



Sunfield

Dual Purpose Reserve Memo and Precedents

Background to the Sunfield Development

The following memo and precedents are provided to support the dual use of open space within Auckland for recreation and stormwater management. The following precedents represent the successful integration of stormwater management and open space that function to support the local community and provide resilience to flooding as evidenced in recent storm events.

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20 November 2025

The purpose of this memo is to respond to the information request from the Sunfield Expert Panel on 5 November 2025 as outlined within Minute 13 paragraph 24, specifically:

“The Panel is also interested to better understand how the proposed stormwater retention areas will be used as open space, and how they would form part of the overall open space strategy for the development and if there are other comparable examples of such use in Auckland. In essence, the Panel is interested to gain an understanding of the nature and scale of the open space and its functionality for the development of this size”.

The proposed stormwater retention areas form part of a comprehensive open space network and strategy as presented in the overall Sunfield Open Space Strategy landscape design report. Across the Sunfield masterplan a range of connected open space typologies provide a variety of recreation activities to satisfy the requirements for both active and passive recreation, and enable a range of outcomes including connectivity, activity, resilience, and biodiversity.

Critically the proposed stormwater retention areas (primarily the centralised stormwater park and northern wetland park) are not relied upon to provide for formal sports and neighbourhood park play spaces. The Sunfield Park (which includes the formal sports fields) and play spaces adjacent to the centralised stormwater park, perform the function of neighbourhood parks, as well as the additional neighbourhood parks within residential neighbourhoods are all located outside of the 10 year flood extents. This will mean that access to, and use of these facilities will not be affected by regular or significant stormwater events.

It should be noted that in response to Auckland Councils Parks and Planning comments provided by Lea van Heerden that suggested additional provision and an alternative distribution of neighbourhood parks were required within the Sunfield masterplan three additional 1,000m² neighbourhood parks were added to the Sunfield masterplan by the applicant. These additional neighbourhood parks are all located outside of the 10 year flood extents and are detailed within the Additional Open Space Plans which were provided to the Expert Panel as part of the applicants response to comments received. For completeness, this document accompanies this response.

We note that in Lisa Mein's Urban Design Peer Review prepared for the Expert Panel it would appear that this information was not provided to Ms Mein, or that it has been misinterpreted, as she states that in the updated open space strategy no additional neighbourhood parks are proposed (refer section 2.7 paragraph 2) which is not the case.

The total area of open space provided for the Sunfield development is 53ha. The total area outside of the 10 year flood zone is ~15.5ha. As mentioned above, the formal sports fields and open spaces perform the required neighbourhood park functions, and neighbourhood parks are all above the 10 year flood extents (refer attached plans). As also mentioned above the updated open space strategy provides for three additional 1,000m² neighbourhood parks.

The intent of the centralised stormwater park is to perform an important stormwater attenuation and treatment function with an integrated and naturalised design approach. As is demonstrated in the flood modelling, the inundation duration for a 2 year event is circa 32 hours and for a 10 year event is circa 48 hours. As the label suggests the frequency of these events is once every 2 and 10 years. This demonstrates that for the vast majority of the time the reserve will be unrestricted and fully available for open space activities. As such for the

majority of the time the centralised stormwater park will provide significant passive recreation opportunities through walking trails, planting, parkland, and open grassed areas.

It should be noted that the completed Awakeri Wetlands Stage 1, which the Sunfield development will connect into, is a great working example of a dual use stormwater and recreation reserve vested and managed by Council. The Awakeri Wetlands provide stormwater resilience and a rich network of walking, cycling, and recreation trails incorporating ecology and significant open space for the surrounding communities. The approach for the centralised stormwater park in Sunfield is to extend this network following similar design principles.

The best example of a similar approach in Auckland is the Greenslade Reserve in Northcote which was newly designed as a stormwater detention basin as well as sports ground and park. In the extreme flood event that took place in January 2023, Auckland received double its monthly rainfall in a single day (being 539mm) . The reserve performed exceptionally well protecting adjacent housing during the storm event. On Friday night and early Saturday it was flooded. By late Saturday morning, all the surface water had drained through and families were playing on the grass.

There are a number of precedents for such an approach in the Auckland region some of which are highlighted in the following pages.

In our view the quantum of open space provided is appropriate for a development of this scale and the dual stormwater and recreation function of parts of it will not negatively impact on residents ability to access or enjoy it.



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Open Space in the Sunfield Development

Sunfield is built on an open space strategy that provides a variety of recreational spaces to the residents and wider public through a catchment approach.

A number of these contribute to the ability of the land to soak up water, but are exclusively outside of the flood extents. These include stream-side playgrounds and walkways located above the stormwater extents and a number of neighbourhood parks and sportsgrounds.

Another proportion is designed to allow stormwater to flow safely during heavy rain, while providing a significant amount of recreational space in normal weather conditions. This dual focus manages stormwater while providing amenity and connectivity, increasing resilience, and supporting biodiversity through varied habitats.

Tāmaki Makaurau Auckland has a number of precedents where blue-green projects are utilised to give water more space and improve flood resilience.

Existing Auckland Council Blue-Green Networks

Blue-green networks already exist in the region and are helping to manage stormwater during severe weather events.

Examples include:

- Awakeri Wetlands
- Hobsonville Point
- Vaughans Stream Corridor
- Greenslade Reserve
- Te Auanga / Oakley Creek

- Taiaotea Creek
- Waiatarua wetlands
- Taniwha Reserve
- Puhinui Stream
- Project Twin Streams.

<https://new.aucklandcouncil.govt.nz/en/environment/looking-after-aucklands-water/managing-growth-our-stormwater-network/blue-green-networks.html>



A F Thomas Park

Wairau Valley

A design concept to develop a golf course into a multi-use blue-green network including both outdoor and indoor recreation, wetlands and floodwater storage.

Status

Existing publicly owned reserve managed by Auckland Council.

Recreational uses

After considering many different options to protect the community from future flooding, Auckland Council has approved a plan to transform A F Thomas Park into a multi-purpose place that supports both flood resilience and recreation. The project will restore a natural wetland and create areas within the park that temporarily hold excess water during heavy rain to reduce the risk of downstream flooding.

When dry, these spaces will provide open green parkland for walking, play, and community connection.

The park is still in its design and consultation phase. It will likely have a mixture of a golf course and other recreational activities such as walkways, play spaces, a new driving range, and other sports facilities.

Existing indoor activities proposed to stay in the park include Eventfinda Stadium, a bowling club, and an archery club.

Stormwater storage

The design is intended to hold up to 550,000 cubic metres.

Open space area

Over 43.6 hectares.

Links

<https://akhaveyoursay.aucklandcouncil.govt.nz/af-thomas-park>

<https://new.aucklandcouncil.govt.nz/en/plans-policies-bylaws-reports-projects/our-projects/projects-north-auckland/wairau-valley-flood-resilience-project.html>



Te Kaitaka Greenslade Reserve

Northcote

Part of a wider greenway network, this reserve is located along Te Ara Awataha, Northcote's greenway along a natural overland waterway.

Status

Constructed and vested with Auckland Council

Recreational uses

The reserve contains open lawn space/sports pitch, bathroom facilities, viewing terraces, and fitness equipment.

Stormwater storage

The system can hold 12 million litres of stormwater.

Open space area

The reserve is 1.5 hectares, located within a larger greenway network.

Case Study

Greenslade Reserve in Northcote Development is a recently completed stormwater detention basin as well as a sports ground and park. During the Auckland floods on 27th January it performed very well to collect water and avoid it reaching more homes. On Friday night and early Saturday it was flooded. By late Saturday morning, all the surface water had drained through and families were playing on the grass.



Greenslade Reserve at around 6pm on Friday 27th January, doing what it is designed to.



Greenslade Reserve late Saturday morning with people playing on the grass.

Source of images above: <https://northcotedevelopment.co.nz/news/greenslade-reserve-does-its-job-in-aucklands-floods/>

Links

<https://www.audo.co.nz/projects/greenslade-reserve>

<https://new.aucklandcouncil.govt.nz/en/parks-recreation/find-park-beach/park-detail/717.html>

<https://isthmus.co.nz/project/te-ara-awataha-greenway/>



Freeland Reserve

Mount Roskill

Surrounded by residential properties, this reserve provides parkland and safe walkways linking together 4 nearby streets. The improved waterway also provides habitats for birds and other wildlife.

Status

Public reserve vested with Auckland Council

Recreational uses

Freeland Reserve includes walking paths around the pond, linking the surrounding streets.

A lookout platform and bridge allows views of the pond.

Lawn and picnic tables provide space for eating, play, and other recreation.

Stormwater storage and quality

In recent floods the wetlands held floodwaters of 3.16m deep.

Over 12,000 new trees, shrubs, and grasses create habitats for wildlife and ensure that downstream stormwater quality is increased.

Open space area

Approximately 1.4 hectares within a wider network of green areas including Turner Reserve.

Links

https://kaingaora.govt.nz/en_NZ/news/celebrating-the-opening-of-freeland-reserve-in-roskill-south/

<https://new.aucklandcouncil.govt.nz/en/parks-recreation/find-park-beach/park-detail/1400.html>

<https://www.leadalliance.nz/news/celebrating-freeland-reserve>



Clover Drive Rānui Flood Resilience Project

Rānui, Henderson, Massey and Swanson

Named Manawa aa Whenua, 'the life force of the land', this blue-green infrastructure initiative aims to strengthen flood resilience through a variety of means, including widening the momutu and removing debris while upgrading pedestrian connections.

Recreational uses

The project area includes several existing and new walking paths. New green corridors will link water flow paths while more green spaces and connected pathways will link park spaces.

Stormwater approach

These upgrades will give stormwater more space to flow and better prepare the network for heavy flooding events. It will also improve water quality and biodiversity.

Beyond flood prevention, the project will enhance the local environment by creating more open spaces, improving water quality and biodiversity, and connecting parklands and pathways for better community uses.

Links

<https://ourauckland.aucklandcouncil.govt.nz/news/2025/11/progressing-flood-resilience-for-ranui-henderson-and-massey-communities/>

<https://new.aucklandcouncil.govt.nz/en/plans-policies-by-laws-reports-projects/our-projects/projects-west-auckland/clover-drive-ranui-flood-resilience-project.html>



Awakeri Wetlands Stage 1

Takanini, South Auckland

The Awakeri Wetlands Stage 1A was a high-profile project to improve flood-prone areas in Takanini, South Auckland. It forms part of the revitalisation of the area to enable thousands of homes to be built in this growing community.

Recreational uses

Along the banks of the channel are over 3km of shared pathways and low-level boardwalks connecting local residents in this emerging community to nature and surrounding areas.

Stormwater approach

Designed to open up former peaty farmland for future development, the wetland channel is also much more than a largescale piece of stormwater infrastructure, it is a re-creation of an ancient kauri swamp.

The wetland filters stormwater and will help lift the water quality of the Manukau Harbour.



Source of images above: <https://mckenzieparma.co.nz/products/copy-of-132-halsey-street-development-1>

Links

<https://ourackland.aucklandcouncil.govt.nz/news/2019/02/awakeri-wetlands-project/>

<https://ourackland.aucklandcouncil.govt.nz/news/2020/11/awakeri-wetlands-stage-one-opens/>



Hobsonville Point

Hobsonville

This development is considered a flagship for sustainable development, illustrating how good urban design and affordable housing has resulted in high levels of resident and community satisfaction. Key aspects of the development include low impact design, resulting in increased amenity, reduced water consumption and opportunities for improved ecology.





Long Bay

Long Bay, Auckland

Situated within the sensitive landscape of Long Bay Regional Park and Long Bay Okura Marine Reserve, as well as Vaughan's Creek and Awaruku Stream.

The fundamental principle underlying the Long Bay development was to build a new urban environment that struck the right balance between an efficient use of land, whilst maintaining and enhancing the natural environment. This has resulted in the streets being designed as an integral part of a treatment train, where stormwater flows through a series of treatment methods, such as rain gardens which are an integral part of the landscaping, before flowing into the wider environment which incorporates recreation areas and constructed wetlands.





Te Auaunga / Oakley Creek

Mt Roskill, Auckland

Te Auaunga is an Auckland Council Healthy Waters project in Mt Roskill, Auckland that prevents flooding from nearly 200 homes in three Local Board areas, enables housing intensification in a brownfield site, and established a river park along Te Auaunga.

Recreational uses

The project includes shared pathways and pedestrian bridges, community orchards, an outdoor classroom, and community fale and atea space.

Stormwater approach

The project restored 1.5km of Te Auaunga, daylighted seven piped tributaries, restored eight hectares of open space, and treated the water quality of the contributing catchment.

Links

<https://www.nzila.co.nz/showcase/te-auaunga-oakley-creek>



Taiaotea Creek

Browns Bay, Auckland

This project turned an existing stormwater attenuation pond back into a wetland.

The Taiaotea Environmental Enhancement Project was constructed to naturalise existing stormwater infrastructure in Sherwood Reserve, Browns Bay. This project required planting to assist in stabilising the ground and reducing the risk of erosion as well as enhancing the amenities and biodiversity value of the area.

Link

<https://www.naturalhabitats.co.nz/our-projects/taiaotea-stream-regeneration>



Waiatarua Wetlands

Remuera

Waiatarua Wetlands are a large open space and New Zealand's biggest urban wetland restoration project.

A good network of paths around the reserve are provided to watch out for bird life – there are several bird viewing areas off the main path.

Recreational opportunities include a basketball half court, gravel path network through the reserve, picnic tables, play equipment, seating and skate facilities.

Links

<https://www.aucklandcouncil.govt.nz/en/parks-recreation/find-park-beach/park-detail/89.html>

<https://www.waiatarua.com/>



Taniwha Reserve

Glen Innes

The Taniwha Reserve provides a link in the green corridor that connects Hobson Bay in the West, through the Tamaki River in the East.

Recreational uses

New shared paths, bridges, seating and a viewing platform improve pedestrian and active modes create welcoming places for both the community and visitors.

Stormwater approach

The constructed wetland provides temporary floodwater storage to reduce downstream flooding and improves water quality by filtering sediments, nutrients and microbes.

Link

<https://www.peopleplacenature.co.nz/projects/taniwha-reserve>



Puhinui Stream

South Auckland

Te Puhinui stream spans from the peak of Totara park through the residential area of Te Wirihihana, into the commercial area of Manukau and out to the Manukau Harbour (Te Manukanuka o Hoturoa).

A major transformation is underway for Te Puhinui / Puhinui Stream, with Te Aka Raataa Stage 1 leading the charge to regenerate the mauri of this vital waterway and its surrounding communities.

After years of declining water quality and environmental degradation, Te Aka Raataa is breathing new life into the stream and surrounding areas. This initiative reconnects people with nature, ensuring a healthier future for Manukau.

As part of the Eke Panuku Transform Manukau regeneration programme, this project will revitalise Rata Vine Stream Reserve, creating green spaces that connect communities and link to the town centre, Hayman Park, and beyond.

Link

<https://ourauckland.aucklandcouncil.govt.nz/news/2025/03/te-aka-raataa/>



Project Twin Streams

Rānui-Massey-Swanson

Project Twin Streams is an umbrella name for a number of initiatives centred on two streams (Opanuku and Oratia) in the West Auckland, New Zealand. It consists of a number of environmental and community initiatives and infrastructure. This includes wetland restoration, largely carried out through volunteer work, partly to mitigate the effects of floodwaters from the Waitākere Ranges.

The intent is also to protect/reclaim the 100-year flood plain from encroaching buildings and infrastructure.

Project Twin Streams encompasses a total of 9.6km of different cycleways and walkways, which feature tiled artworks, community installations and information panels along the way. The walk and cycleways and its lighting won several awards, including:

- 2010 Illuminating Engineering Society - Lighting Design Award
- 2010 Royal Astronomical Society of NZ (RASNZ) - Dark Sky Award for Lighting
- 2009 NZTA and Living Streets Aotearoa Golden Foot Award - Best Practice Walking Facility
- 2009 Cycling Advocate Network (CAN) Avanti Award - Best Cycle Facility

Links

https://en.wikipedia.org/wiki/Project_Twin_Streams

<https://ourauckland.aucklandcouncil.govt.nz/news/2015/01-09/project-twin-streams/>



Sunfield

Takanini

Sunfield has an open space network that contains 5 blue-green stream or wetland parks, along with 4 neighbourhood parks, a sports-focused area, and a school park amongst various other greenways and planted laneways.

All together there is over 53 hectares of open space designed to deliver social and recreation spaces for the public while increasing the biodiversity and support the stormwater strategy for the area.

Recreational uses

Recreational activities catered for include;

- Neighbourhood parks and playgrounds
- Informal play spaces
- Walking and cycling paths, including active transportation between neighbourhoods, school, work, hubs, and amenity.
- Parks for play, socialising, respite, and community events
- Formal sports fields
- Passive recreation

Formal sports and neighbourhood park play spaces are located outside of the 10 year flood extents, as well as most main active transportation connections and many other walkways, meaning that they will not be severely affected by significant stormwater events.

Outside of a major stormwater event, the stormwater parks provide a significant amount of space for recreation opportunities through walking trails, planting, and open parkland.

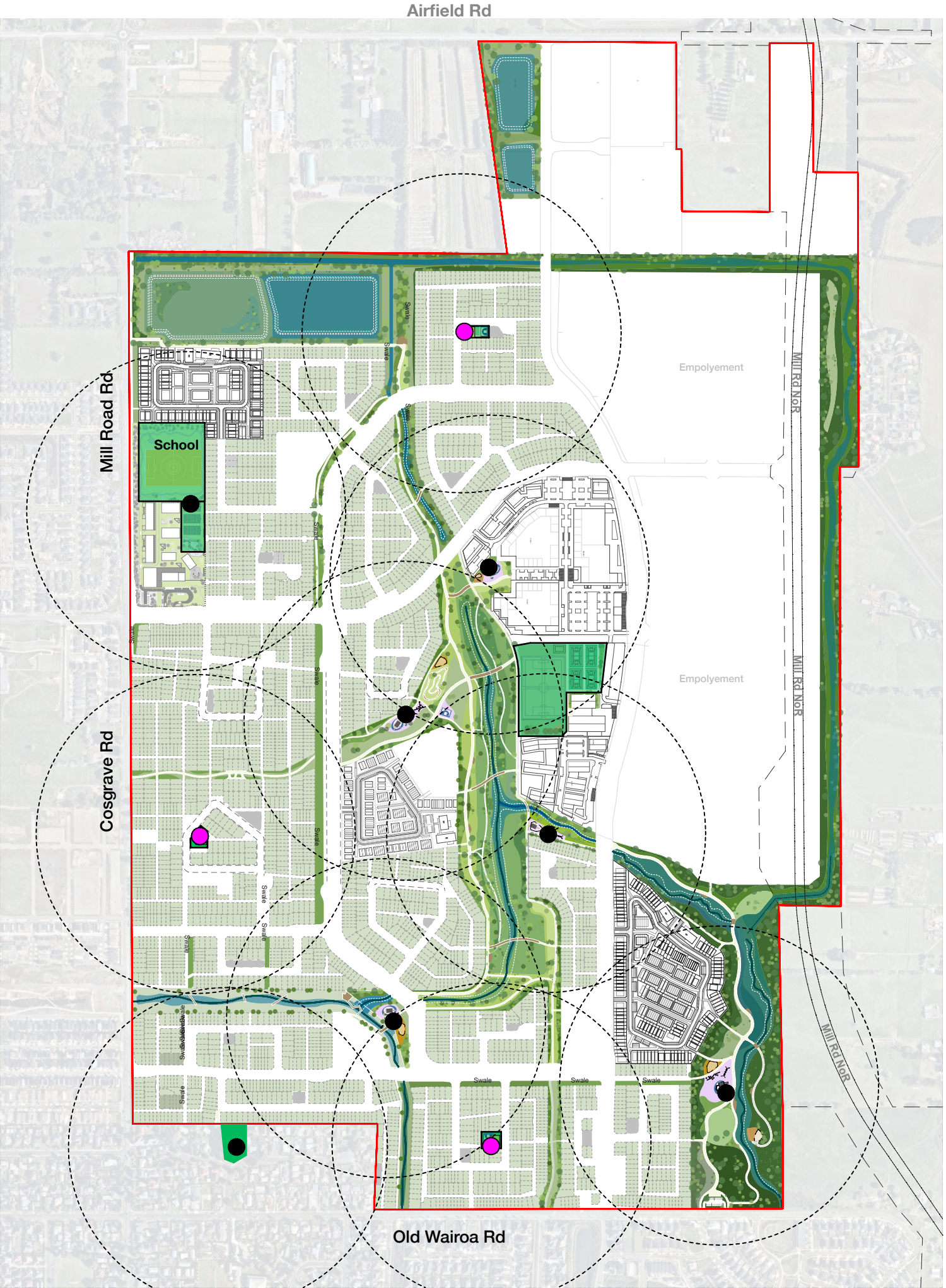
Stormwater catchment and approach

The centralised stormwater park will carry out an important stormwater attenuation and treatment function, providing water attenuation and quality improvement, particularly in the case of a significant flood. Outside of major stormwater events the park will provide a range of passive and informal recreation opportunities.

Open space area

Sunfield has a total of over 53 hectares of open space arranged as a highly connected and functional blue and green network (refer plan below).

Additional Open Space Plans



Legend

- Open Spaces forming Neighbourhood Park function
- 300m radial catchment
- Newly proposed compact Neighbourhood Parks
 - Minimum 0.1ha
 - Level unobstructed usable 20 x 20m grass space
 - For public use
 - Privately maintained
 - Provides a range of recreation opportunities

Sunfield



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Project Title:
Sunfield Masterplanned Community

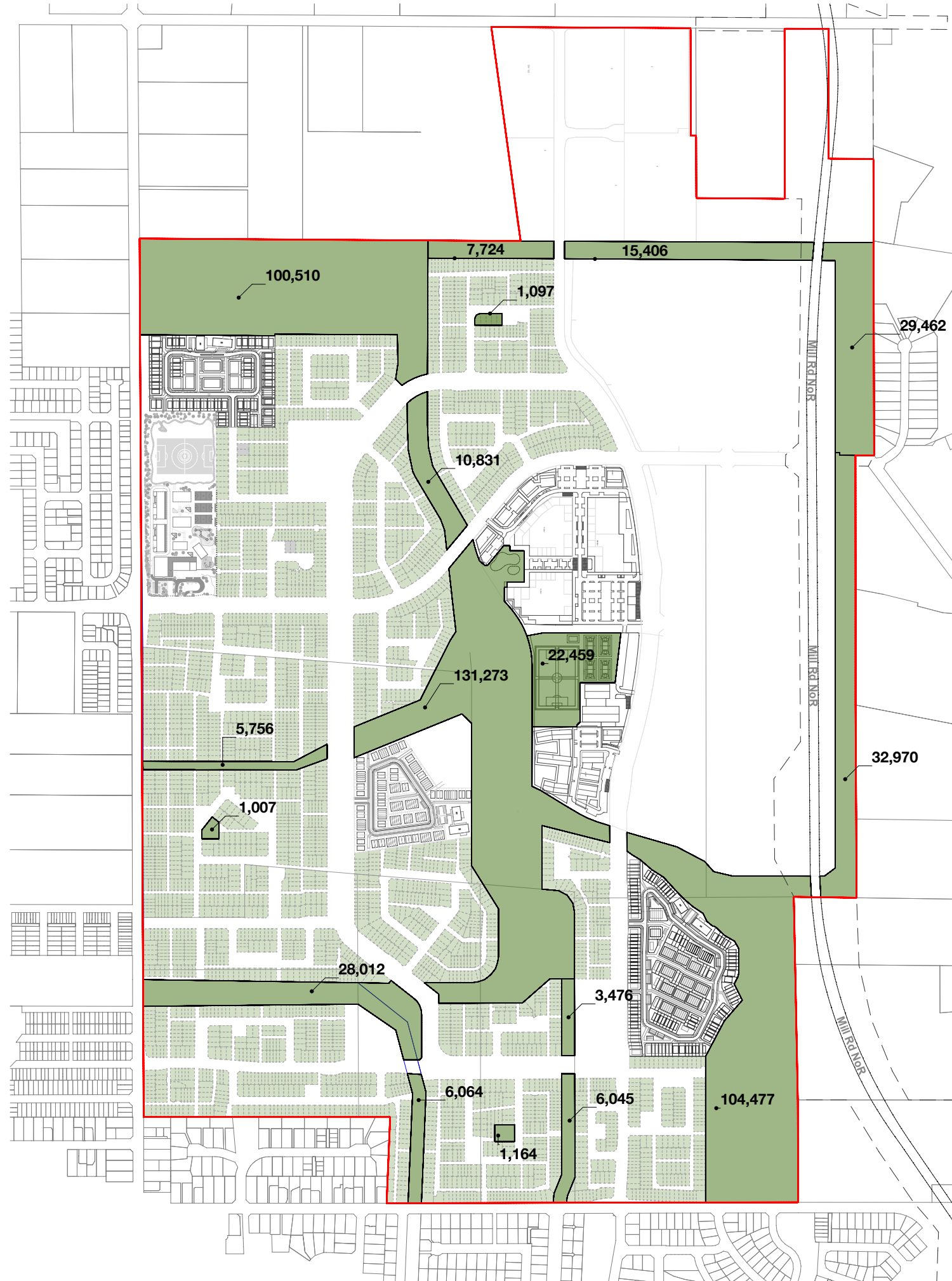
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**Analytical Diagrams
Open Space Distribution**

Scale: 1:4500 Original Paper Size: A1
Job No.: Layout I.D.: Revision:
2677 rC

Printed: 10/10/2025, 1:05 PM CAD Ref: 2677 Sunfield RC

Open Space Distribution



Total Open Space Area
53.0Ha

Open Space Areas

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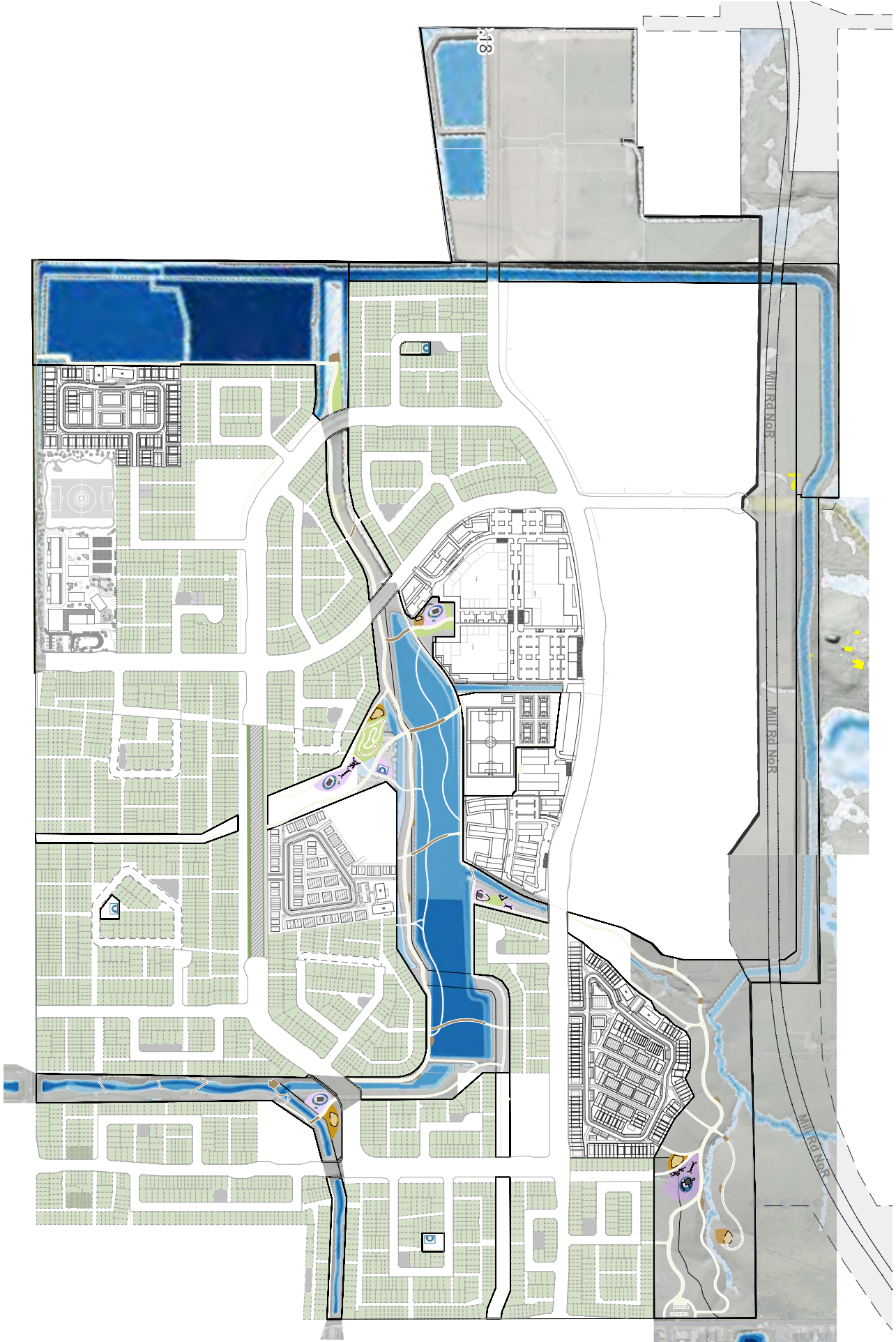
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Job No.: 2677 rC Layout I.D.: Revision:



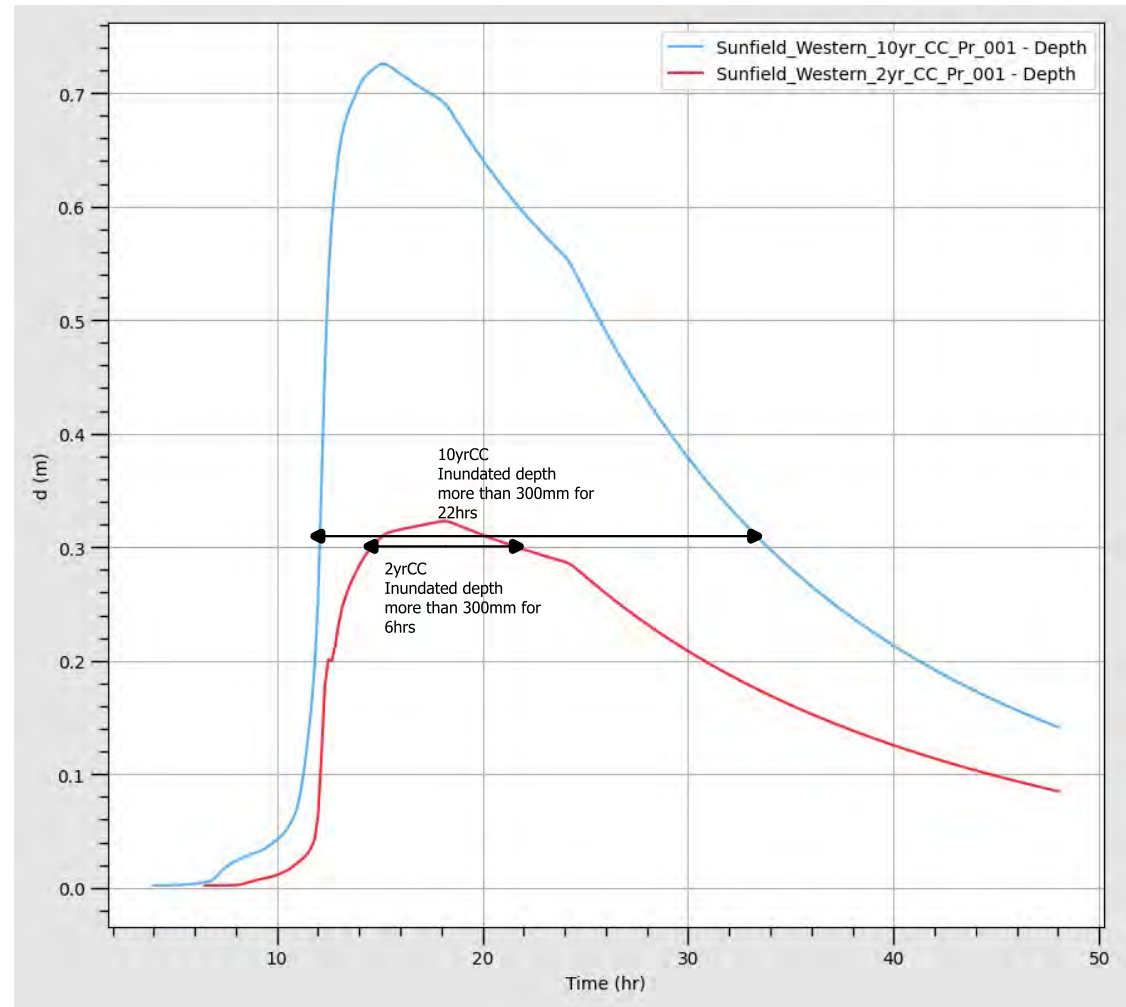
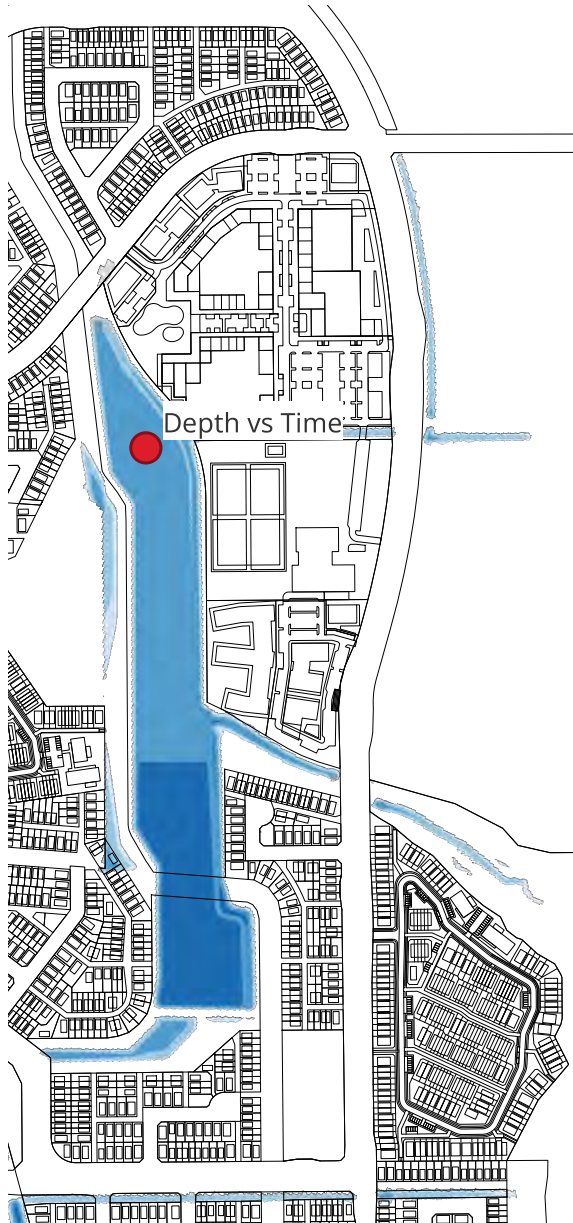
LEGEND

- XR_MasterPlan
- 10yr with Climate Change Depths
- <= 0.050000
 - 0.050000 - 0.200000
 - 0.200000 - 0.500000
 - 0.500000 - 1.000000
 - 1.000000 - 2.000000
 - > 2.000000

Measurement in Meters

Open Space Flooding 10 Year Event

Flood Depth Inundation Time for 2yr and 10yr with Climate Change



Flood hazard category as outlined by Australian Emergency Management Institute in 2014 ([Australian Emergency Management Institute, 2014](#)). ZAE M1 output values are 0 (zero) for no hazard and 1 to 6 for H1 to H6 respectively.

