



Croydon South, VIC 3136 Australia



Image: Community Notice Board

Giving people the opportunity to connect through community boards allows for a more diverse group of people to communicate to each other



Image: Community Garden

Giving people access to a local community garden allows for social interaction, but also stress release and therapy

Community Benefits

1. Increased connection to place & community

A focus through the design process was the idea of connecting people not only to the community, but back to the place they live. It is about developing a mind /attitude shift, encouraging locals to take pride in their suburb and to celebrate this. It is about encouraging greater social cohesion and connection, allowing people from all of the suburb to come together and celebrate the place they live and to share that with each other.

2. Increased availability of public space for exercise & recreation

Another main focus was the creation of a new path network which would allow people to be able to explore and exercise in the suburb without the necessity to go along roadside or put themselves in a dangerous position. The new path network frames the newly devised public open spaces, allowing for a variety of inclusive recreation to take place.

3. Greater access to local amenity

Additionally, there was great emphasis on developing a holistic solution to the notion of the shops within the area. The new plaza along with the intersection designs and park designs aims to create an experience for the local which allows them to easily and safely travel around the site without any necessity to drive to the shops. This included the creation of a shopping/social experience which was unique to the area and beyond, while still providing the essential services the locals need.

4. Greater access to green space and vegetation & improvement of mental health

Finally, with growing awareness for mental health within society, a key component of the design was creating spaces for which people could retreat to and feel at peace. The newly designed gardens offer locals a native garden experience which can help promote joy and happiness by being amongst it. Throughout the masterplan there has been several parks and green spaces implemented to give people access to greenery wherever they are located in the suburb.

Net Impact over 50 Years

Total Material Emissions (Embodied Carbon)
Total Plant Sequestration
Total Operational Emissions

-792 Metric Tons

595,977 kg Co₂-eq
1,395,853 kg Co₂-eq
7,397 kg Co₂-eq

Total Area (Masterplan)

Planted Area
Emissions per Area
Sequestration per Area

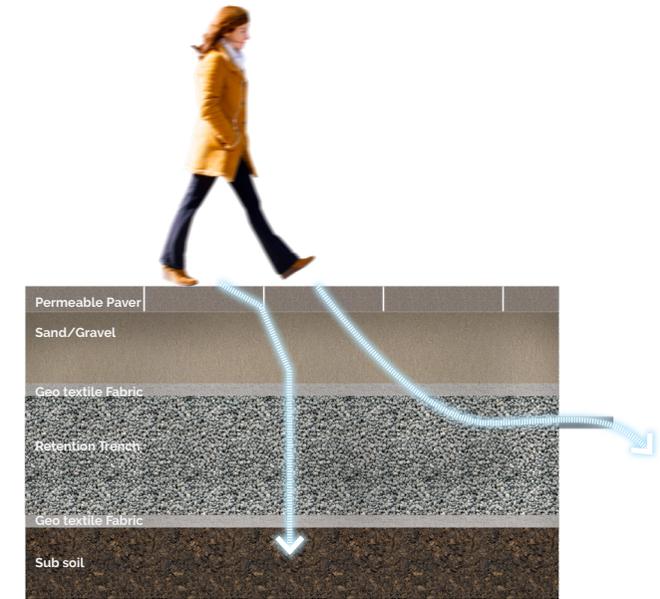
54,166 sq metres
9,088 sq metres (15% of total area)
11.1 kg Co₂-eq
25.8 kg Co₂-eq

Materials

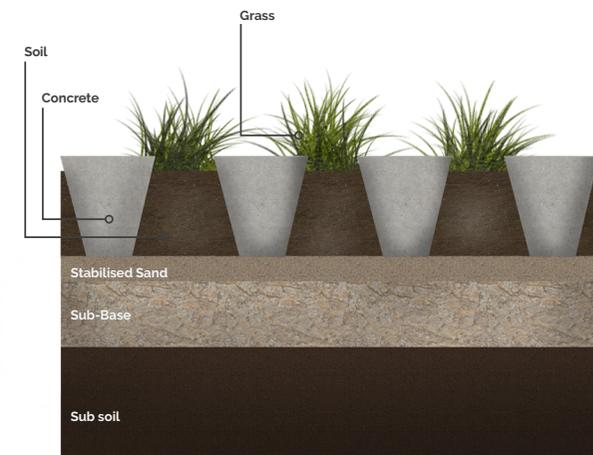
Element	Total Impact
Furniture	16,581 kg
Shelters	5,200 kg
Stabilized Crushed Stone	6,209 kg
Stabilized Crushed Stone	13,716 kg
Wood Decking	14,387 kg
Concrete - Pervious	540,485 kg
Subtotal	-595,977 kg

Plants

Element	Total Impact
Moderate Lawn Management	9,003 kg
Evergreen Medium Shrubs	176,715 kg
Deciduous Large Trees	128,688 kg
Evergreen Large Trees	234,350 kg
Wetlands	865,095 kg
Subtotal	+1,395,845 kg



Cross Section
Permeable Paving options for site



Cross Section
Grasscrete options for site

Outcome 1A - New underground intersection



New underground intersection design rationale



Improving pedestrian and cyclist access above the busy intersection will aid in encouraging active transportation methods, thus reducing carbon emissions from private vehicles



Greater pedestrian and cyclist freedom to move safely above the intersection without interacting with vehicular traffic



Redirecting car traffic underground at this junction will avoid disruption to regularly flowing traffic and simultaneously creates availability to reclaim space from original road area

C40 Principles

2: People-centred mobility and thriving streets

Enhanced Eastfield & Bayswater Road Intersection

By sending the intersection underground, it removes the dangerous crossing for pedestrians, while contributing to greater traffic flow through the site

3: Connected Place

Improving quality and ease of trips

The underground intersection proposal creates opportunity for better connections from above for pedestrians and cyclists such as from Eastfield Shops to Cheong Park. High flowing traffic is redirected underground, but maintains its vital connections to the suburb and outside the catchment.



Plan - 1:1000 @ A1
Land Bridge Tunnel Road Network



Section - 1:250 @ A3
Land Bridge Tunnel

Outcome 1B - Land Bridge at Current Grade Level



Land Bridge design rationale



New extensive planting program will create a stronger ecological condition, with new habitat opportunities for local fauna, while assisting in the sequestration of air pollution



Newly devised path network allows for a strengthened connection between all four communities surrounding the intersection, stimulating new social communication and interactions



New public open space created allows for large social gatherings to occur, potential markets space opportunities and an increase in tourism and business of commercial areas

C40 Principles

3: Connected Place

Increased connection to Cheong Park/
pathway access

The proposed new park at current grade level increases connection across four communities within the area previously divided by the dangerous, high speed intersection of Eastfield and Bayswater Road

4: A Place for Everyone

Open Space / Place for social interaction

The new land bridge allows for greater local synergy, interaction and gathering. The park features vast areas of land which are capable of holding large festivals, but also acting as a rest spot for local residents who are walking around. The park is easily accessible by all, including those with disabilities, making it an ideal place for social discourse and interaction to occur.

9: Sustainable lifestyles

Market Opportunities / New Walking trails

The large expanse of land makes it ideal to host local festivals or markets which promote local businesses and services. Additionally, the new path network gives locals new trails to run/walk along which promotes a healthier lifestyle.



Axonometric
Land Bridge & Tunnel



Outcome 2 - North Eastfield Plaza



North Eastfield Plaza design rationale



A new high-quality public realm which focuses on greening area to become a more inviting more vibrant urban space which improves the quality of life for locals



Transformation of existing shops to become shop-top residential, new business/co-working hub on top of existing medical centre. New shops increases employment opportunities for locals



Smart furniture on site including outdoor canopies and tables provide electrical outputs and Wi-Fi hotspots powered by solar energy generated on site



The removal of the current car park allows for the opportunity for urban greening. New introduced materialities such as Grasscrete lower the urban heat island effect of the site

C40 Principles

1: Close to Home

Top shop residential Mixed-Use Zone

New residential complexes located above existing and proposed commercial buildings allows for people to live more locally to the community.

2: People-centred mobility & thriving Streets

Pedestrian Plaza

With the car park being sent underground, the plaza can open up to allow pedestrians only. This allows for more space to be utilised by pedestrians and creates a unique shopping and walking experience, which is more safer.

4: A place for everyone

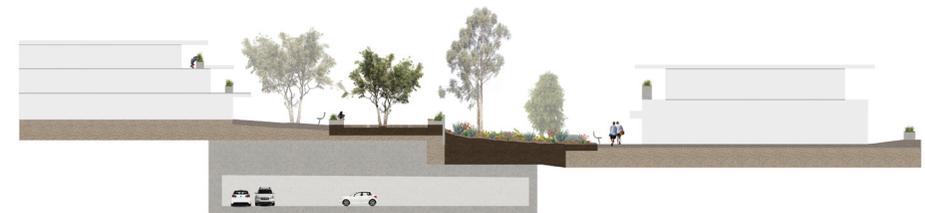
Increased housing diversity

With the introduction of new varied housing, including apartment complexes, there is more chances for affordable housing for young families or individuals.

6: Green Energy and buildings

Solar Panels & DDO

A new Design and Development Overlay will increase clean energy and energy efficiency of new buildings. New solar panel roll out frameworks will enable many to utilise green energy independently.



Section - 1:250 @ A3
Croydon South Plaza

Outcome 3 - South Eastfield Plaza



South Eastfield Plaza design rationale



New underground car park located underneath the new Eastfield Plaza creates a safer car parking experience and meets car parking requirements for the area



New sheltered areas allow for locals to gather and socialise, during all seasons of the year. These areas are surrounded by lush, poetic native Australian plantings



New nature based playground which is playful in its gestural form and provides children with a tactile experience which is reflective of the condition around them, instigating play which is challenging yet rewarding.

C40 Principles

3: Connected Place

Removal of cars at ground level

The new underground carpark alleviates the stress on street level parking. It centralises all parking within the catchment, making it a major point within the space.

4: A Place for Everyone

Open Green Space & Playground

New native gardens adorn the path networks, which frames the new open spaces. The new nature based playground invites kids of all ages to play and have fun.

8: Green Space, Climate Resilient & Nature-based Solutions

Rain Garden Collection system

New stormwater catchment pits and rain gardens on site collect excess stormwater and clean it before going into Tarralla Creek. Large trees will aim to sequester a majority of the carbon on site.

9: Sustainable Lifestyles

New paths & access to open space

A new path structure will encourage locals to explore their neighbourhood and exercise while doing so. New open spaces allow for more varieties of recreational activity to occur



Axonometric
Nature Playground



Section - 1:100 @ A3
BBQ / Recreation Space

Outcome 4 - Tarralla Creek Restoration



Tarralla Creek Restoration rationale



Proposed integration of new raingardens paired with existing stormwater system aims to cleanse water prior to introduction to Tarralla Creek



The proposed remediation of Tarralla Creek contributes to the greater Tarralla Creek ecological corridor, working with the existing Reimagining Tarralla Creek Melbourne Water project



New proposed lookout areas, along with additional walking trails will encourage birdwatching and facilitate increased community interaction with their local ecology and environment



The restoration of the creek will create new habitat for native flora and fauna of the region, ensuring their survival from habitat destruction and rising climatic pressures

C40 Principles

5: Clean Construction

Removal of concrete and implementation of new erosion control strategies

As part of the overall Tarralla Creek revitalisation, all concrete in the Eastfield plaza stretch of creek is being removed and replanted. New recycled geomesh erosion control is installed on the banks to prevent collapse of the banks.

7: Resource Management

Stormwater Treatment

All stormwater on site is collected in rain gardens and cleaned before it hits the main Tarralla Creek system, helping to restore the creeks health.

8: Green Space, Climate Resilient & Nature-based Solutions

Revegetation of Tarralla Creek

New native plantings are implemented along the creek to restore the creek to a more ecological condition.

10: Green Economy

Education programs and job opportunities

As part of the ongoing maintenance of the creek, various programs aimed at educating locals and children about the importance of the creek will be developed and actualised. Jobs opportunities will also come about, focused around maintenance of the creek and educating future generations.



Section - 1:100 @ A3
Bridge over rain garden



Section - 1:250 @ A3
New bird watching/viewing platform

Outcome 4 - Tarralla Creek Restoration

Tarralla Creek Restoration program

The focus for the Tarralla Creek revegetation program will be to create a system which not only reflects its surroundings, but also provides residents with a place to retreat to as well as be proud of.

The program is completed in four key phases.

PHASE 1 - CREEK EVALUATION

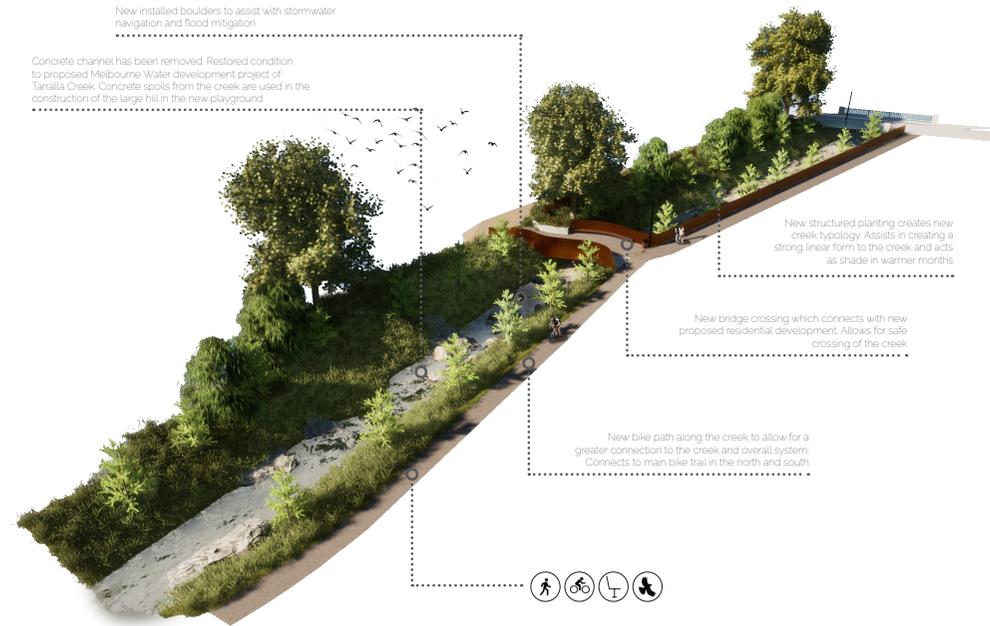
PHASE 2 - CONCRETE REMOVAL

PHASE 3 - CREEK REVEGETATION

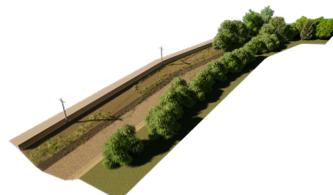
PHASE 4 - CREEK DEVELOPMENT

To assist in the revegetation program success, the community will be invited to help plant new seedlings and tubestock along the creek, as a way of engaging people's connection to the creek itself.

It will serve as a platform for local environmental groups to be able to educate the locals on the fauna and flora of the area.



PHASE 1 - Creek evaluation



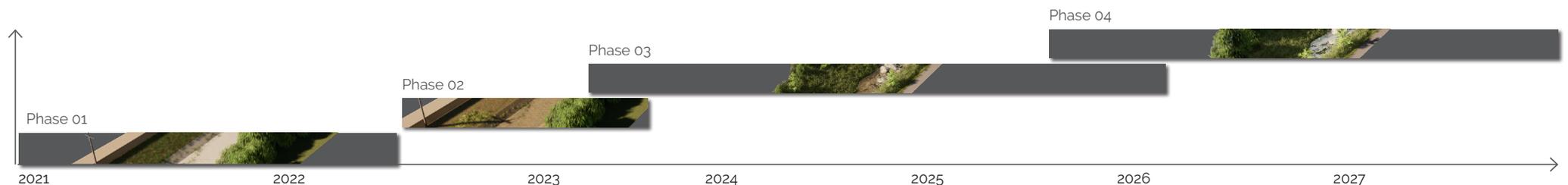
PHASE 2 - Concrete removal



PHASE 3 - Creek Revegetation



PHASE 4 - Creek development



Outcome 5 - Bayswater Road & Lucille Avenue Intersection



Bayswater Road & Lucille Avenue Intersection rationale



A new bus route with a new terminus will provide residents with better connection to jobs and other services locally and out of the neighbourhood



Dwellings above existing and proposed commercial establishments provide residents with a short walk to the newly activated precinct



A signalised intersection creates a safer driving experience, while also ensuring pedestrians can cross with ease, new vegetation creates a buffer for pedestrians walking through



New rain gardens are positioned at each corner of the intersection to capture stormwater run off, cleaning the water before it heads into the Tarralla Creek waterway

C40 Principles

1: Close to Home New small commercial centre

Replacing the old shopping strip, a new commercial building is implemented, aimed at providing health care and other services. This building is complimented by lush green roofs, adding texture to the facade.

4: People-Centred Mobility and Thriving Streets Signalised Intersection

The new intersection makes it easier to cross Bayswater and connect back into the suburb or into the new Eastfield Plaza space.

8: Connected Place A More Succinct PT Network

The new bus route is aimed at connecting more people in the suburb to the plaza and other areas outside of the suburb. The route (Route 662) will aim to travel from west to east, travelling through the new Yvonne Avenue residential precinct.



Plan - 1:1000 @ A1
New Bus Route 662



Section - 1:200 @ A3
Bayswater Road & Lucille Avenue Intersection

Outcome 6 - Yvonne Avenue Residential Precinct



Yvonne Avenue Residential Precinct design rationale



New housing lot allocations creates a new precinct based on the *Greening the Greyfields* concept



New local parks and recreational spots to give residents access to open space which is close. This includes new basketball courts, walking trails and large areas of grass for other recreational purposes



Solar panel frameworks incentivise greater energy generation independence, while also reducing the carbon footprint of the neighbourhood



New pathways link to a new bridge crossing the Tarralla Creek, allowing for residents to have an easily accessible path to the shops and local facilities

C40 Principles

1: Close to Home

Access to services

Increased residential density with excellent access to the shopping centre allows more residents to walk to essential services.

3: Connected Place

Tarralla Creek Bridge & Trail

Residents to the Yvonne Ave Residential Precinct have increased access to shops and employment in the plaza via a new bridge and trail which reduces travel time.

4: A place for everyone

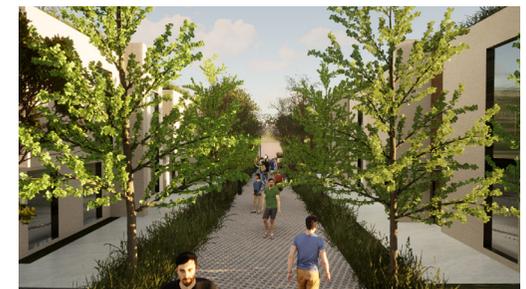
Housing Diversity

A wider variety of housing is available, ranging from small apartments, to detached townhouses. This allows for more of the market to be able to buy property in the area at affordable prices.

6: Green Energy Buildings

Solar Energy & the Home of tomorrow

New solar panel framework will aim to roll out solar panels to every household in the area. All new residential must include solar panels and batteries as part of the framework. This will decrease traditional energy consumption requirements and place less stress on the climatic condition.



Section - 1:200 @ A3

Yvonne Avenue Residential Precinct