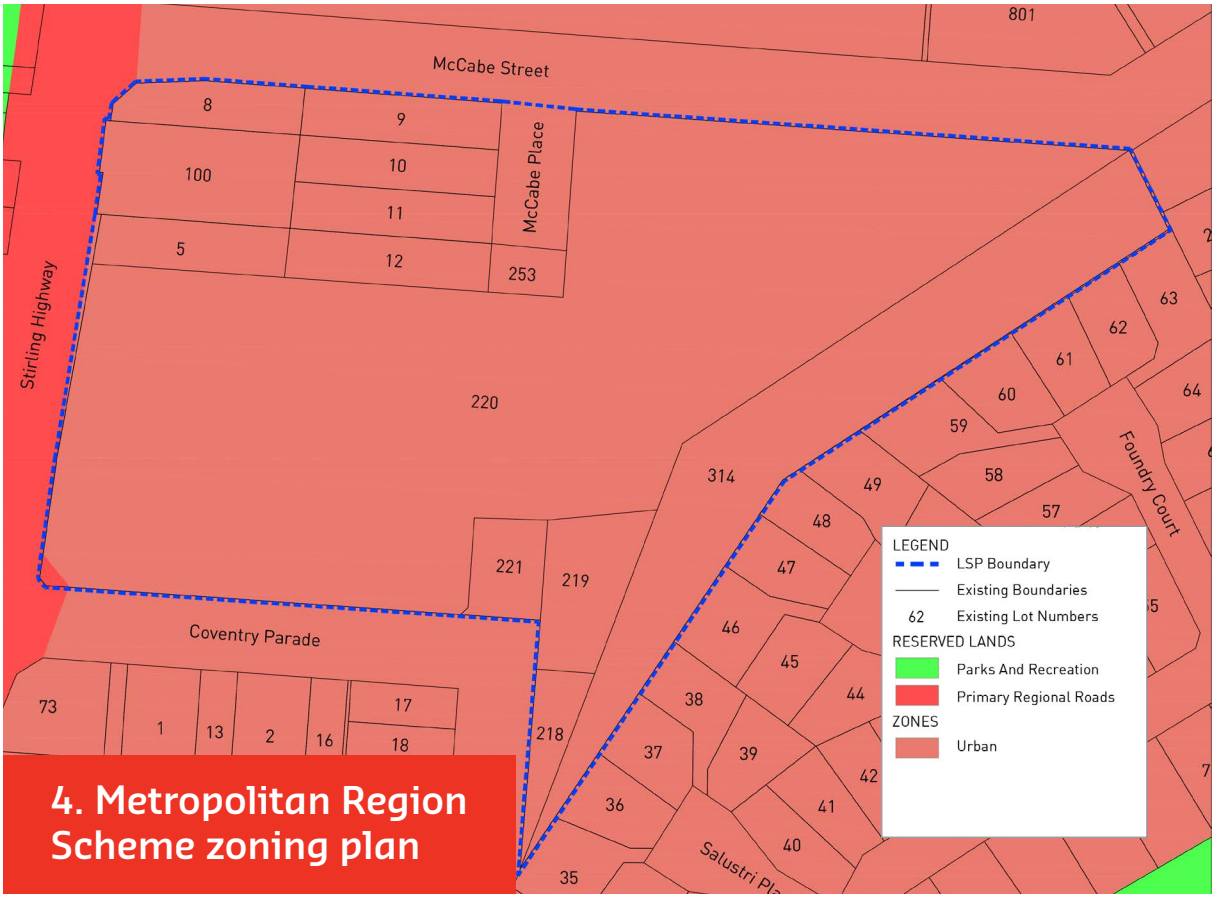
3. Site plan

1.3 Planning Framework

1.3.1 Zoning and Reservations

1.3.1.1 Metropolitan Region Scheme

The Structure Plan Area is predominantly zoned "Urban" under the provisions of the Metropolitan Region Scheme ('MRS') and abuts a "Primary Regional Road Reservation" (Stirling Highway) which runs along the Structure Plan Area's western boundary. A small portion of the Structure Plan Area, comprising a 10m by 10m truncation at the intersection of Stirling Highway and Coventry Parade, is reserved as a Primary Regional Road Reservation (Stirling Highway) under the MRS.



4. Metropolitan Region Scheme zoning plan

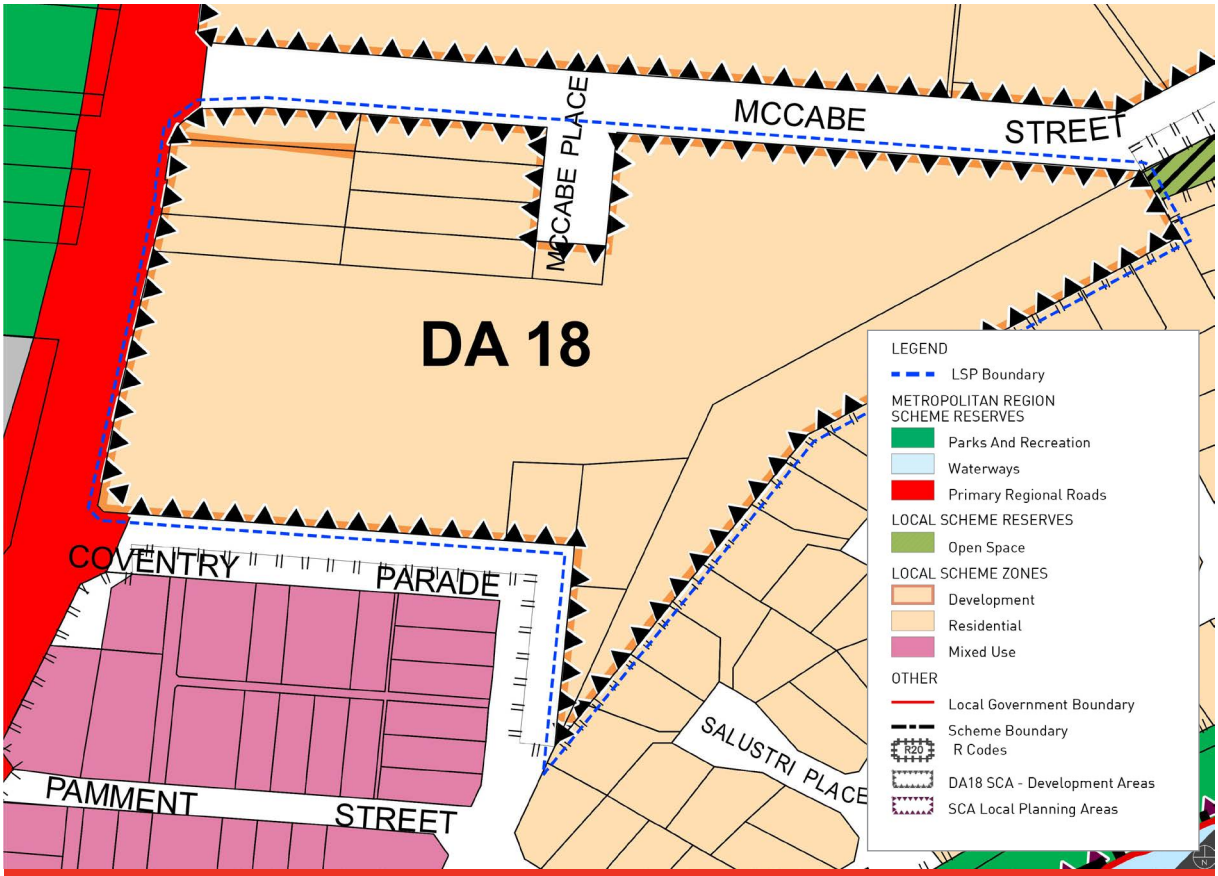
1.3.1.2 City of Fremantle Local Planning Scheme No. 4

Under the provisions of the City of Fremantle Local Planning Scheme No. 4 ('Scheme') the Structure Plan Area is zoned "Development". The purpose of the "Development" Zone is to provide for future residential, industrial, commercial and other uses in accordance with a comprehensive Structure Plan or Detailed Area Plan.

The Structure Plan Area also forms part of a Development Area known as "Development Area No. 18 - McCabe-Coventry Street, North Fremantle" ('DA18'). The development of land within a Development Area is to comply with the following provisions:

1. *Structure Plan is to be adopted to guide subdivision, land use and development prior to approval of development applications.*

2. *Investigation of potential site contamination to the satisfaction of the DEC.*



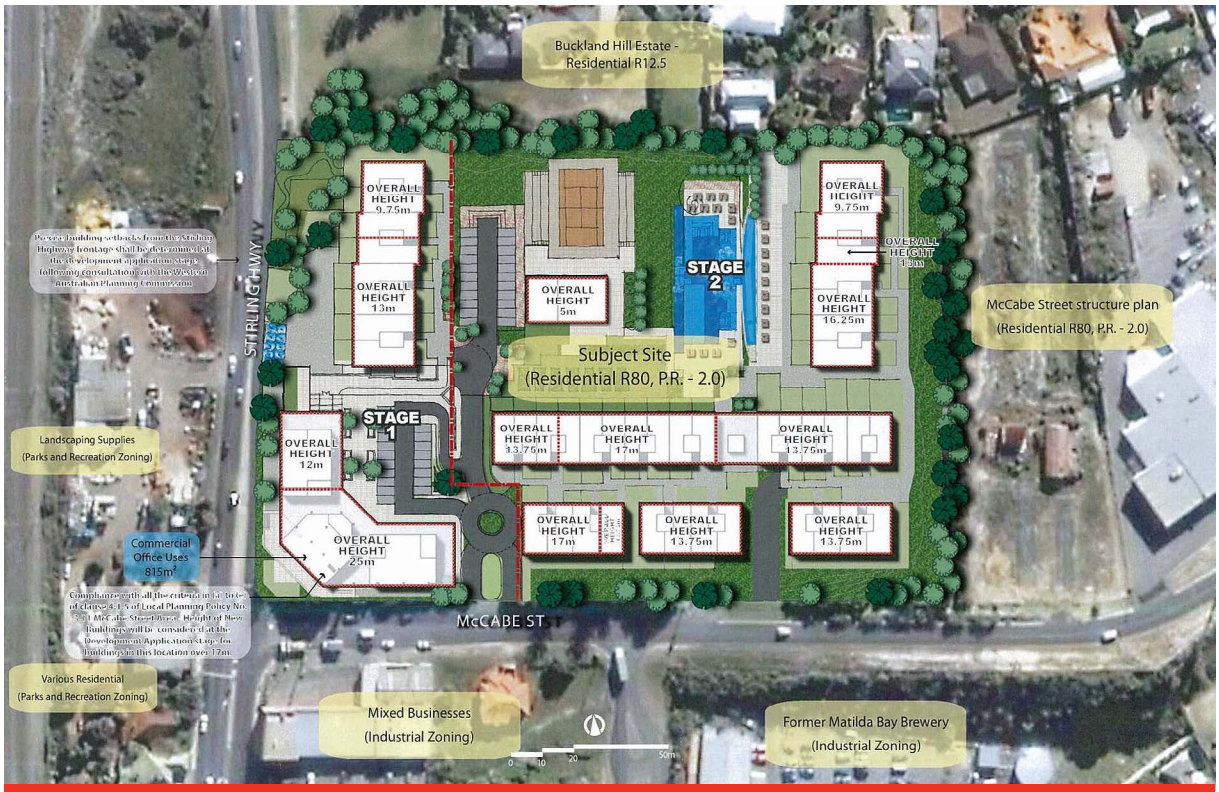
5. Local Planning Scheme No. 4 zoning plan

3. *No development shall be permitted within the proposed road widening on Stirling Highway and McCabe Street as indicated in the proposed Metropolitan Region Scheme (MRS) Amendment 1210/41 or as in a finalised MRS Amendment.*

4. *Any Structure Plan for the land of No. 130 Stirling Highway (including Lot 5, 12, 218, 219, 220, 221, 314 and 253) and No. 2-4 McCabe Street (including Lot 9, 10 and 11), North Fremantle, is to include an internal link road connecting McCabe Street/McCabe Place to Coventry Parade/Thompson Road.*

5. *Development applications received prior to adoption of a Structure Plan shall be assessed via Mixed Use provisions of the Scheme. Applications for any form of residential development and subdivision should be deferred until the Structure Plan is adopted in order that servicing, open space provision, environmental remediation and other issues are resolved.*

Structure Plans have been prepared and adopted for the "One Steel Site" to the immediate north of the Structure Plan Area and the "Taskers Site" located to the north-east of the Structure Plan Area. These sites form part of DA18. Both local structures plans propose primarily residential land uses in the form of medium to high density residential apartments.



6. Approved 'One Steel' Structure Plan (source: City of Fremantle)

7. Approved 'Taskers' Structure Plan (source: City of Fremantle)

1.3.2 Regional and Sub-Regional Strategies/ Structure Plans

There are no adopted regional or sub-regional Structure Plans relating to the Structure Plan Area.

1.3.2.1 Directions 2031 and Beyond (August 2010)

Directions 2031, prepared by the WAPC, is a high-level spatial framework and strategic plan that guides the detailed planning and delivery of housing, infrastructure and services necessary in accommodating the anticipated population growth of the Metropolitan and Peel regions. Directions 2031 identifies an infill target of 47% (154,000 people) and an increase in the current average residential density of 10 dwellings per gross urban zoned hectare to 15 dwellings per gross urban zoned hectare.

1.3.2.2 Central Metropolitan Perth Sub-Regional Strategy (August 2010)

The WAPC's Central Metropolitan Perth Sub-Regional Strategy (the 'Sub-Regional Strategy') forms part of Directions 2031. It sets housing target for local government and provides an inventory of potential development projects to achieve infill target.

The Sub-Regional Strategy specifies a housing target of 3,500 for the City of Fremantle, to be achieved by 2031 through the provision of infill and greenfield development projects. Potential growth areas in the City of Fremantle identified under the Sub-Regional Strategy include the locality of North Fremantle, east of Stirling Highway. This area is identified as a "Major Growth Area" under the Sub-Regional Strategy with an expected dwelling yield of 1000 or greater.

The Structure Plan is expected to generate a dwelling yield in the order of 500 which equates to around 14% of the City's housing target.

1.3.2.3 Draft Central Sub-Regional Planning Framework (May 2015)

The WAPC's draft Central Sub-Regional Planning Framework ('draft Framework') identifies the Structure Plan Area as part of an urban consolidation "Corridor" that stretches along Stirling Highway between Fremantle and Nedlands. These Corridors are identified as the focus for increased densities and a greater mix of suitable land uses, taking advantage of existing public transport services and infrastructure.

1.3.3 Planning Strategies

1.3.3.1 City of Fremantle Local Planning Strategy (2001)

The City of Fremantle Local Planning Strategy ('Local Planning Strategy') was adopted in July 2001 and identified the Structure Plan Area as part of a potential commercial/employment area. The Local Planning Strategy has, in part, been surpassed by the significant volume of more recent strategic planning activities undertaken at the State level which include Directions 2031, Sub-Regional Planning Strategies and, most recently, draft Sub-Regional Frameworks. The identification of the Structure Plan Area as a potential commercial/employment area under the Local Planning Strategy in this sense may be viewed as somewhat 'out of date' with contemporary land use planning principles.

The Local Planning Strategy includes commentary on sites of heritage significance in the City, noting the Matilda Bay Brewery Site (former Ford Factory) as an important heritage building and highlighting the need for retention of these buildings.

1.3.4 Planning Policies

1.3.4.1 Liveable Neighbourhoods

Liveable Neighbourhoods ('LN') is a WAPC operational policy that applies to structure planning and subdivision for greenfield sites and for the redevelopment of large brownfield and urban infill sites. It seeks to create more vibrant, self sufficient and interactive communities that provide a wide range of residential, employment, recreational and business opportunities within a reasonable catchment. The WAPC has recently released a review of LN for public comment.

Some of the principle aims of LN that are relevant to the Structure Plan Area include the following:

- To provide for an urban structure of walkable neighbourhoods clustering to form towns of compatible mixed uses in order to reduce car dependence for access to employment, retail and community facilities.
- To foster a sense of community and strong local identify and sense of place in neighbourhoods and towns.
- To ensure active street-land use interfaces, with building frontages to streets to improve personal safety through increased surveillance and activity.
- To facilitate new development which supports the efficient use of public transport systems where available, and provides safe, direct access to the system for residents.
- To provide a variety of lot sizes and housing types to cater for the diverse housing needs of the community at a density that can ultimately support the provision of local services.
- To ensure the avoidance of key environmental areas and the incorporation of significant cultural and environmental features of a site into the design of an area.
- To provide for a more integrated approach to the design of open space and urban water management.
- To maximise land efficiency wherever possible.

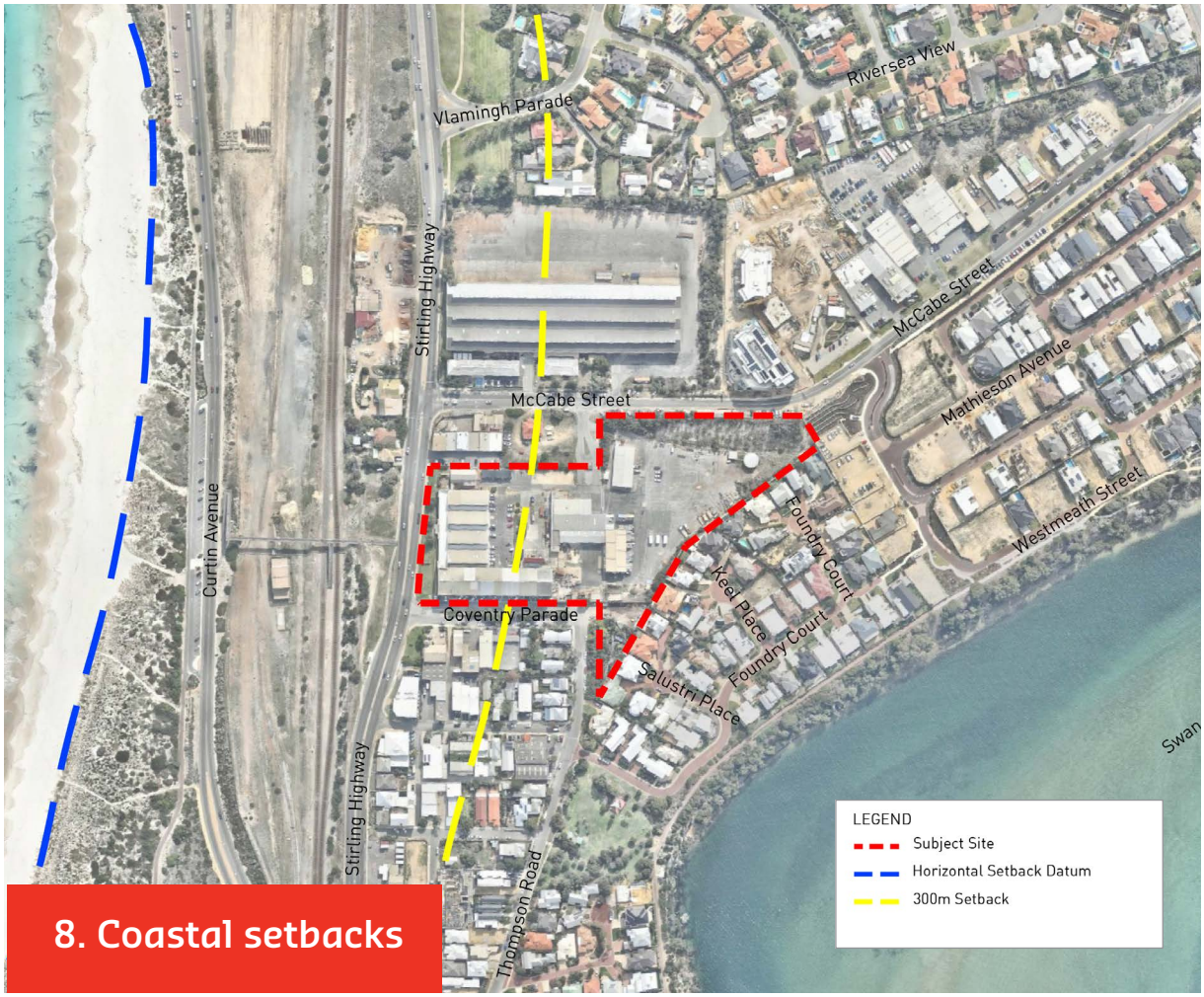
This Structure Plan has been prepared having regard to the aims, objectives and requirements of LN.

1.3.4.2 Statement of Planning Policy 2.6 - State Coastal Planning Policy

The WAPC's State Coastal Planning Policy ('SPP2.6') provides guidance for decision-making in coastal areas. While the Structure Plan Area is positioned in a coastal location, it is situated several hundred metres from the foreshore in an elevated position behind major infrastructure works including railway lines and regional roads. In this respect, the provisions of SPP2.6 in relation to matters such as coastal processes, foreshore management, erosion and the like are not directly relevant to the Structure Plan Area.

Section 5.4 of SPP2.6 contains provisions in relation to building heights within 300m of the 'horizontal shoreline datum' ('HSD'). Part of the Structure Plan Area is located within 300m of the HSD.

SPP2.4 recommends that maximum height limits should be specified as part of controls outlined in a local planning scheme and/or structure plan, in order to achieve outcomes which respond to the desired character, built form and amenity of the locality. In this case, a building height study (the McCabe Street Height Study, 2008) has been undertaken for the land in and around the Structure Plan Area. The purpose of the study was to determine the most appropriate height and bulk of new development on potential redevelopment sites in the area having regard to matters such as topographical features, important public views, cultural heritage and amenity.



8. Coastal setbacks

The study led to the creation of Local Planning Policy 3.11 McCabe Street Area, North Fremantle Height of New Buildings ('LPP 3.11') which was most recently amended and adopted by the Council of the City of Fremantle in August 2015. The purpose of the LPP 3.11 is to ensure that new buildings do not adversely affect the visual amenity of the locality and help safeguard important public views by setting maximum building height limits.

This Structure Plan has been prepared having regard to the Local Planning Policy and its provisions are incorporated into Part One - Implementation Section of this report. In this regard, the requirements of Section 5.4 of SPP2.6 are addressed under both the provisions of the Scheme and this Structure Plan.

1.3.4.3 Statement of Planning Policy 3 - Urban Growth and Settlement

The WAPC's Urban Growth and Settlement Policy ('SPP3') was developed to facilitate sustainable patterns of urban growth and settlement and sets out principles and requirements to assist in achieving a more sustainable urban form. The objectives of SPP3, relevant to this Structure Plan include:

- To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities.
- To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.

- To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints.

This Structure Plan fulfils the objectives of SPP3 by making the most efficient use of underutilised land in an existing urban area, accommodating higher residential densities in an area that is accessible to high frequency public transport and maximising use of existing infrastructure.

1.3.4.4 Statement of Planning Policy No. 3.1 - Residential Design Codes

The Structure Plan proposes primarily residential land uses and in this regard, the WAPC's Residential Design Codes ('SPP3.1') is a relevant policy consideration. Future development in the Structure Plan Area will be guided by the requirements of SPP3.1 except where varied by a Local Development Plan, the Scheme and/or provision of a local planning policy.

A separate Local Development Plan has been prepared in relation to the Structure Plan Area and will be considered by the City concurrently with the Structure Plan. The Local Development Plan seeks to vary some of the deemed-to-comply provisions of SPP3.1 where such variations are warranted having regard to the nature of the Structure Plan Area and its context.

1.3.4.5 Statement of Planning Policy 3.5 - Historic Heritage Conservation

The WAPC's Historic Heritage Conservation Policy ('SPP3.5') sets out principles for the sound and responsible planning, conservation and protection of historic places. The objectives of SPP3.5 seek to:

- Conserve places and areas of historic heritage significance.
- Ensure that development does not adversely affect the significance of heritage places and areas.
- Ensure that heritage significance at both the State and local levels is given due weight in planning decision-making, and
- Provide improved certainty to landowners and the community about the planning processes for heritage identification, conservation and protection.

The Structure Plan contains buildings of cultural heritage significance and these buildings are proposed to be retained and sensitively re-used as part of the Structure Plan Area's redevelopment in order to reinforce its sense of place. A Heritage Impact Statement has been prepared for the Structure Plan Area and is enclosed at Appendix 2.

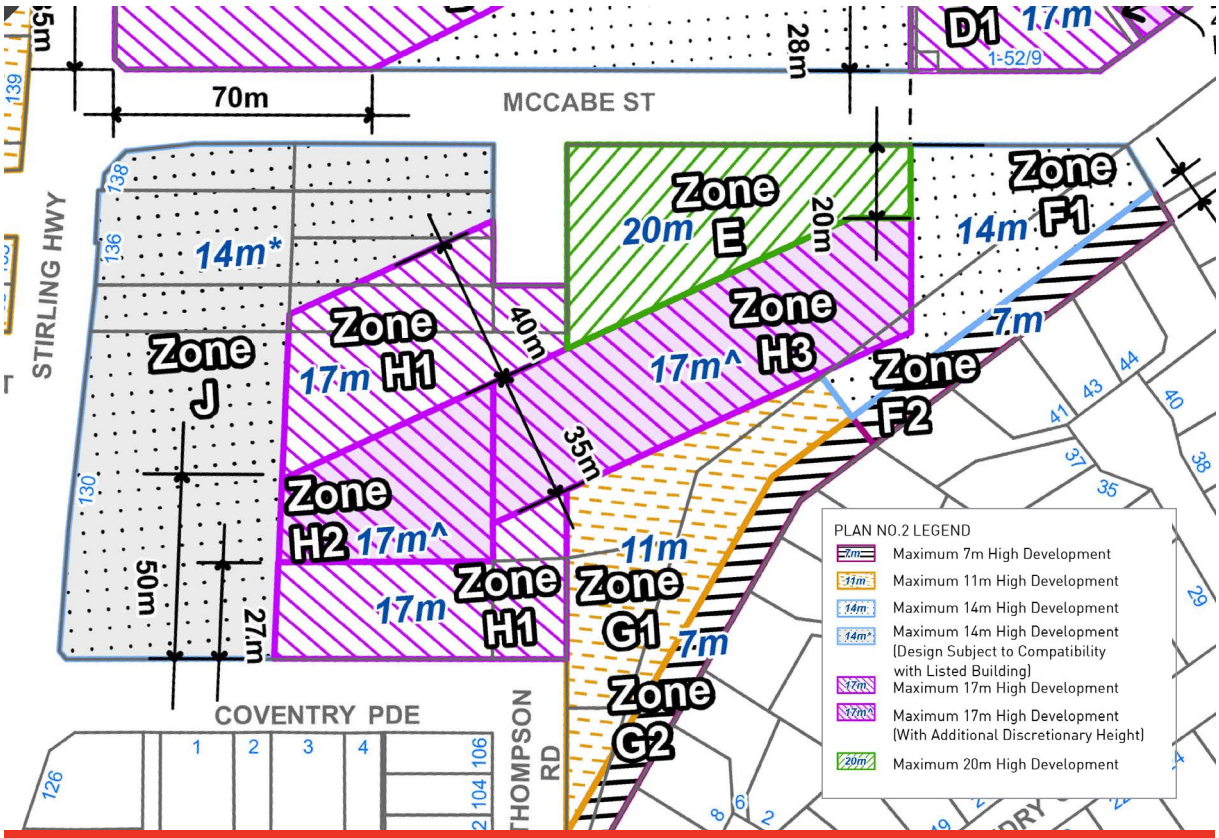
The Heritage Impact Statement sets out a series of recommendations and objectives having regard to the Structure Plan Area's heritage significance. These recommendations and objectives will be used to guide future development within the Structure Plan Area.

1.3.4.6 Local Planning Policy 1.6 - Preparing Heritage Assessments

The Structure Plan Area contains buildings of heritage significance and accordingly a Heritage Impact Statement has been undertaken as part of this Structure Plan. The Heritage Impact Statement has been prepared in accordance with the requirements of the City of Fremantle's Local Planning Policy 1.6 to the extent that is appropriate at the structure planning stage. It is envisaged that the Heritage Impact Statement will be further refined prior to the submission of a formal Development Application.

1.3.4.7 Local Planning Policy 2.9 - Residential Streetscape Policy

The City of Fremantle's Local Planning Policy 2.9 sets out variations to the deemed-to-comply provisions of the WAPC's SPP3.1. Given the Structure Plan proposes residential land uses, the provisions of Local Planning Policy 2.9 will be considered in future Development Applications to the extent that they are applicable.



9. 9. Local Planning Policy 3.11 Plan No. 2 - Building Height Zones Plan (source: City of Fremantle)

1.3.4.8 Local Planning Policy 3.11 - McCabe Street Area, North Fremantle - Height of New Buildings

The City of Fremantle's LPP 3.11 was prepared following the completion of the McCabe Street Height Study in 2008 which was undertaken to determine appropriate height and building bulk controls for new development in DA18. The Study recommendations were used as a basis for the preparation of LPP 3.11 which was first adopted by Council in April 2009 and recently amended (and adopted) in August 2015. The purpose of LPP 3.11 is to identify maximum building height limits within DA18 under the Scheme and to apply these limits in the assessment of structure plans and applications for planning approval.

LPP 3.11 identifies a range of building height limits across the Structure Plan Area, ranging from 7.0m along the south-eastern boundary where the Structure Plan Area adjoins existing low density residential development, and up to 33.0m in the centre of the Structure Plan Area where the potential off-site impacts of taller buildings, such as overshadowing and overlooking, can be more effectively managed.

This Structure Plan has been prepared having regard to LPP 3.11 and its provisions are incorporated into the Structure Plan under Part One - Implementation Section.

1.3.5 Other Approvals and Decisions

1.3.5.1 MRS Amendment 1168/57 - Minor Amendment

MRS Amendment 1168/57 rezoned the Structure Plan Area from "Industrial" to "Urban" under the MRS and was gazetted on 30 October 2009. The purpose of Amendment 1168/57 was to facilitate the redevelopment of the Structure Plan Area for urban purposes.

1.3.5.2 City of Fremantle Scheme Amendment 12

Amendment 12 to the Scheme rezoned the Structure Plan Area from "Industrial" to "Development" and was gazetted on 7 June 2013. The purpose of Amendment 12 was to bring the local zoning into conformity with the MRS as required under section 124(3) of the *Planning and Development Act 2005*. Amendment 12 also introduced the following development control provisions into Schedule 11 (DA18) of the Scheme:

Ref No.	Area	Provisions
DA 18	McCabe-Coventry Street, North Fremantle	1.Structure plan is to be adopted to guide subdivision, land use and development prior to approval of development applications. 2. Investigation of potential site contamination to the satisfaction of the DEC. 3. No development shall be permitted within the proposed road widening on Stirling Highway and McCabe Street as indicated in the proposed Metropolitan Region Scheme (MRS) Amendment 1210/41 or as in a finalised MRS Amendment. 4. Any structure plan for the land of No. 130 Stirling Highway (including Lot 5, 12, 218, 219, 220, 221, 314 and 253) and No. 2-4 McCabe Street (including Lot 9, 10 and 11), North Fremantle, is to include an internal link road connecting McCabe Street/McCabe Place to Coventry Parade/Thompson Road. 5. Development applications received prior to adoption of a structure plan shall be assessed via Mixed Use provisions of the Scheme. Applications for any form of residential development and subdivision should be deferred until the structure plan is adopted in order that servicing, open space provision, environmental remediation and other issues are resolved.

Table 2: Development Area 18 Development Control Provisions.

1.3.5.3 MRS Amendment 1210/41 - Major Amendment

MRS Amendment 1210/41 was initiated in March 2012 for the purpose of rationalising the Stirling Highway Primary Regional Road reservation under the MRS. A portion of the Structure Plan Area at the intersection of Stirling Highway and McCabe Street and the intersection of Stirling Highway and Coventry Parade is identified for future road widening under Amendment 1210/41.

The areas identified for future road widening under Amendment 1210/41 are shown on the Structure Plan (Plan 1) under Part One - Implementation Section.

Amendment 1210/41 remains under consideration by the WAPC however we are advised that a decision on the Amendment is expected in the first half of 2016.

1.3.6 Pre-Lodgement Consultation

The preparation of this Structure Plan has been informed by consultation with the City of Fremantle, the Town of Mosman Park, the North Fremantle Community Association and various State Government agencies. The following provides a summary of consultation undertaken.

Authority	Date of Consultation	Method of Consultation	Summary of Outcomes
City of Fremantle	20.02.2015	Meeting	Initial project meeting to discuss site, process and objectives. Guidelines to be prepared by the City of Fremantle to guide the Structure Plan. Consultation to be undertaken with the North Fremantle Community Association.
City of Fremantle	24.02.2015	Site Visit	Identification of site opportunities and constraints, internal inspection of heritage buildings.
City of Fremantle and North Fremantle Community Association (NFCA)	18.03.2015	Design Workshop	Planning, Built Form, Heritage and Landscape Objectives established to inform Structure Plan design.
City of Fremantle and NFCA	25.03.2015	Technical Workshop	Overview of traffic, engineering and drainage opportunities and constraints within the Structure Plan Area, and identification of matters to be addressed in sub-consultant reports.
Department of Environment and Regulation, Contaminated Sites Regulation Group	08.05.2015	Email Correspondence	Review of Sampling and Analysis Plan, Department of Environment Regulation confirmed support for the completion of further investigations in conjunction with, or after, demolition works. No further investigations required prior to the approval of the Structure Plan.
Main Roads WA	27.05.2015	Meeting	Review of MRWA road widening requirements and identification of possible future road widening requirements along McCabe Street.
City of Fremantle and NFCA	19.08.2015	Meeting	Preliminary Development Concept Plan tabled for discussion, feedback received for further consideration by the project team.
Town of Mosman Park	01.09.2015	Meeting	Preliminary Development Concept Plan tabled for discussion, feedback received. Local issues identified, modifications to be considered by the project team.
City of Fremantle and Department of Water	02.10.2015	Meeting	Discussion on suitable water management solutions for the site, feedback provided by the Department of Water and the City in relation to the Local Water Management Strategy.
Department of Planning	06.10.2015	Telephone Discussion	Discussion regarding the *Planning and Development (Local Planning Schemes) Regulations 2015* and implications for Structure Plan/Local Development Plan.
City of Fremantle	09.10.2015	Meeting	Review of *Planning and Development (Local Planning Schemes) Regulations 2015* and implications for Structure Plan/Local Development Plan, update on Structure Plan preparation and lodgement strategy.

Table 3: Pre-Lodgement Consultation Summary

02 Site Conditions and Constraints

2.1 Biodiversity and Natural Area Assets

2.1.1 Flora

Given the historic use of the Structure Plan Area for industrial and manufacturing purposes, limited vegetation is located on the site.

The 'escarpment' located on the northern boundary of Lot 220 fronting McCabe Street in the eastern part of the Structure Plan Area contains some existing vegetation which generally consists of low-lying shrubs. This vegetation also extends along the McCabe Street frontage of the Structure Plan Area and along the eastern side of McCabe Place.

Existing vegetation along the 'escarpment' (view looking west from eastern boundary of Lot 220)

The verge area located on the western boundary of the Structure Plan Area between the Stirling Highway road pavement and existing buildings is predominantly grassed and contains three (3) existing palm trees which will be retained.

A number of trees are scattered around the permitter of the Structure Plan Area, primarily along the eastern boundary of Lot 220.

The Structure Plan Area does not contain any protected Bush Forever areas nor does it contain any declared rare or priority flora. In this regard there are no natural area or biodiversity assets located in the Structure Plan Area.

Existing vegetation along Stirling Highway

Scattered vegetation along the eastern boundary of Lot 220

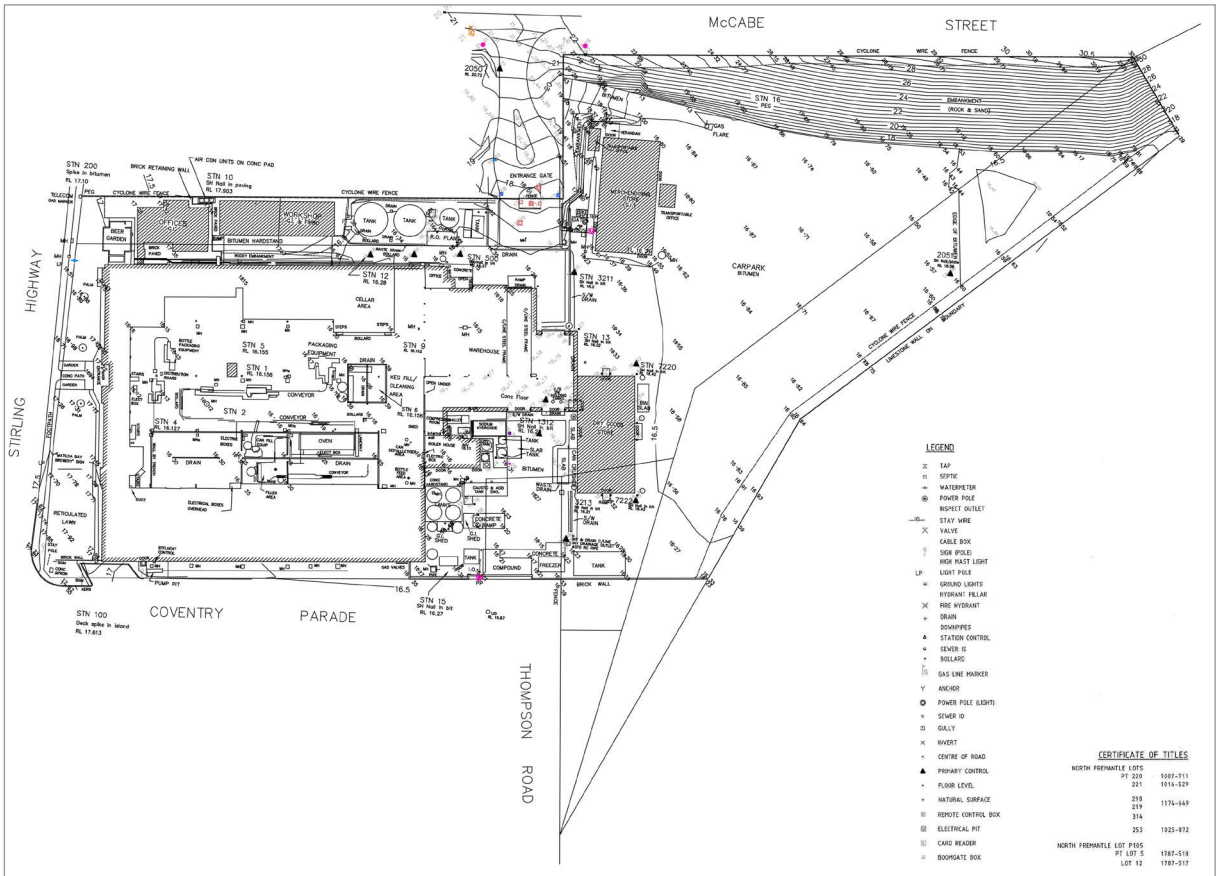
2.1.2 Fauna

Given the historic use of the Structure Plan Area for industrial and manufacturing purposes, along with the site's limited vegetation, there are no fauna species known to be inhabiting the Structure Plan Area.

2.2 Landform and Soils

2.2.1 Topography

The Structure Plan Area is generally level with an elevation of between approximately 16m and 17m AHD. The northern edge of the site is formed from a steep embankment that is up to about 8m high.

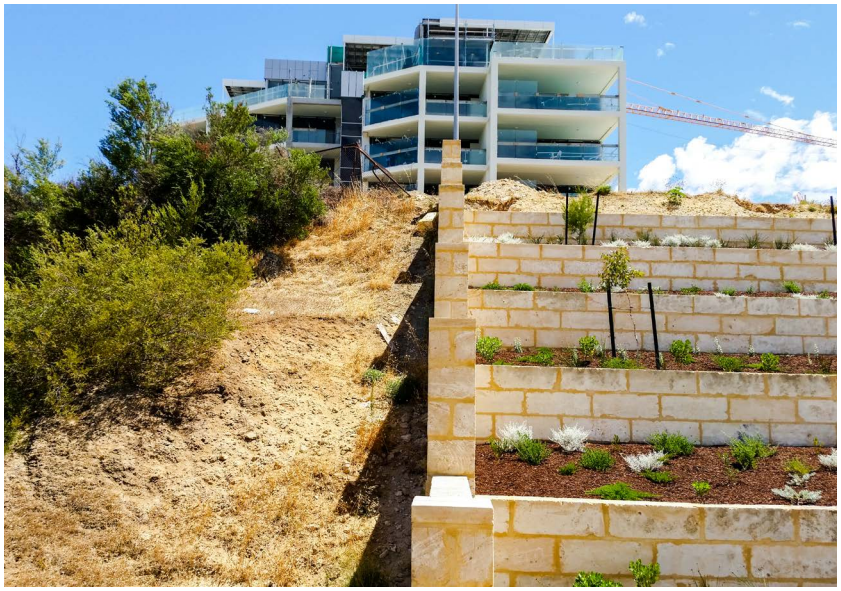


10. Feature survey (source: GHD Surveys Pty Ltd)

The steep embankment located on the northern edge of the Structure Plan Area presents a constraint to development and requires a considered design response. The construction of dwellings along the embankment is proposed in order to provide an appropriate interface along McCabe Street. Preliminary design concepts suggest single to double storey buildings can be constructed along the McCabe Street frontage, extending in height to three or four storeys as the topography falls away to the south.

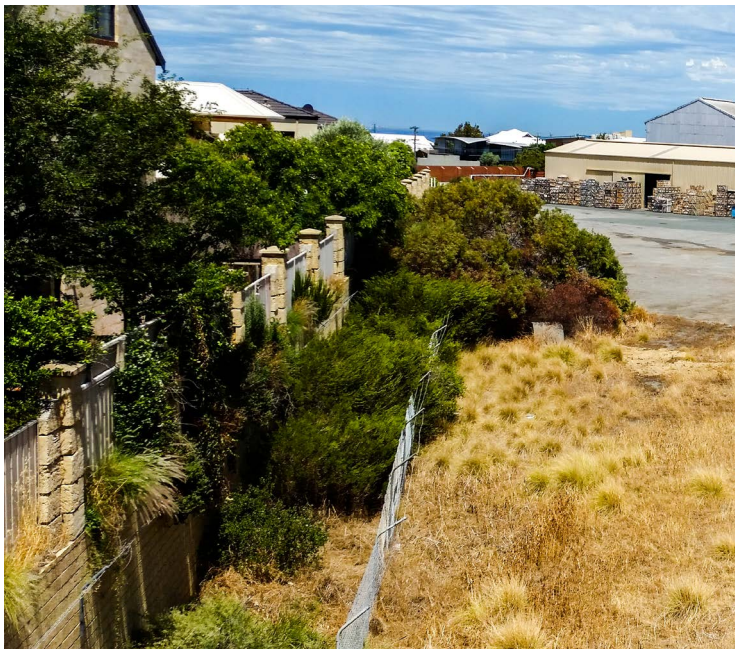
The south-eastern 'edge' of the Structure Plan abuts an existing low density residential area which is elevated up to 2m above existing ground levels within the Structure Plan Area.

Under LPP 3.11, a building height limit of 7m applies within 10m of the south-eastern 'edge' of the Structure Plan Area. In this regard, future buildings on this part of the Structure Plan Area will effectively sit below the adjoining site.



Steep embankment on the northern side of the Structure Plan Area looking towards McCabe Street. The retaining to the right-hand side forms part of the Minim Cove development. A residential apartment tower within the Taskers development is visible in the background

Ground level difference up to 2m between the Structure Plan Area and adjoining residential area to the south-east.



2.2.2 Geology

A Preliminary Geotechnical Investigation of the Structure Plan Area has been undertaken by Douglas Partners and is enclosed at Appendix 3.

The investigation revealed that the Structure Plan Area is essentially a "cut" site, with a significant exposure of in situ limestone bedrock in the north-east. Tamala limestone is the predominant lithological unit in the Mosman Park/North Fremantle area. The limestone within the Structure Plan Area is understood to vary between sandy limestone and a harder, karstic limestone, with evidence of significant solution pipes up to 20cm in diameter. Some small parts of the Structure Plan Area have been filled.

The investigation indicates that the Structure Plan Area should be suitable for the proposed development, including the excavation for, and construction of, basement parking and building foundations. Notwithstanding, further geotechnical investigations are recommended at the detailed design stage to better inform site preparation, compaction, excavation and construction.

2.2.3 Contaminated Sites

A Preliminary Site Investigation ('PSI') was undertaken over the Structure Plan Area in 2007 as part of MRS Amendment 1168/57. The results of the PSI indicated that there is potential for contamination to be present and that the Structure Plan Area should be investigated in accordance with the Department of Environment Regulation's ('DER') Assessment and Management of Contaminated Sites Guidance. Recommendations made in the PSI include the preparation and implementation of a Sampling and Analysis Program ('SAP') to provide a suitable pathway to determine the site's contamination status. Stratgen was engaged to prepare a SAP for the Structure Plan Area. A copy of the SAP is enclosed at Appendix 4.

The SAP was prepared in accordance with the DER's requirements and reviewed by an Environmental Auditor. Given the Structure Plan Area contains existing infrastructure and areas of bulk storage, the carrying out of detailed investigations at this stage of the project is constrained. As such, the SAP details the rationale and methodology for sample collection and laboratory analysis to inform a future Detailed Site Investigation ('DSI') which will be undertaken at the Development Application stage.

The SAP was provided to the DER's Contaminated Sites Branch and on 8 May 2015, the DER advised that it *"support[s] the completion of further investigations at the site in conjunction with or after the demolition works and investigations are not required prior to the approval of the structure plan"*.

On 12 May 2015 the City of Fremantle advised that when assessing the Structure Plan, it would consider the requirements of Schedule 11 (DA18) in relation to the investigation of site contamination to be met if the DER confirmed that the investigation of potential site contamination had been to their satisfaction. In this case, the DER cannot confirm this until further works such as demolition of buildings on site have been undertaken. Therefore, site contamination investigation and potential remediation will be required at either the Subdivision or Development Application stage.

2.2.4 Hydrology

Hyd2o were engaged to undertake an assessment of the Structure Plan Area's hydrological characteristics and prepare a Local Water Management Strategy ('LWMS') to address the collection, management and discharge of stormwater on site. A copy of the LWMS is enclosed at Appendix 5. The following provides a summary of the assessment findings.

2.2.4.1 Wetlands

According to the DER's Geomorphic Wetlands of the Swan Coastal Plain dataset there are no wetlands located within the Structure Plan Area. The Swan River Estuary, classified as a Conservation Category Wetland, is located approximately 150m east of the Structure Plan Area. Based on the EPA's *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* there are no Enviromental Protection Policy lakes occurring within, or in close vicinity, to the Structure Plan Area.

2.2.4.2 Acid Sulfate Soils

According to Landgate's acid sulfate soils risk mapping, there are no acid sulphate soils ('ASS') occurring within 3m of natural soil surface within the Structure Plan Area.

2.2.4.3 Surface Water

There are no defined waterways or watercourses within the Structure Plan Area. At present, surface water is managed via a mix of informal and formal drainage infrastructure.

Roof runoff is understood to be disposed of in an infiltration sump located at the south-east corner of the Structure Plan Area, while runoff from the hardstand car park is managed via an informal soakage area located in the north-east corner of the Structure Plan Area.

The infiltration drainage sump was once formally connected to the City of Fremantle drainage network along Coventry Parade which drains directly into the Swan River, but is understood to have been disconnected in 2007.

2.2.4.4 Groundwater

The underlying hydrogeology of the Structure Plan Area is characterised by a superficial aquifer, extending to approximately -30m Australian Height Datum ('AHD').

Historic maximum groundwater levels are <1m AHD, due to the Structure Plan Area's proximity to the coastline, which corresponds to in excess of 17m below existing natural surface across the Structure Plan Area. Groundwater levels are likely to fluctuate with the tide and are likely to flow either east towards the river or west towards to ocean. The closest Department of Water ('DoW') long term groundwater monitoring bore (IF16) is located approximately 2.2km north of the Structure Plan Area. From 1996 to present it has recorded levels ranging from 0.74m AHD to 0.23m AHD.

Groundwater monitoring should be undertaken where groundwater has a close interaction with the natural surface. Due to groundwater exceeding 17m AHD below surface, a pre-development groundwater level and quality monitoring program is considered unnecessary for the Structure Plan Area.

2.3 Servicing

The Civil Group were engaged to review existing services to the Structure Plan Area and identify future servicing requirements. A copy of the engineering report is enclosed at Appendix 6. The following provides a summary of the report findings.

2.3.1 Water

The Structure Plan Area is connected to, and currently serviced by, water infrastructure. A 150mm diameter main is located along Stirling Highway and has several connections into the Structure Plan Area (including fire services). A 205mm main runs along McCabe Street from which there is another fire service connection adjacent to McCabe Place. A 100mm main is located on part of the western side of McCabe Street and a 100mm main is located along the southern side of Coventry Place.

Hardstand located within the eastern part of the Structure Plan Area

2.3.2 Wastewater

The Structure Plan is connected to, and currently serviced by, sewer infrastructure. The Structure Plan Area falls to a sewer connection near the Structure Plan Area's north-west corner on Stirling Highway. This connection is at the end of a 225mm diameter sewer that crosses Stirling Highway and then turns north along the edge of the rail reserve.

A 150mm sewer may have originally been located along the western edge of the Structure Plan Area and partly inside the boundary. The sewer is expected to have run southwards to Coventry Parade and then south through the existing residential area. There are two (2) other connections to this southern sewer.

2.3.3 Gas

Existing high pressure gas mains are located on the three (3) main street frontages of the Structure Plan Area. Near Thompson Road, a high pressure supply is provided to the Structure Plan Area and is accessed off the main in Coventry Parade. Medium pressure mains are located on the south side of Coventry Parade and the northern side of McCabe Street.

2.3.4 Power

Existing high and low voltage overhead powerlines are located in Coventry Parade and McCabe Street. The high voltage supply in Coventry Parade is connected to a high voltage substation and switchgear that is located in a semi-roofed compound adjacent to the northern side of Coventry Parade near its intersection with Thompson Street. The markings on this substation suggest it might also be connected back into the adjoining residential areas and provide a low voltage supply to nearby residential dwellings.

2.4 Heritage

2.4.1 Aboriginal Heritage

A review of the Department of Aboriginal Affairs' Aboriginal Heritage Enquiry System reveals that the Structure Plan Area is located within the vicinity of the Rocky Bay Registered Site (Site ID 3596).

11. Aboriginal heritage site location plan
(source: Department of Aboriginal Affairs)

The Registered Site encompasses a broad area measuring of several kilometres and extends north from Victoria Street Mosman Park, south to Staples Street North Fremantle, east to the Mosman Park Golf Course and west to Stirling Highway. The Structure Plan Area is located on the western edge of the Registered Site boundary.

Given the Structure Plan Area has been extensively excavated and developed for industrial purposes and is located on the periphery of the Registered Site boundary, a targeted Aboriginal heritage investigation has not been undertaken.

Investigations may be required after the granting of Planning Approval and prior to construction commencing to ensure compliance with the *Aboriginal Heritage Act 1972*.

2.4.2 Cultural Heritage

The Structure Plan Area contains buildings of cultural heritage significance, reflecting the area's industrial past. A Heritage Impact Statement has been prepared in relation to Structure Plan Area and sets out a series of recommendations and objectives having regard to the site's heritage significance. These recommendations and objectives will be used to guide future development on the site. A copy of the Heritage Impact Statement is enclosed at Appendix 2.

The site's current heritage listings are identified below:

Listing Type	Included
National Heritage List (Commonwealth)	No
Register of the National Estate (Indicative Place)	Yes
Register of Heritage Places (State)	No
National Trust of Australia (WA) (Classified)	Yes
Municipal Heritage Inventory (Local) - Management Category 1B	Yes
Town Planning Scheme (Local) - Heritage List	Yes
Art Deco Significant Building Survey	Yes
Survey of 20th Century Architecture	Yes

Table 4: Cultural Heritage

The buildings were originally designed and constructed to accommodate the Ford Assembly Plant which was opened in 1930. Apart from a period during World War II where the Plant was requisitioned for the production of military equipment, it retained this use until 1987. From 1988 to 2007 the buildings were occupied by the Matilda Bay Brewing Company and used in the production of locally brewed beers.

By the end of their lease in 2013, the Matilda Bay Brewing Company had decommissioned the site and the owner (H.L.M. Holdings Pty Ltd) had undertaken works involving the removal of factory space to the east of the administration building, conservation works to the south façade facing Coventry Parade and a new carpark to the east of the saw tooth roof factory building. The current site configuration reflects these works.

The Stirling Highway facade of the 1929 office building and the 1929/47 southern warehouse to Coventry Parade display the Inter War Functionalist Style and are a prominent local landmark given their location, bulk and the lack of other buildings of similar size in proximity.

Stirling Highway facade of the 1929 office building and the 1929/47 southern warehouse to Coventry Parade displaying the Inter War Functionalist Style

Internal view, 1929/47 southern warehouse fronting Coventry Parade

1929/47 southern warehouse fronting Coventry Parade

2.5 Access

Aurecon were engaged to undertake a review of existing traffic conditions in and around the Structure Plan Area and to assess the impact of the Structure Plan on these existing conditions. A copy of the Transport Assessment is enclosed at Appendix 7. The following provides a summary of the report findings in relation to existing traffic conditions.

2.5.1 Surrounding Road Network

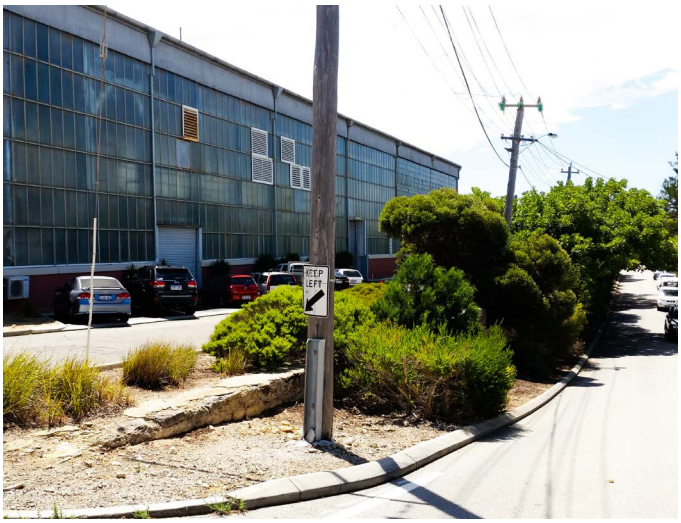
The Structure Plan Area maintains frontage to Stirling Highway in the west, McCabe Street and McCabe Place in the north and Coventry Parade/Thompson Road in the south. The table below describes the nature and hierarchy of each road.

Road	Classification	Description
Stirling Highway	Primary Distributor	Caters for major regional traffic volumes in the order of 40,000 vehicles linking Perth and Fremantle. Dual carriageway road with a median island, and has a posted speed of 60km/h.
McCabe Street	Local Distributor	Serves as an east-west link between Stirling Highway and the residential area of Mosman Park, and provides direct access to St Hilda's School. Single carriageway road with a posted speed of 50km/h. The T-intersection of Stirling Highway and McCabe Street is signalised with a left turn storage lane (approximately 50m in length) provided on the McCabe Street approach.
McCabe Place	Access Road	Currently provides access to the northern half of the Structure Plan Area. The McCabe Place / McCabe Street T-intersection is unsignalised and allows all movements.
Coventry Parade	Access Road	Predominantly provides access to the residential area south of the Structure Plan Area. Single carriageway road separated by a median, with a posted speed of 50km/h. The T-intersection of Stirling Highway and Coventry Parade is currently unsignalised and allows all movements. There is currently a grade change between the northern and southern carriageways on Coventry Parade.

Table 5: Classification of roads surrounding the Structure Plan Area

Coventry Place looking south from McCabe Street towards the Structure Plan Area

Eastern end of Coventry Parade at the intersection of Thompson Road looking west



Western end of Coventry Parade looking north-east towards the Structure Plan Area

2.5.2 Pedestrian and Cycle Movement

The surrounding road network has footpaths on at least one side of the road on the majority of directly accessible routes, including Stirling Highway, McCabe Street, Coventry Parade, Thompson Road and Craig Street. The pedestrian path width varies between 1.2m and 1.8m and is generally in good condition. A signalised pedestrian crossing is provided at the Stirling Highway / McCabe Street intersection providing safe and convenient access to the Structure Plan Area, particularly given the high traffic volumes on Stirling Highway.

The existing pedestrian footpath network also provides access to the nearby public transport stops and North Fremantle Railway Station. In order to access Leighton Beach, a pedestrian bridge is provided across the road from the Structure Plan Area to cross safely over the railway tracks.

There are a number of existing bicycle facilities in proximity to the Structure Plan Area. Cyclist facilities are generally provided for in the form of on-road cycle lanes (sealed road shoulders), off-road paths (separated or shared pedestrian / cyclist paths); or otherwise within general traffic lanes (given low traffic volumes and posted speeds of between 30 and 50km/h).

2.5.3 Parking

Kerbside parking is currently permitted within the local access roads surrounding the Structure Plan Area. Most kerbside parking on the surrounding road network is time limited to 2 hours.

2.5.4 Public Transport

The Structure Plan Area is located in proximity to a number of public transport options, including bus and rail services. The North Fremantle Railway Station is located approximately 800m south of the Structure Plan Area. North Fremantle Station is situated on the Fremantle Railway Line which provides direct access to both the Fremantle and Perth CBDs.

A bus stop is located 150m south of the Structure Plan Area along Stirling Highway, immediately after Coventry Parade. The bus stop facilitates four regular bus services (98, 99, 193, 107), and is within a short walking distance to the Structure Plan Area. The Circle Route (98, 99) provides access to a number of key destinations in Perth, including numerous universities, hospitals, shopping centres and train stations. The 103 and 107 bus services provide direct routes between Fremantle and the Perth CBD. An infrequent bus service (381) also runs along Curtin Avenue between Fremantle and Karrinyup with the bus stop located 400m from the Structure Plan Area.

2.6 Context and Other Land Use Constraints and Opportunities

The Structure Plan Area is located in a former industrial area that has been progressively redeveloped for primarily residential purposes. The land to the south and east of the Structure Plan Area and further north within the Town of Mosman Park, contains typically low density single residential dwellings and some limited non-residential (commercial) uses.

Low dens
single resident
dwellings with
the Buchland H
Esta

The land to the north of the Structure Plan Area has undergone significant change in recent years with the planning, approval and (now) construction of medium and high density apartment developments (Taskers). The One Steel site located to the immediate north of the Structure Plan Area on the northern side of McCabe Street contains an approved Structure Plan however implementation of the Structure Plan has not commenced and the property is currently for sale.

Low density single residential dwellings within the Minim Cove Estate

Commercial buildings on the southern side of Coventry Parade

Taskers development on the northern side of McCabe Street, north-east of the Structure Plan Area

The Structure Plan Area is well located in relation to existing transport routes, being positioned on Stirling Highway and accessible to a high frequency public (bus) transport system. The Fremantle Railway Lane is located to the west of the Structure Plan Area and the North Fremantle Railway Station is positioned to the south-west. The Structure Plan's proximity to existing public transport infrastructure and regional roads creates an opportunity for higher density development, as reflected in the approved local structures plans to the north.

The Structure Plan Area is also well located in the context of recreational areas, being positioned between the Ocean and the Swan River. Leighton beach is located approximately 200m to the west of the site and is accessible via a footbridge located on the western side of Stirling Highway directing opposite the Structure Plan Area.

Footbridge providing pedestrian access to Leighton Beach

Existing park at the intersection of Thompson Road and Foundry Court

Passive recreation is provided along Thompson Road at the intersection of Foundry Court, approximately 150m south of the Structure Plan Area, Buchland Hill Park which is located approximately 150m to the east and Mount Lyall Park which is located approximately 430m to the east. The Swan River Foreshore is located approximately 200m from the Structure Plan Area and is accessible by the surrounding road network.

In relation to schools, the North Fremantle Primary School is located approximately 1.2km south of the Structure Plan Area and St Hilda's Primary School is located approximately 1.5km to the east within the Town of Mosman Park. Being located on a Primary Regional Road that is serviced by a high frequency public transport system and only 3.5km north-east of the Fremantle City Centre, the Structure Plan Area is accessible to a range of higher education facilities such as high schools and universities, along with a variety of health and community services, sports grounds and other active recreational facilities, employment opportunities and retail/shopping areas.

The above factors combine to illustrate that the Structure Plan Area is afforded a higher level of amenity and is well located to deliver higher density residential development.

03 Land Use and Subdivision Requirements

3.1 Design Objectives

Design Guidelines were prepared for the Structure Plan Area by the City of Fremantle in consultation with the Applicant and the North Fremantle Community Association ('NFCA'). The Guidelines identify design objectives and desired outcomes for the following elements: Connectivity and traffic management, Built form, Heritage and character, Housing and land use diversity, Public realm, Community engagement.

The Design Guidelines were used to inform the Structure Plan. Each of the Guideline design objectives and desired outcomes are listed in the table below with an explanation of how the Structure Plan responds to each.

Element	Design Objectives	Desired Outcomes	Structure Plan Response
Connectivity and traffic management	- A high quality, well-integrated and safe movement network. - A permeable, legible and walkable neighbourhood with connections optimised across and around the site including to the river and the sea. - Pedestrians and cyclist movement prioritised over vehicular movements.	**Pedestrian and cycle linkages** - Cycle connectivity and pedestrian linkages in the area should consider connections to the north-south and east-west axis's, public open space, public transport and the river and the sea (beach). - If required, vehicular movement through the site should be one-way in a northern direction from Thompson Road to McCabe Street. **Thompson Road vehicular traffic management** - Limited access could be provided in a southern direction at McCabe Street to provide vehicular access into the site. - With further investigation, limited access could be provided in a southern direction to provide residents of the site an exit to Coventry Parade/Thompson Road. - Through access from McCabe Street to Coventry Parade/ Thompson Road would not be supported. - Traffic calming measures on this connecting road should be included to ensure the site is not used as a thoroughfare.	**Pedestrian and cycle linkages** - The internal link road provides pedestrian and cycle connectivity between McCabe Street and Coventry Parade, connecting existing pedestrian and cycle paths north and south of the Structure Plan Area. - A network of shared paths around the perimeter of the site connects the existing pathway network to improve connectivity between Stirling Highway and the residential areas to the east. **Thompson Road vehicular traffic management** - The internal link road provides for primarily northbound vehicle movement between Thompson Road and McCabe Street with some limited southbound movement at the northern end. - Right-turn movements from the internal link road onto McCabe Street will not be permitted. - A proposed vehicle access point along Thompson Road in the southern part of the Structure Plan Area provides for some limited southbound movement. - On-street parking, landscaping, reduced road pavement widths and other traffic calming methods will be used to control traffic speed within the internal link road.

Element	Design Objectives	Desired Outcomes	Structure Plan Response
Built form	- Development that relates to the surrounds and contributes positively and celebrates the character of North Fremantle's including the river, the ocean, and the position as a gateway to North Fremantle. - A built form that provides a sense of arrival into North Fremantle by framing and not distracting from the Port and Indian Ocean vistas.	- Future development of the site should be: - appropriately orientated and face the street; - 'open', assessable, permeable and inclusive with public access; - designed to enhance street activation and safety including active and passive surveillance to the street; - designed to be varied, articulated in height and responsive to the landscape with taller buildings positioned away from the site edges e.g. homogenous and 'blocky' structures would not be supported; - interesting and comprise of architecture that reflects the history, industrial character and design language of North Fremantle e.g. limestone, red brick, timber, glass, steel, concrete and new materials showing modern design; and - sympathetic to key views of the Port and showcase the former Matilda Bay brewery building as a landmark building.	- New buildings will be orientated towards the street in order to provide street level interaction. - The internal link road will be gazetted as a public road, ceded to the Crown and ultimately vested with the City ensuring future public access. - New buildings will be required to comply with the R-Codes in relation to street surveillance (Elements 5.2.3 and 6.2.1). - New buildings will be required to comply with the provisions of the City's Local Planning Policy 3.1.1 - 'McCabe Street Area, North Fremantle Height of New Buildings'. This Policy recommends lower scale built form around the periphery of the Structure Plan Area. - The City's Local Height Policy requires distinctive architecture to be incorporated into the site's redevelopment in order to seek discretion for additional building heights in Zones H2 and H3. - A Heritage Impact Statement has been prepared in relation to the Structure Plan Area and will be refined at the Development Application stage to ensure that new development suitably acknowledges the site's heritage significance. - The open landscaped verge in front of the 1929 office building fronting Stirling Highway will be retained in order to preserve key views of the Port.

Element	Design Objectives	Desired Outcomes	Structure Plan Response
Heritage and character	- Development that recognises and enriches the significance of the landmark heritage facade fronting Stirling Highway and the history of site. - Design and development that maintain and enhances the character of North Fremantle and the McCabe Street area.	- Facilitate retention of the value and status of the landmark heritage building fronting Stirling Highway. - Respect the form and scale of the Coventry Parade glass and steel façade as an iconic feature and encourage its incorporation into the redevelopment. - Appropriate reuse of the landmark heritage building fronting Stirling Highway to activate and enhance the heritage value of the place. - New development should be sympathetic and responsive to the heritage building on site and reflect the existing coastal, residential, heritage and industrial urban character of the area. - Recognition of the former uses, landscape and stories of the site, including the Ford Motor Company and the Matilda Bay Brewing Company, should be provided through interpretation projects in building design and works the public realm. - Design of development on the site should consider the limestone landscape features and natural topography.	- The 1929 office building fronting Stirling Highway and the 1929/47 southern warehouse to Coventry Parade, will be retained to grid line 'Q'. - The retained heritage buildings will be conserved and sensitively re-used where appropriate. - Conservation works will be undertaken to the retained heritage buildings that respect and display the building's original architectural details The specific nature of these conservation works will be addressed at the Development Application stage. - The Heritage Impact Statement prepared in relation to the Structure Plan will be refined at the Development Application stage to ensure new development suitably responds to the site's heritage significance. - At the Development Application stage, interpretation projects will be incorporated into building design and works within the public realm in recognition of the site's former uses.
Housing and land use diversity	- A place that is predominantly residential with a mix of supporting commercial uses to provide for activity and a place the community can come together and meet.	The area should provide for: - a variety and mix of housing type, size and design to accommodate a broad range of demographics. - an appropriate mix of ground floor uses to give street level activity, enhance the cultural amenity of the area and provide a meeting place for people in the area.	- Housing diversity will be achieved through a mixture of one, two and three bedroom apartments (multiple dwellings) and townhouses (grouped dwellings). - A Mixed Use Zone has been incorporated into the Structure Plan in order to accommodate a limited range of complementary commercial and retail land uses. These uses will be provided at ground level.

Element	Design Objectives	Desired Outcomes	Structure Plan Response
Public realm	"Friendly" and attractive public open spaces and streets that are safe and accessible and provide for a variety of active and passive uses.	- Developments should be oriented to face and overlook open spaces and the public realm. - The public open space on the site should consider its connection to other public open space in the area including the river and the sea. - The public open space should be connected to pedestrian and cycle access. - 'Greening' of the structure plan area should include consideration of the built form and landscape, reduction of the potential for a 'heat sink', promotion of passive irrigation including investigation of the feasibility of reusing grey water from future development on the site to irrigate landscaping in privately-owned parts of the development and/or public open space created through the structure plan, the use of traditionally planted native and exotic species, the creation of intimate landscaped spaces providing for visual permeability and the accommodation of activate landscapes inclusive of canopy trees.	- A Local Development Plan has been prepared concurrently with the Structure Plan. The Local Development Plan promotes nil building setbacks to the internal link road and area of public open space to encourage interaction between buildings and the public realm. - New buildings will be required to comply with the R-Codes in relation to street surveillance (Elements 5.2.3 and 6.2.1). - An area of public open space is provided at the southern entry to the internal link road and is envisaged to be developed as part of the internal link road in order to create a larger and more inclusive high amenity public realm. - The area of public open space fronts the internal link road and will be accessible by the shared path network. - A Landscape Concept Plan has been prepared for the Structure Plan Area by EPCAD. The Landscape Concept Plan addresses treatments to both private and public spaces with a view to enhancing the amenity for residents, visitors and the general public. It is envisaged that the Landscape Concept Plan will be further refined at the Development Application stage at which point matters such as grey water re-use and irrigation will be further investigated.

Element	Design Objectives	Desired Outcomes	Structure Plan Response
Community engagement	- A collaborative approach to community engagement is maintained throughout the structure plan and development application processes.	- All major stakeholders should have the opportunity to respond to the proposed structure plan and in an open engagement process. - Engagement activities could include community meetings (open or invitation only), facilitated design workshops, and/or site walk throughs.	- Consultation has been undertaken at various stages of the Structure Plan process and have included meetings and workshops with the City of Fremantle, the North Fremantle Community Association, the Town of Mosman Park and various State Government agencies. - The Structure Plan will be advertised for public comment in accordance with the Planning and Development (Local Planning Schemes) Regulations 2015. - The Applicant intends to undertake briefing sessions with the City of Fremantle and the North Fremantle Community Association following lodgement of the Structure Plan and prior to the commencement of the formal advertising period.

Table 6: Design Objectives

3.2 Indicative Development Concept Plan

As part of the Structure Planning process, the Applicant has prepared an Indicative Development Concept Plan ('Concept Plan') for the Structure Plan Area. The Concept Plan shows how the Structure Plan Area may be developed having regard to the provisions at Part One - Implementation Section of this report, the development controls proposed under the Local Development Plan and feedback received from the City of Fremantle's technical Officers, Elected Members and community representatives.

The Concept Plan illustrates some of the key elements of the Structure Plan, including the following:

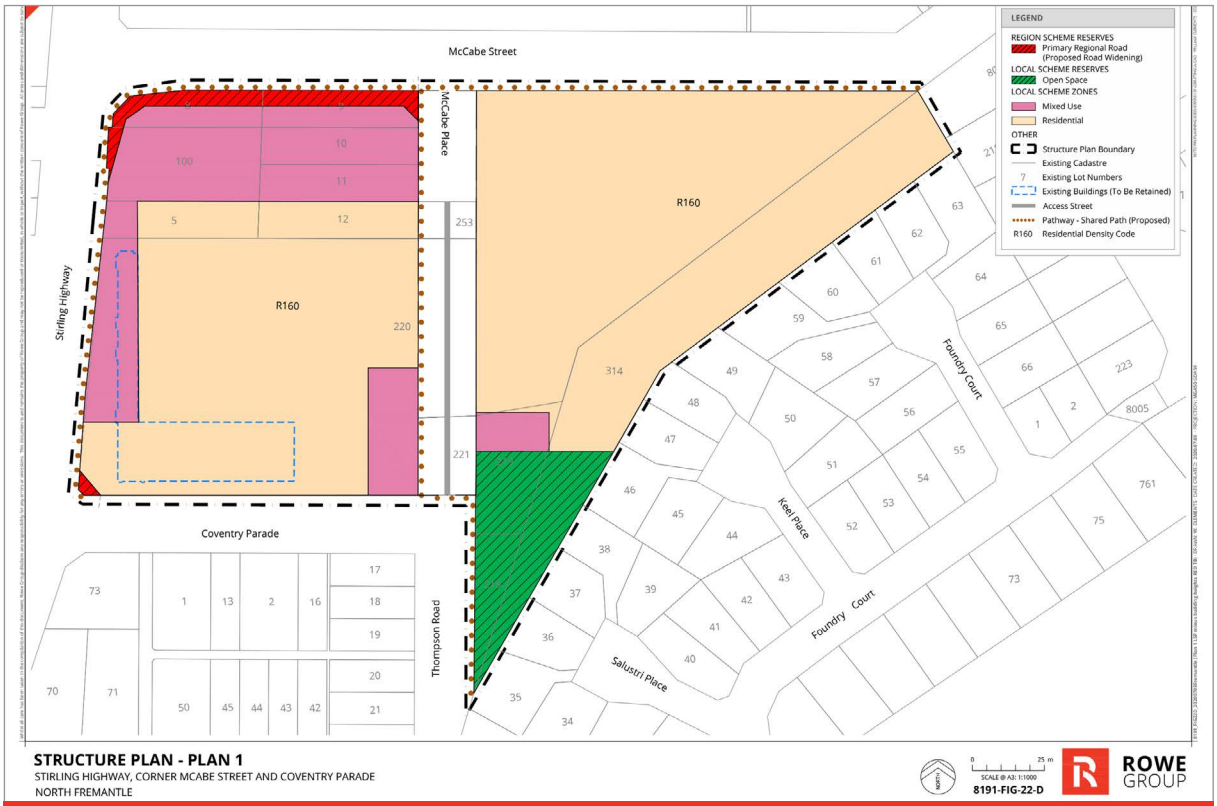
- Provision of an internal road linking McCabe Street and Coventry Parade;
- Points of vehicle access and egress;
- Road widening along Stirling Highway and McCabe Street;
- MRWA's preferred design concept for the Stirling Highway/McCabe Street and McCabe Street/ McCabe Place intersections;
- Pedestrian and bicycle connections;
- Location of public open space;
- Location of non-residential land uses;
- Traffic calming; and
- Landscaping.

The Concept Plan has been prepared for illustrative purposes only and should not be interpreted as reflecting the final design or layout of buildings within the Structure Plan Area. More detailed planning is required at the Development Application stage following determination of the Structure Plan and Local Development Plan.

12. Indicative Development Concept Plan

3.3 Land Use

The Structure Plan provides for the comprehensive redevelopment of the site for medium and high density residential uses and a limited range of complementary commercial and retail land uses, communal facilities and public open space. These land uses are consistent with existing and approved land uses surrounding the Structure Plan Area.



13. Proposed Structure Plan

3.3.1 Residential

The Structure Plan is expected to generate approximately 500 new dwellings. Residential development is primarily proposed in the form of multi-storey apartments (multiple dwellings) and low scale townhouses (grouped dwellings). Accordingly, the majority of the Structure Plan is designated a "Residential" zoning.

A residential density coding of R160 is proposed for the Structure Plan.

In this instance the density coding assigned to the Residential Zone is of limited relevance given building heights within the Structure Plan Area are determined by reference to LPP 3.11. In this regard, the provisions of the Residential Design Codes ('R-Codes') (Table 4) in relation to building height is not applicable.

There is no difference in either the primary street or secondary street setback requirements or the maximum wall height requirements under Table 4 of the R-Codes between the density codings R80, R100 and R160. In this regard, the proposed R160 density coding does not provide for reduced setbacks or taller boundary walls.

The main difference between the R80, R100 and R160 density codes is plot ratio. A plot ratio of 2.0 : 1.0 is desired for the Structure Plan Area, consistent with the plot ratio approved for the One Steel and Tasker Structure Plans to the immediate north of the Structure Plan Area. At the time these two (2) Structure Plans were adopted by the City and the WAPC, legislative provisions in relation to Structure Plans permitted amendments to plot ratio and other provisions of the R-Codes and the Scheme via the Structure Planning process. Recent legislative changes through

the introduction of the *Planning and Development (Local Planning Schemes) Regulations 2015* have removed the ability to vary plot ratio and other development control provisions at the Structure Planning stage. In order to obtain the required plot ratio of 2.0 : 1.0, a density coding of R160 is required.

The only benefit gained by the R160 density coding is in relation to maximum plot ratio. No additional benefits are gained in relation to matters such as building height, setbacks or boundary wall heights as these requirements are consistent in the R80, R100 and R160 density codes.

3.3.2 Mixed Use

The Structure Plan provides for a limited range of complementary commercial and retail land uses to provide on-site services and facilities for residents in and around the Structure Plan Area. The "Residential" Zone under the Scheme prohibits some of the commercial and retail land uses envisaged as being potentially suitable or desirable for the Structure Plan Area. Examples include "Office" and "Shop", which are both 'X' land use in the Residential Zone. Given it is not possible to alter land use permissibility under a Structure Plan as a consequence of the recent legislative changes, it is necessary to designate part of the Structure Plan Area as a "Mixed Use" Zone.

Residential development in the "Mixed Use" Zone will be subject to a residential density code of R160, consistent with the 'Residential' Zone.

Under the Structure Plan, the proposed "Mixed Use" Zone extends over part of the 1929 heritage building fronting Stirling Highway, a section of land adjoining the area of public open space and the north-western corner of the Structure Plan Area which is not controlled by the Applicant.

It is envisaged that the heritage building will be used for Office purposes, consistent with its existing use. Adapting the building for residential uses may not be possible given the extent of internal modifications required and the impact these modifications may have on the integrity and value of the building as a heritage asset.

The "Mixed Use" Zone adjoining the area of public open space is envisaged to accommodate a cafe, restaurant, small tavern or the like and its location has been selected to take advantage of the winter sun and proximity to the area of public open space. The location of this "Mixed Use" Zone and the nature of potential uses has been informed by feedback provided by local residents during design workshops and meetings.

The north-west corner of the Structure Plan Area comprises five (5) seperate lots that are not controlled by the Applicant. Lot 8 on the corner of Stirling Highway and McCabe Street was previously used for vehicle servicing however it is not clear whether this use has ceased. Lot 100 Stirling Highway is strata titled and contains two (2) buildings that accommodate a range of business activities. Lots 9, 10 and 11 on the corner of McCabe Street and McCabe Place are owned by H.L.M Holdings Pty Ltd and are considered the most likely of these landholdings to be redeveloped in the short to medium term. To provide flexibility whilst reflecting the nature of existing land uses, the Structure Plan proposes a "Mixed Use" Zone over these landholdings.

3.3.3 Building Height

A building height study was undertaken for the land in and around the Structure Plan Area in 2008 and is known as the 'McCabe Street Height Study'. The purpose of the Study was to determine the most appropriate height and bulk of new development on potential redevelopments sites in the area having regard to matters such as topographical features, important public views, cultural heritage and amenity.

The Study led to the creation of Local Planning Policy 3.11 'McCabe Street Area, North Fremantle Height of New Buildings' ('LPP3.11'). The purpose of LPP3.11 is ensure that new buildings do not adversely affect the visual amenity of the locality and help safeguard important public views by setting maximum building height limits. LPP3.11 identifies a range of building height limits across the Structure Plan Area, ranging from 7m along the south-eastern boundary where the Structure Plan Area adjoins existing low density residential development, and up to 33m in the centre of the Structure Plan Area where the potential off-site impacts of taller buildings, such as overshadowing and overlooking, can be more effectively managed.

This Structure Plan has been prepared having regard to LPP3.11 and its provisions are incorporated into Part One - Implementation Section of this report. Maximum building heights in the Structure Plan Area shall generally be in accordance with LPP3.11 as adopted by the Council of the City of Fremantle at its meeting on 26 August 2015.

3.3.4 Local Development Plans

In accordance with Part One - Implementation Section, a Local Development Plan may be prepared for any part of the Structure Plan Area, prior to the City of Fremantle approving development or recommending subdivision within the Structure Plan Area.

A Local Development Plan has been prepared in relation to the part of the Structure Plan Area owned by 3 Oceans Property Pty Ltd and submitted to the City of Fremantle concurrently for assessment. The Local Development Plan seeks to vary some of the deemed-to-comply provisions of the R-Codes where such variations are warranted having regard to the nature of the Structure Plan Area and its context. Any Local Development Plan prepared and approved for the Structure Plan Area should be read in conjunction with this Structure Plan.

3.4 Public Open Space

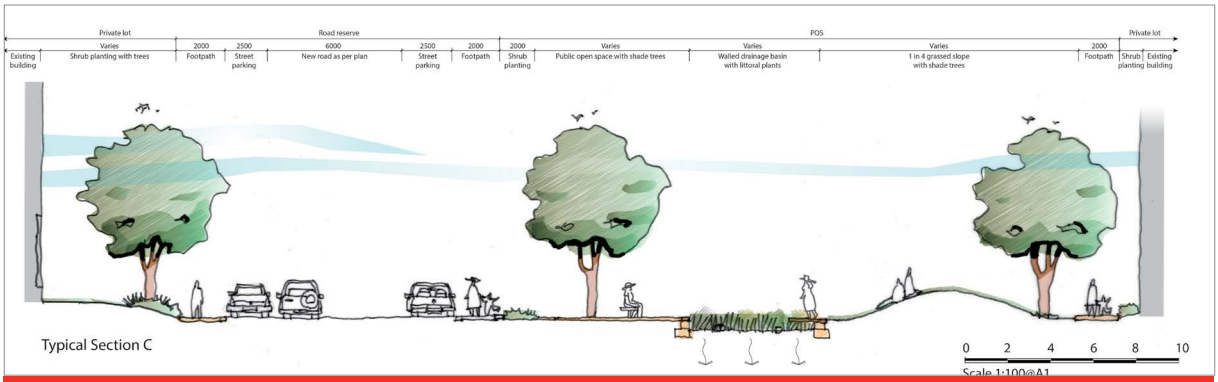
An area of public open space measuring approximately 2,000m² is proposed within the Structure Plan Area and is located at the southernmost portion of the site, consistent with the location of remnant bushland located on Lots 218, 219 and part of Lot 314. It is envisaged that the area of public open space will be ceded to the Crown and ultimately vested in the care and control of the City of Fremantle.

Whilst there is no statutory requirement to provide public open space within the Structure Plan Area on account that the area is not intended to be subdivided, feedback received from the local community during the design workshop indicated a desire for an area of open space that could be used by existing and future residents.

The area of public open space will be developed as a high amenity public space for enjoyment by future residents, visitors and surrounding landowners. A Landscape Concept Plan has been prepared for the Structure Plan Area by EPCAD and incorporates a preliminary open space design. A copy of the Landscape Concept Plan is enclosed at Appendix 8. It is envisaged that the plan will be further refined at the Development Application stage.

The public open space will partially serve a drainage function for the Structure Plan Area as outlined in the LWMS enclosed at Appendix 5. An indicative cross-section showing the internal access road and area of public open space, including the proposed drainage basin is provided below.

Preliminary public open space design concept



Indicative cross-section showing internal road and area of public open space

3.5 Movement Networks

3.5.1 Traffic Assessment

The City of Fremantle engaged Cardno to undertake a Traffic Study of the McCabe Street area and this Study was completed in April 2015. The findings of the Cardo Traffic Study have been taken into account in the Transport Assessment undertaken for the Structure Plan Area by Aurecon and have been used to inform the Structure Plan's proposed movement network.

The movement network has also been informed by design work undertaken by Main Roads WA as part of its review of the Stirling Highway Regional Road Reserve alignment. This work contemplates proposed upgrades to the intersection of Stirling Highway and McCabe Street and includes south-bound vehicle access restrictions at the intersection of McCabe Street and McCabe Pace.

The Traffic Assessment undertaken by Aurecon considered access requirements to the Structure Plan Area by all modes of transport and was based on a dwelling yield of 500. As part of the assessment, a micro-simulation model was developed to inform the design process and identify the likely traffic generation and associated impacts on the surrounding road network. The assessment considered existing conditions as at 2015 and ultimate conditions as at 2031, following the anticipated completion of the development.

The Traffic Assesment is based on traffic generated by the proposed development on the land owned by 3 Oceans Property Pty Ltd and in this regard does not take into account traffic generated by any future development on Lots 8, 9, 10, 11 and 100. It is envisaged that any proposal to develop these landholdings will be accomodated by a seperate traffic assesment prepared at the Development Application stage by these landowners.

Some of the findings and recommendations from the Traffic Assessment are listed below:

- All intersections will perform satisfactorily overall, with a worst case scenario level of service ('LOS') "D" at the Stirling Highway/McCabe Street and Stirling Highway/Craig Street intersections during the AM peak period and LOS "E" during the PM peak period.
- The overall intersection LOS for the Stirling Highway/Coventry Parade intersection is predicted to improve due to restricting movements at the intersection to left in, left out during the AM peak period and remain as is during the PM peak period.
- With only northbound movements permitted along the proposed internal link road, there will be less vehicles using the Stirling Highway/Craig Street intersection, and therefore less delay during the AM peak period.
- Northbound traffic movement along the internal access road with limited southbound traffic is recommended.
- The road network performs to a satisfactory level with the proposed northbound (and limited southbound) access arrangement and takes into account comments from the City of Fremantle and Main Roads WA.

14. Main Roads WA design concept plan (source: Main Roads WA)

- The proposed northbound (and limited southbound) access arrangement ensures that the volume of traffic associated with the development has appropriate access from the McCabe Street intersection, without impacting the other intersections further south along Stirling Highway i.e. Craig Street and Alfred Street.
- Limiting southbound traffic through McCabe Place, removes potential rat running during the AM peak period.
- Allowing a right turn movement out of McCabe Place was considered, however this could potentially allow rat running through McCabe Place. McCabe Place is proposed to be a low volume, pedestrian friendly street and therefore this would be undesirable.

3.5.2 Proposed Movement Network

The Structure Plan proposes an internal north-south access road connecting Thompson Road and McCabe Street. The provision of an internal road is a requirement under Schedule 11 (DA18) of the Scheme. The proposed road reserve measures 20m in width, reflecting the width of the existing McCabe Place road reserve which extends south from McCabe Street.

Feedback received from the local community during pre-lodgement consultation indicated a desire for the access street to be restricted to one-way vehicle movement in order to reduce 'rat running'. This view was shared by Main Roads WA and the City of Fremantle and was recommended in the Traffic Assessments undertaken by Cardno and Aurecon. The Structure Plan incorporates primarily one-way (northbound) vehicle movements with some limited southbound movement in response to these comments. Right-turn movements from the internal link road onto McCabe Street will not be permitted.

Community feedback also indicated a desire for the internal access road to be developed into a high quality public environment incorporating landscaping, street furniture and traffic calming to slow vehicles and encourage pedestrian use. In response to community feedback, it is envisaged that the internal access road will be developed with shared paths on both sides, parallel car parking, landscaped verges and shade trees.

A Landscape Concept Plan has been prepared for the Structure Plan Area by EPCAD and incorporates a preliminary design for the internal access road. A copy of the Landscape Concept Plan is enclosed at Appendix 8. It is envisaged that the concept plan will be further refines at the Development Application stage.

The Structure Plan is well serviced by the existing public transport network. A network of shared paths around the perimeter of the Structure Plan Area will connect the existing pathway network to improve connectivity between Stirling Highway and the residential areas to the east and improve access to public transport.

3.5.3 Parking

On-site parking for residents and commercial tenants will be provided in underground parking areas that will be suitably screened from the street and other public places to ensure an appropriate level of amenity. Visitor parking will be partially accommodated in the underground parking areas and at the 'podium' level which is accessed from the internal access road.

On-street parking is proposed within the internal access road and south along Thompson Road. It is envisaged that these on-street parking areas will be predominately used by visitors and patrons of the commercial uses and public open space.

Further details in relation to on-site and off-site parking will be provided at the Development Application stage.

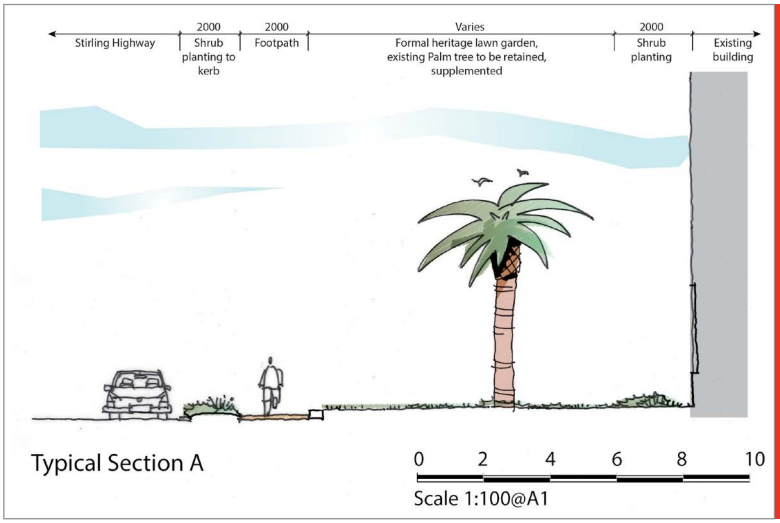
3.6 Heritage

The recommendations and objectives contained in the Heritage Impact Statement were guided by the outcomes of a Design Workshop held with the City of Fremantle and the North Fremantle Community Association in March 2015. These design outcomes include the following:

- Facilitate retention of the value and status of the landmark heritage building fronting Stirling Highway.
- Respect the form and scale of the Coventry Parade glass and steel façade as an iconic feature and encourage its incorporation into the redevelopment.
- Appropriate re-use of the landmark heritage building fronting Stirling Highway to activate and enhance the heritage value of the place.
- New development should be sympathetic and responsive to the heritage building on-site and reflect the existing coastal, residential, heritage and industrial urban character of the area.
- Recognition of the former uses, landscape and stories of the site, including the Ford Motor Company and the Matilda Bay Brewing Company, should be provided through interpretation projects in building design and works the public realm.
- Design of development on the site should consider the limestone landscape features and natural topography.

Having regard to the design outcomes developed at the Design Workshop and the findings of the Heritage Impact Statement, the following actions are proposed through the Structure Plan:

- Retain the 1929 office building to Stirling Highway and the 1929/47 southern warehouse to Coventry Parade displaying the Inter War Functionalist Style to grid line 'Q'.
- Retain the open landscaped area in front of the 1929 office building to preserve the building's presence and landmark qualities. An indicative cross-section has been prepared for the verge area as part of the Landscape Concept Plan and is reproduced below.
- Allow the sensitive re-use of the buildings and ameliorate any impacts on heritage value by retaining significant building fabric, features and using quality interpretation techniques.
- Undertake conservation works that respect and display the original architectural details. The nature of these specific conservation works will be addressed at the Development Application stage.
- Retain and conserve the fundamental structure and design qualities of the existing buildings where possible.
- Incorporate the glass and steel façade along Coventry Parade into the site's redevelopment, where possible.



Indicative cross-section showing retention of the open landscaped area in front of the 1929 office building

- Investigate the integration of part of the saw tooth roof and associated steel structure of the four warehouse bays to the east of the administration building as part of the interpretation strategy for the site.
- Ensure future development on the site respects the scale, form, siting, detailing, materials and colour of the existing buildings.
- Prepare an Interpretation Plan for the building and site incorporating the history of the site.

3.7 Water Management

A LWMS has been prepared for the Structure Plan Area by Hyd2o and is enclosed at Appendix 5.

Stormwater management is proposed to be undertaken consistent with Department of Water ('DoW') water sensitive design practices. The drainage system will consist of pipes, bioretention areas to provide water quality treatment, ephemeral storage within holding tanks and deep well injection for stormwater generated from the proposed development.

The LWMS has been prepared for the land owned by 3 Oceans Property Pty Ltd only and assumes that any stormwater runoff from Lots 8, 9, 10, 11 and 100 will be accommodated on-site at these landholdings. It is envisaged that any proposal to develop these landholdings will be accomodated by a seperate Urban Water Management Strategy or Detailed Stormwater Management Plan prepared by these landowners at the Development Application stage.

Key elements of the LWMS are identified below:

- All stormwater is proposed to be managed on-site with no outlets proposed off-site. The system will be separated into several treatment and storages across the Structure Plan Area based on a breakdown of runoff surfaces areas and catchments.
- During the 1 hour 1 year Average Recurrence Interval ('ARI') event (15mm), runoff from hardstand areas including roads, pavements and external car parks will be stored and treated within a landscaped bio-filtration area. Roof runoff is proposed to be retained within rainwater tanks for grey water recycling. Open space areas with underground car parking below are proposed to treat stormwater in-situ through the subsurface profile.
- During events greater than the 1 year ARI, stormwater is proposed to be retained on-site in retention tanks, with a volume up to and including the 1 in 100 year ARI event, and injected into the underlying aquifer.
- All stormwater up to the 100 year ARI event will be retained and infiltrated within a landscaped storage area

and will not contribute to stormwater retention tanks.

- Stormwater from roofs and open space landscaping (with basement beneath) will not require separate stormwater treatment, and as such will be retained up to the 100 year event within stormwater retention tanks and infiltrated via deep wells.
- Stormwater generated in Catchment 3 will be treated within a separate landscaped bio-filtration area for 1 year ARI events, and discharged to a stormwater retention tank for infiltration and injection into the groundwater table via deep wells in events greater than the 1 year ARI.
- The total area within the Structure Plan Area required for flood storage up to the 100 year ARI event is approximately 255sqm with a total detention storage volume of approximately 430 cubic metres.
- The total area required for the 5 year ARI event is approximately 255sqm with a total detention storage volume of approximately 120 cubic metres.
- Aquifer recharge of stormwater is proposed however further investigations are required to be undertaken to confirm this is a viable option.
- Depth to groundwater varies over the Structure Plan Area from approximately 17m to 20m below existing natural surface. Due to groundwater clearance, imported fill and subsoil drainage will not be necessary.

3.8 Education Facilities

The Structure Plan Area is well serviced by existing education facilities in Mosman Park and North Fremantle. In this regard, no additional education facilities are proposed in the Structure Plan.

3.9 Activity Centres and Employment

The Structure Plan Area is well serviced by existing activity centres in Mosman Park and Fremantle. Some limited non-residential land uses will be permitted in the Structure Plan Area and it is envisaged that a minimum of 500sqm of non-residential floorspace will ultimately be accommodated. These land uses will be provided at ground level in order to promote street level interaction and will be suitably located to improve the quality of public spaces and enable the sensitive re-use of the heritage buildings fronting Stirling Highway and Coventry Parade.

3.10 Infrastructure Coordination, Servicing and Staging

3.10.1 Water

The engineering assessment undertaken by The Civil Group does not identify any issues with the capacity of the existing water supply system to service the Structure Plan Area for domestic purposes. Further investigations and discussions with the Water Corporation will be undertaken at the Development Application stage.

3.10.2 Wastewater

Wastewater will be deep sewerage (reticulated) with management by the Water Corporation. The engineering assessment indicates that the Structure Plan Area should be able to discharge into the existing 225mm sewer located on Stirling Highway however further investigations and discussions with the Water Corporation will need to be undertaken at the Development Application stage. It is expected that the southern 150mm systems may not have capacity to accommodate a large scale residential development of this nature and in this regard, some upgrading of infrastructure may be required.

3.10.3 Gas

It is expected that the gas mains located to the south of the Structure Plan Area may be too small to service the site and upgrades may be required. Alternatively, part of the Structure Plan Area may need to be serviced from the existing gas supply in McCabe Street. Further investigations and discussions with ATCO Gas will need to be undertaken at the Development Application stage to determine the most appropriate solution.

3.10.4 Power

Future development on the Structure Plan Area will require a HV supply and this may necessitate the relocation or modification of the existing facility. Further investigations and discussions with Western Power will be required at the Development Application stage.

3.10.5 Communications

Communications will be provided via pit and pipe network to be installed at the developer's cost, to the NBN. Co standard requirements at the Development Application stage.

3.10.6 New Infrastructure, Upgrades and Modifications

Given the Structure Plan is located in an existing (established) urban area, the Structure Plan Area is generally well serviced by existing infrastructure. Requirements for the provision of new infrastructure, necessary upgrades and modifications to existing infrastructure generated by future development on the Structure Plan Area will typically be borne by the developer at the construction stage.

A more detailed assessment of servicing requirements will be undertaken at the Development Application stage once the development concept plan is further refined.

3.11 Developer Contribution Arrangements

The City of Fremantle do not impose developer contributions on a district or regional scale across the municipality. Certain works and upgrades required to deliver the development will be funded by the Developer and therefore no developer contributions apply to the Structure Plan Area.

3.12 Staging

Given the Structure Plan Area is predominantly under the control of a single landowner and comprises a comparatively small and consolidated parcel of land, no formal staging plan has been prepared.

It is envisaged that development will be implemented in stages as follows:

1. the construction of a dedicated internal link road connecting McCabe Place and Thompson Road/ Coventry Parade over of Lot 253, 221 and portion of 220;
2. the future development of Lots 5, 12 and portion of 220 located west of the new road;
3. the future development of Lots 218, 219, portion of 220 and 314, located east of the new road;
4. the future development of Lots 8-11 and 100.

An Application for Subdivision Approval will be required to create the road reserve.

Further information regarding staging will be provided at the Development Application stage.

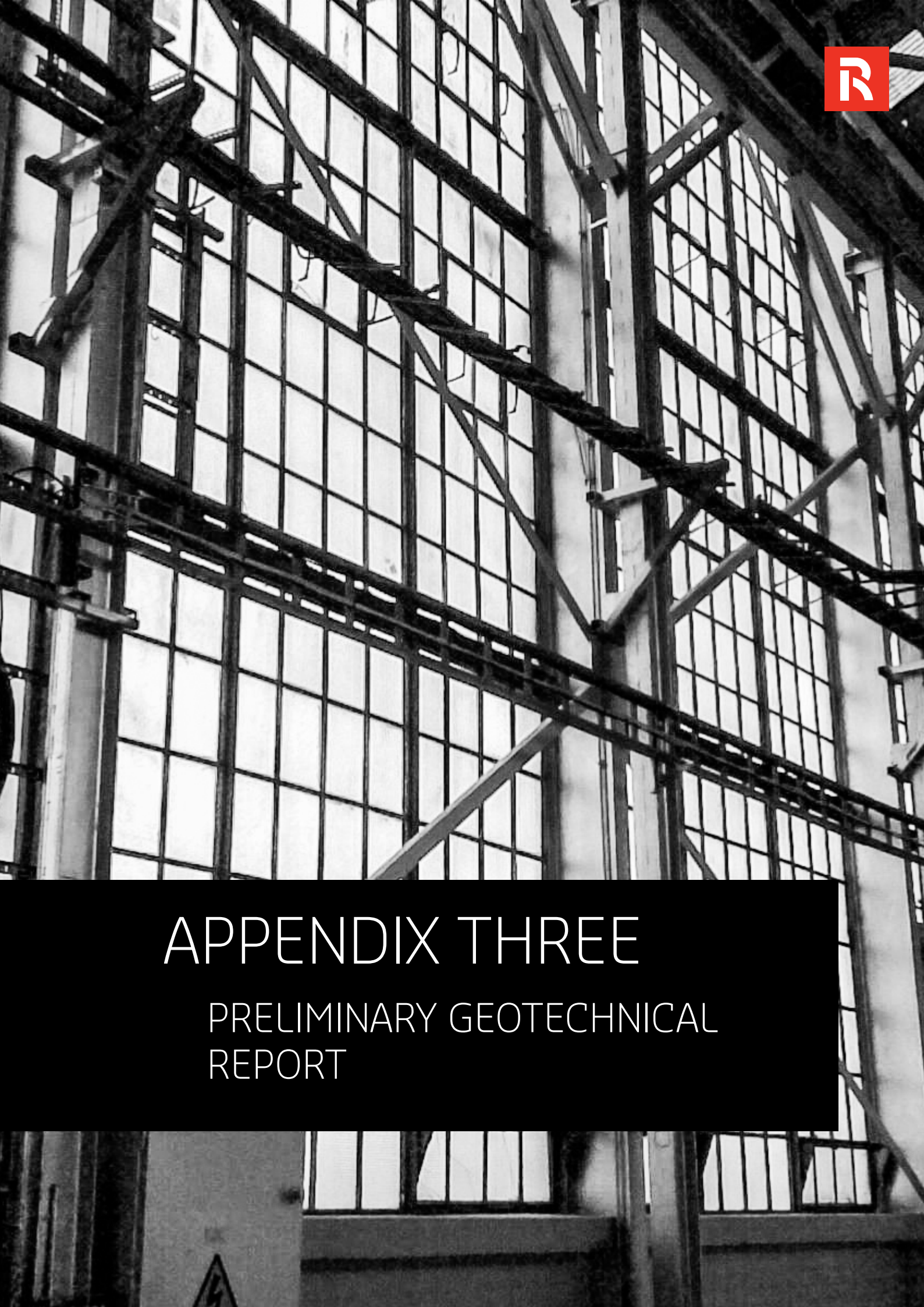
PART THREE:
TECHNICAL APPENDICES

APPENDIX ONE

CERTIFICATES OF TITLE

APPENDIX TWO

HERITAGE IMPACT STATEMENT



APPENDIX THREE

PRELIMINARY GEOTECHNICAL REPORT

APPENDIX FOUR

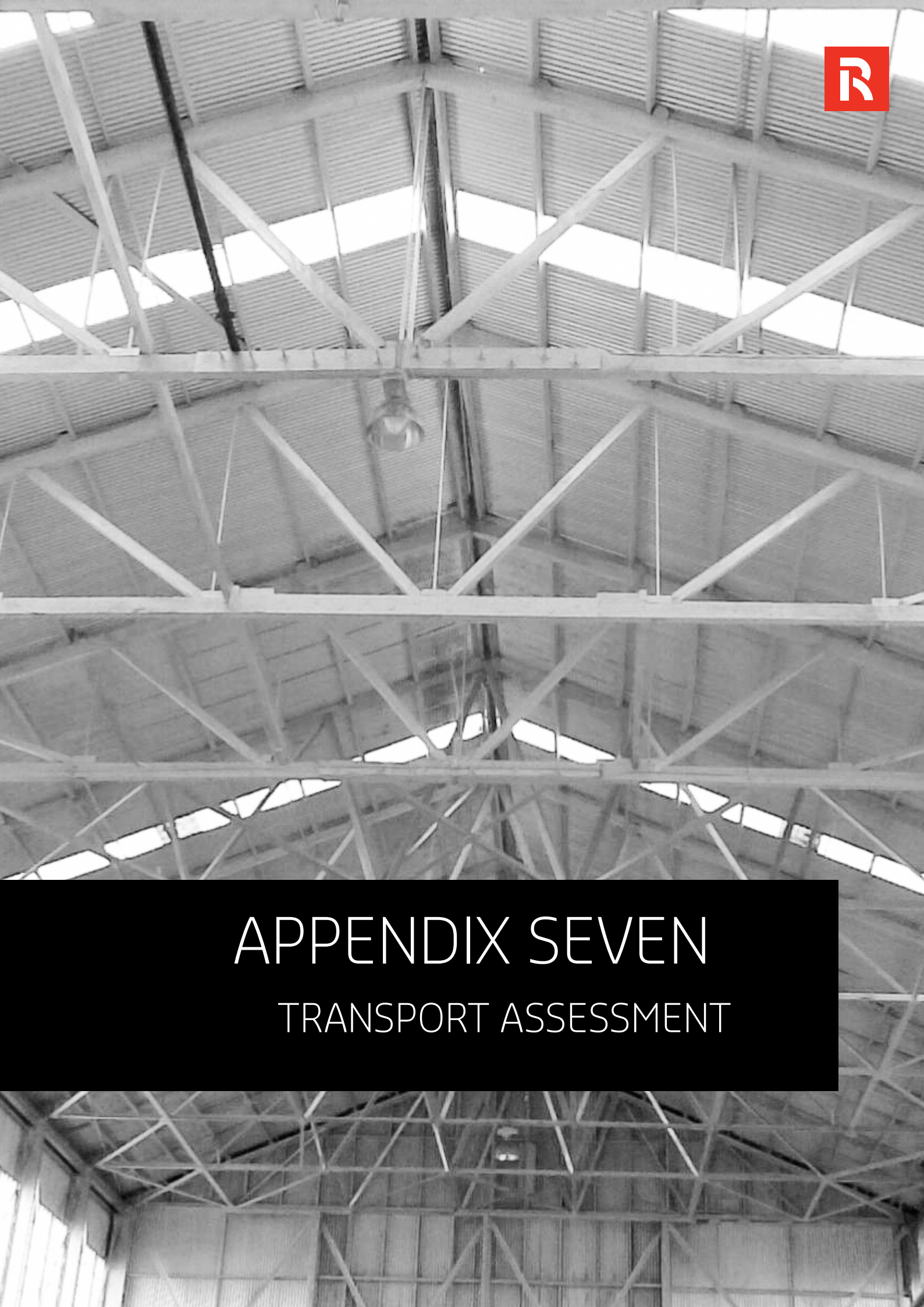
SAMPLING AND ANALYSIS PLAN

APPENDIX FIVE

LOCAL WATER MANAGEMENT STRATEGY

APPENDIX SIX

ENGINEERING REPORT



APPENDIX SEVEN

TRANSPORT ASSESSMENT

APPENDIX EIGHT

LANDSCAPE CONCEPT PLAN