Trinity Grammar School

Independent Planning Commission - 11 August 2021

Traffic overview

Transport Impact Assessment

Submitted with the Environmental Impact Statement 2020

Supplementary Traffic Assessment

Updated intersection assessment and Green Travel Plan

Car park design & operations

Design intent, pick-up/ drop-off and street access points

Proposed roadworks

for Prospect Road and Victoria Street

street level strategies

Transport Impact Assessment

street level strategies

Base assumptions

Base case - 2021

- Students: 1,655
- Staff: 277
- Current year

Future case - 2028

- Students: 2,100
- Staff: 327
- Full development scenario

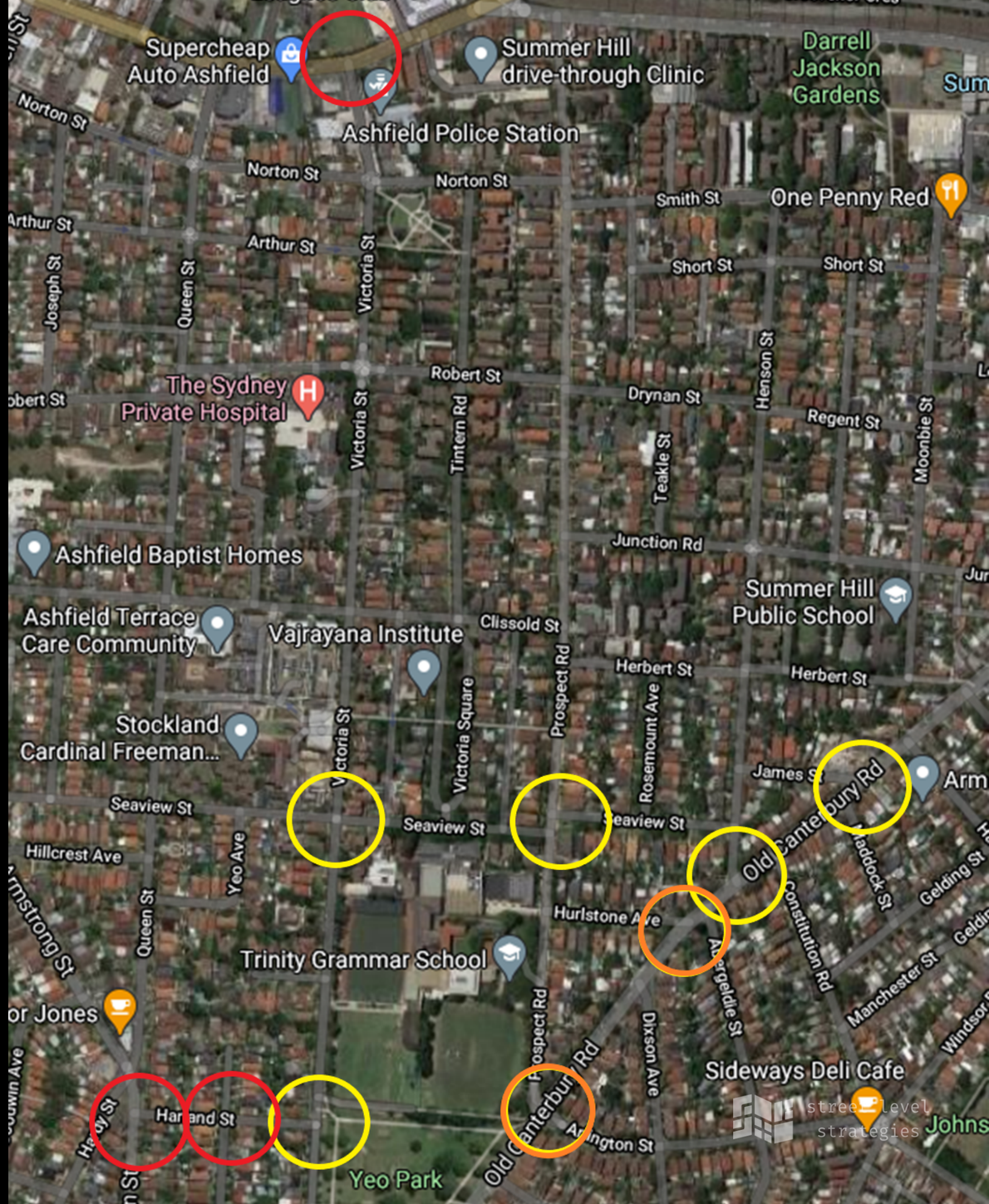
Intersections

State roads

1. Old Canterbury Road/Prospect Road;
2. Old Canterbury Road/Hurlstone Avenue;
3. Old Canterbury Road/Henson Street;
4. Old Canterbury Road/James Street; and
5. Liverpool Road/ Victoria Street.

Local streets

6. Prospect Road/Seaview Street – East;
7. Prospect Road/Seaview Street - West;
8. Victoria Street/Seaview Street;
9. Victoria Street/Harland Street;
10. Queen Street/ Harland Street; and
11. Harland Street/ Service Avenue.



Initial results (EIS)

Intersection	Requirement	AM Base (current)	PM Base (current)	AM Future (full development)	PM Future (full development)
Old Canterbury Rd/ Prospect Rd	SEAR	F	F	F	F
Old Canterbury Rd/ Hurlstone Ave	SEAR	F	E	F	E
Old Canterbury Rd/ Henson St	SEAR	F	F	F	F
Old Canterbury Rd/ James St	SEAR	E	E	E	E
Prospect Rd/ Seaview St (E)	Local	A	A	A	A
Prospect Rd/ Seaview St (W)	Local	A	A	A	A
Victoria St/ Seaview St	Local	A	A	A	A
Victoria St/ Harland St	Local	A	A	A	A

street level strategies

Modelling approach for RFI works

Review previous modelling

Check assumptions, distribution and calibration

SIDRA Network model

Network model for closely-spaced intersections

Focus on AM peak

AM school peak coincides with commuter peak

Base + Future cases

Current year 2021 + Full Development 2028

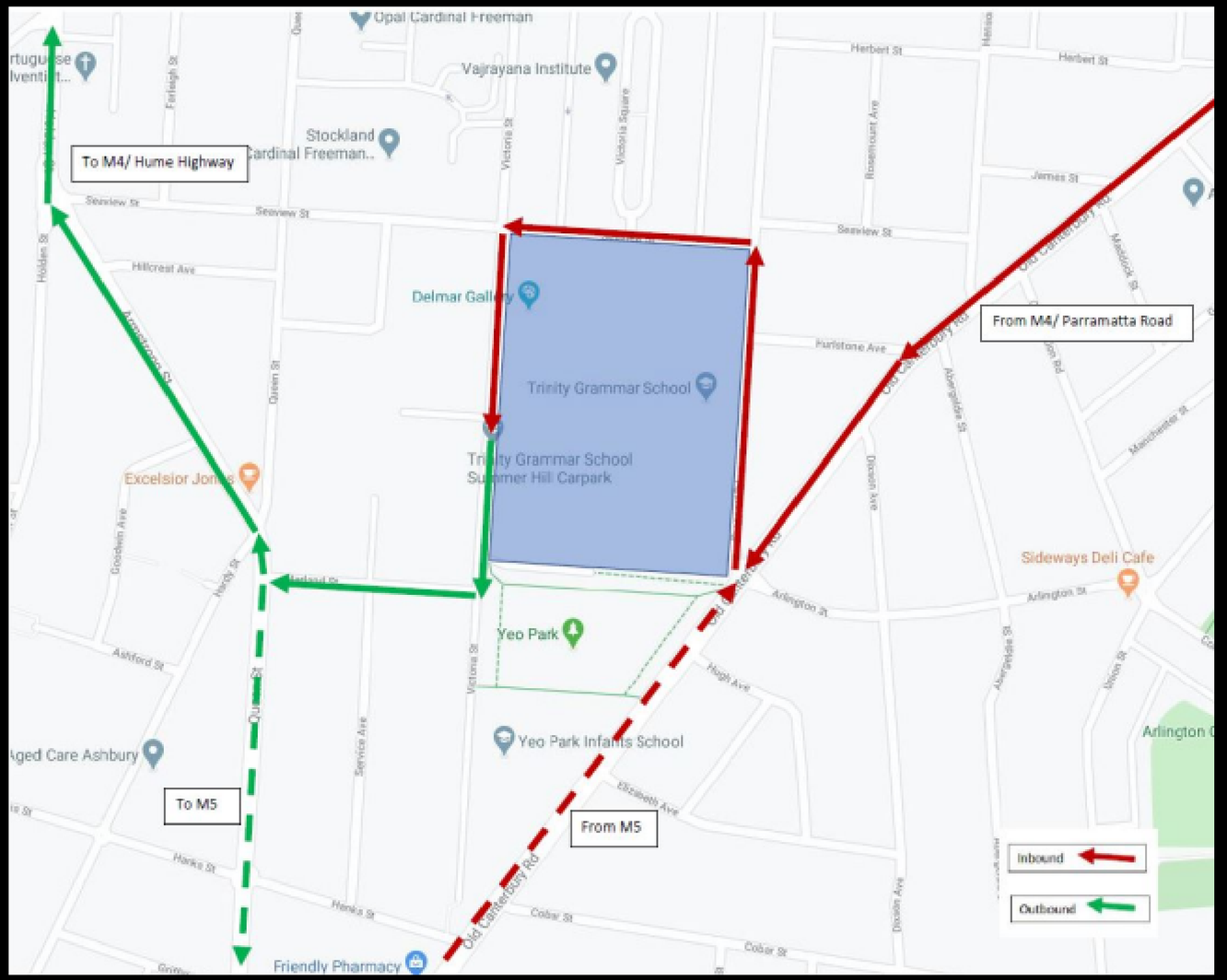
street level strategies

Updated results (RFI)

Intersection	AM Base (current)	PM Base (current)	AM Future (full development)	PM Future (full development)
Old Canterbury Rd/ Prospect Rd	C	C	C	D
Old Canterbury Rd/ Hurlstone Ave	D	C	D	C
Liverpool Rd/ Victoria St	A	C	B	C
Harland St/ Queen St	B	A	B	C
Harland St/ Service Ave	A	A	A	A

CTMP Framework

- Ensure safe entering and exiting of heavy vehicles, covered loads etc.
- Reduce on-street parking for construction staff
- Contractors to prepare site-specific CTMPs
- Driver Code of Conduct
- Proposed haulage routes



street level strategies

Green Travel Plan

street level
strategies

GTP Strategies

For 10% mode shift to sustainable travel

1. Increase travel by active transport

Build facilities, remove barriers, advocate for infrastructure

2. Increase travel by public transport

Shuttle services (Ashfield & Summer Hill), incentivise staff

3. Increase use of Trinity bus services

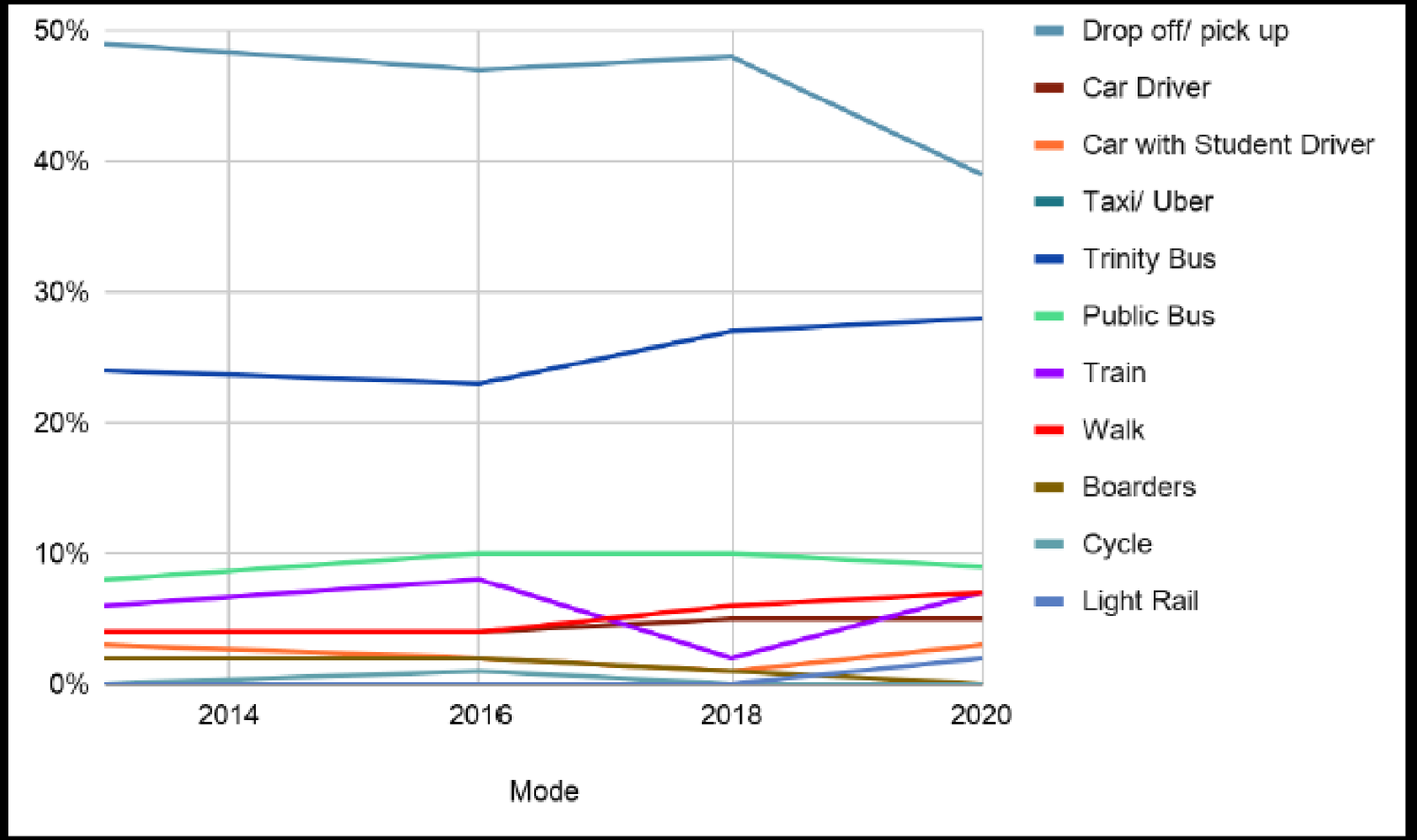
Monitor patronage and service levels, expand as needed

4. Reduce the number of car trips

Carpool for staff, remote working/ flexible learning

5. Engagement and governance

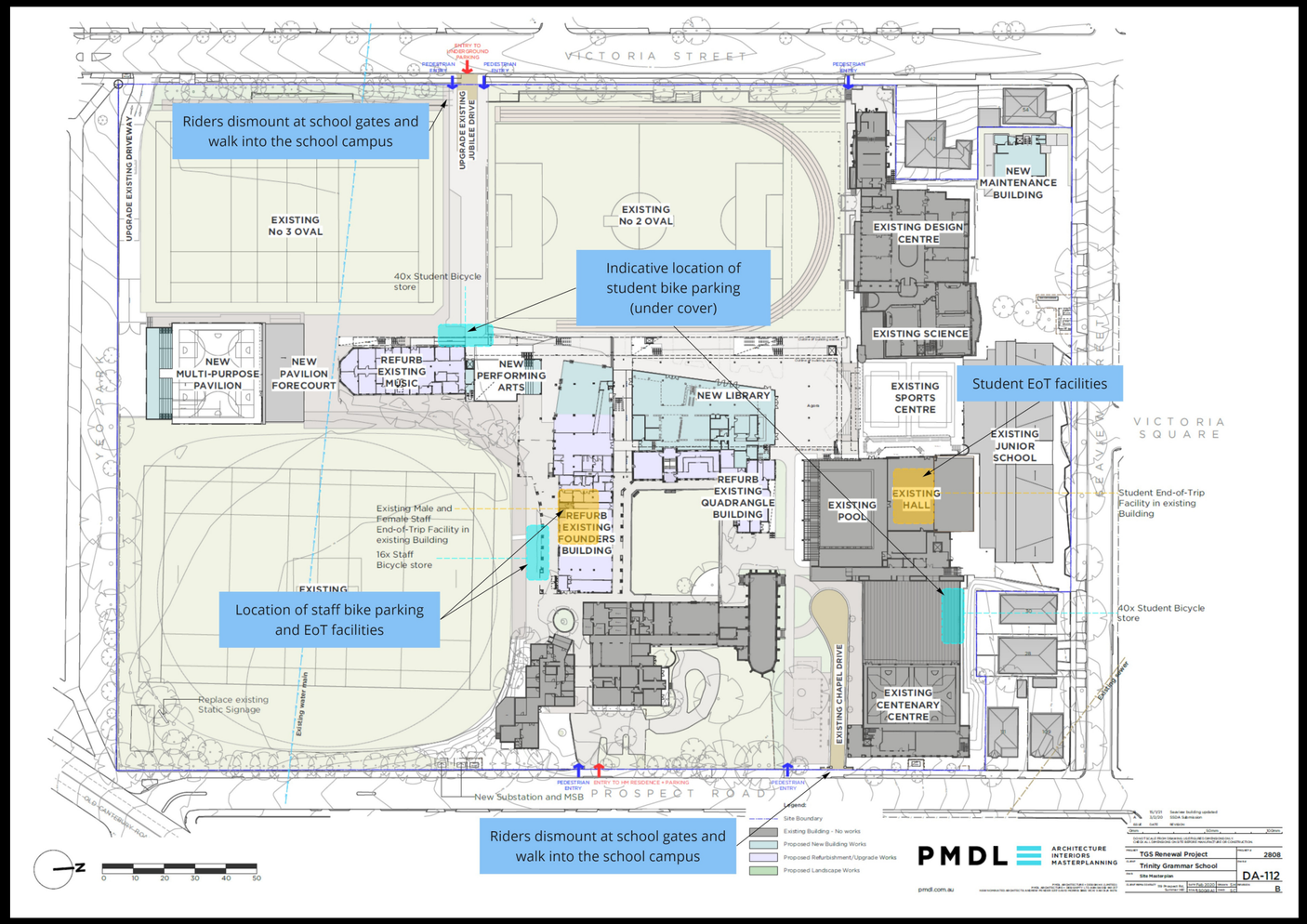
Consultation, resourced, monitoring & reporting, visibility



Positive, existing trends

8% decline in car trips over 7 years

Bicycle parking and End-of-Trip



Bike parking spaces required:

- 40 student spaces near Victoria St entry
- 40 student spaces near Prospect Road entry
- 16 staff spaces near staff EoT facilities

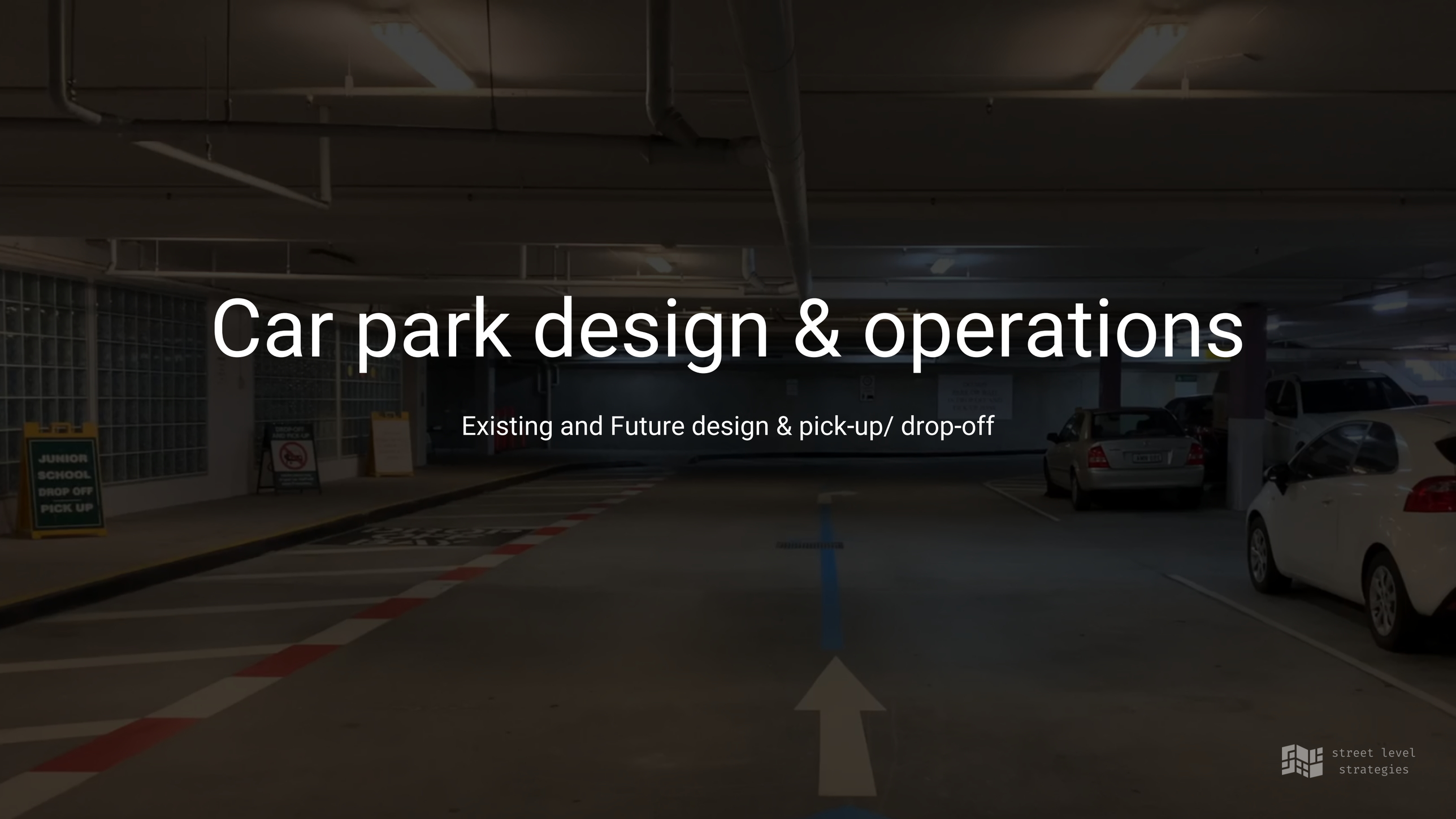
End-of-Trip facilities:

- Student EoT at the Aquatic Centre
- Staff EoT at the Founders Building

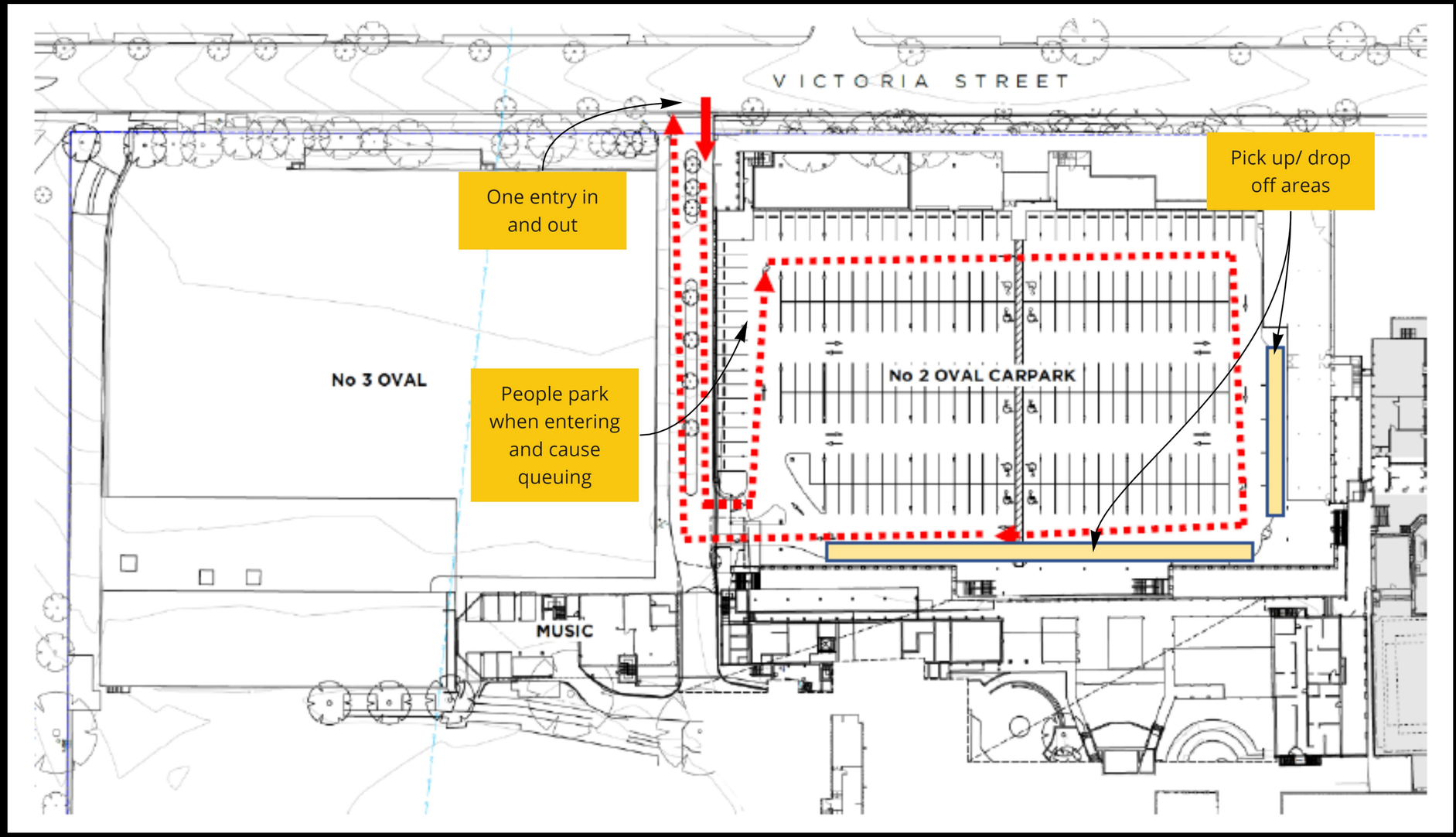
street level strategies

Car park design & operations

Existing and Future design & pick-up/ drop-off

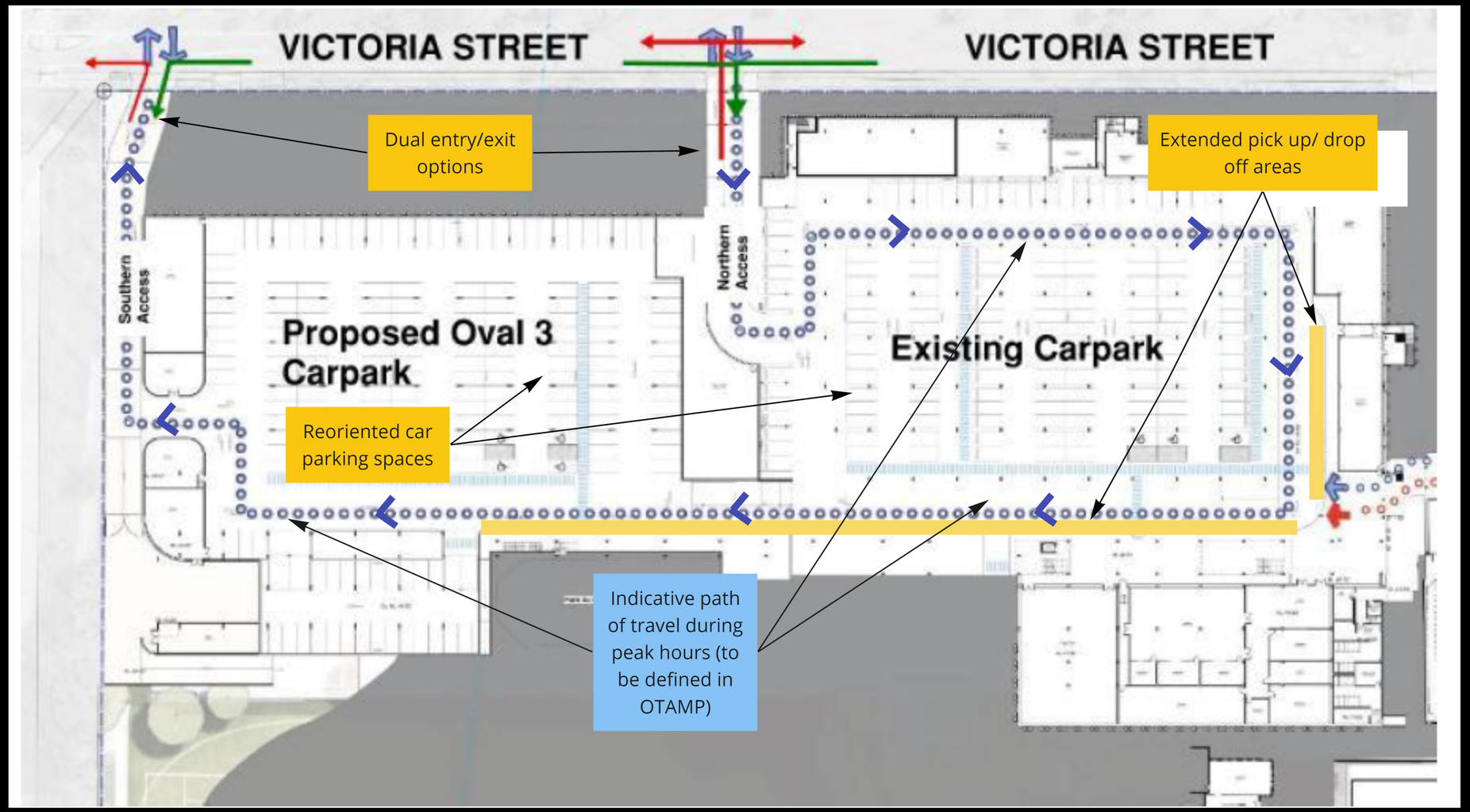


street level strategies



Existing car park

street level strategies



Future car park

Item	Existing Car Park	Future Car Park
No. spaces on circulation aisle	107	41 (-66)
No. parking spaces next to pick up/drop off zone	25	0 (-25)
Total number of spaces	**312**	**324 (+12)**
Length of pick up/drop off area (m)	**105**	**170 (+65)**
Length of main circulation aisle (m)	290	408 (+118)
Total length of circulation aisle (m)	180	501 (+321)
Driveway length – entry (m)	75	108 (+33)
Driveway length – exit (m)	75	45 (-30)
Total roadway length (m)	**620**	**1,062 (+442)**

Key improvements

Pick-up/ Drop-off capacity

Adequate capacity to meet demand

	At 1,500 students (Existing -10%)	Existing 1.655 students	Full Development (Existing +25%)
Pick-up/Drop-off length (m)	105	105	170
Number of bays	18	18	28
Average turnover time (sec)	120	120	120
Capacity per hour (no. vehicles)	**540**	**540**	**850**
Demand AM peak (no. vehicles)	297	327	409
Demand PM peak (no. vehicles)	163	179	224
Queuing demand (no. vehicles)	10	12	14
Queue length required (m)	60	72	84
Length of main circulation aisle (m)	290	290	408
Total length of circulation aisle (m)	180	180	501
Driveway length - entry (m)	75	75	108
Driveway length - exit (m)	75	75	45
Total roadway length (m)	**620**	**620**	**1062**

street level strategies

2-minute drop off

Adequate time

Arrive, child gets in, safe and secure, drive away

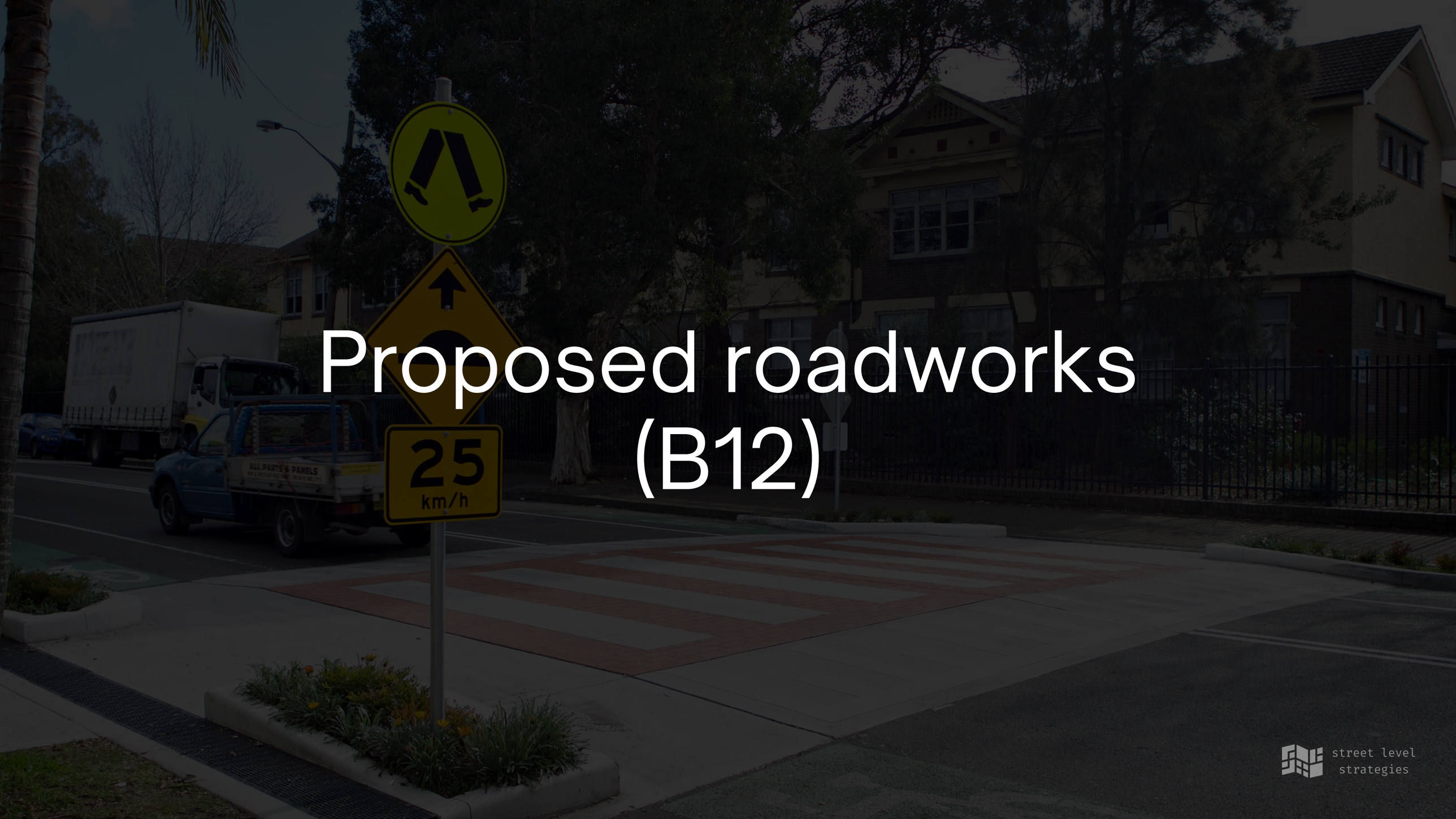
Observed on site

During site visits, short drop-offs were observed

Professional practice

Two minutes is industry standard for schools

street level strategies



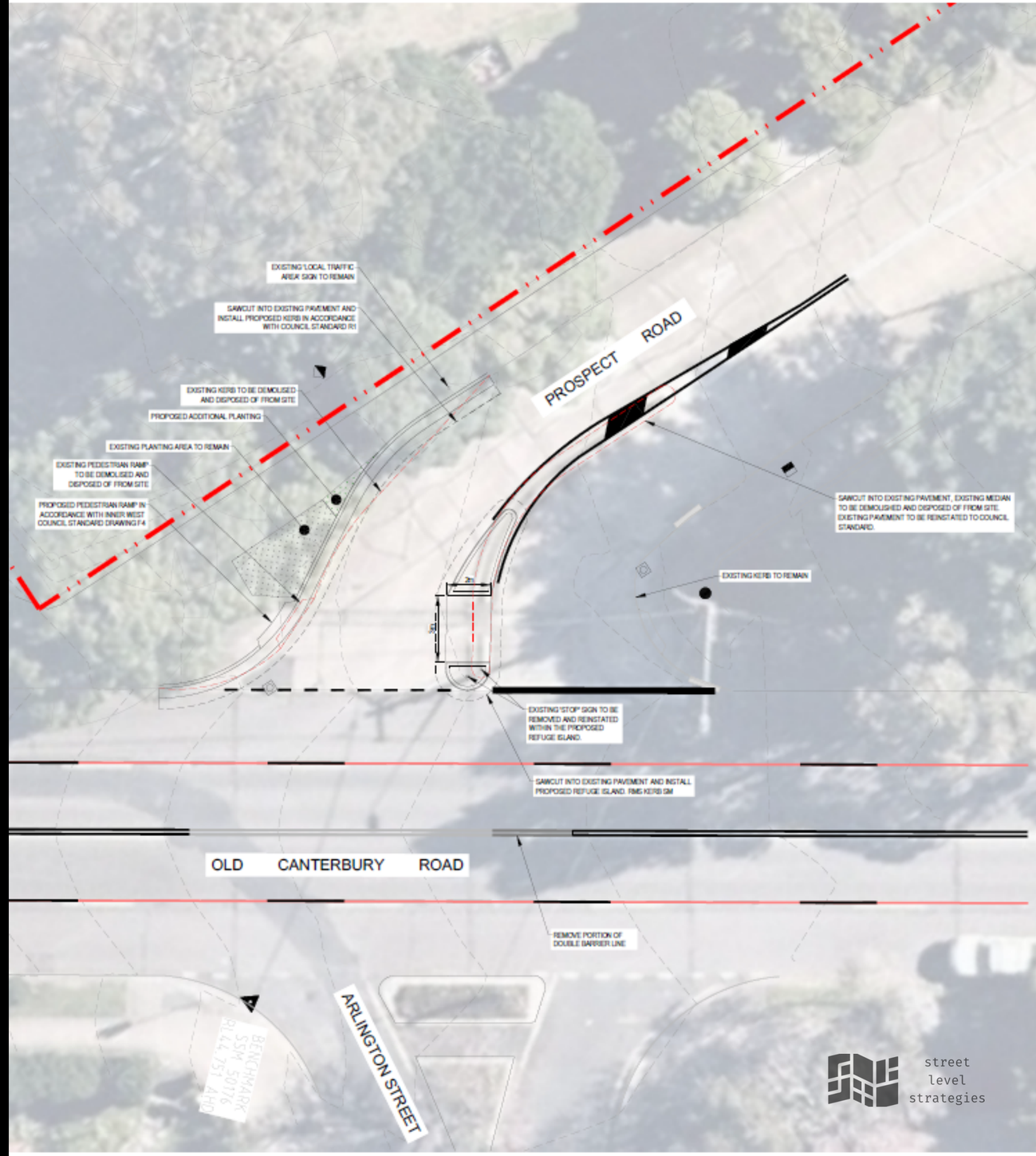
Proposed roadworks (B12)

street level strategies

Locality context

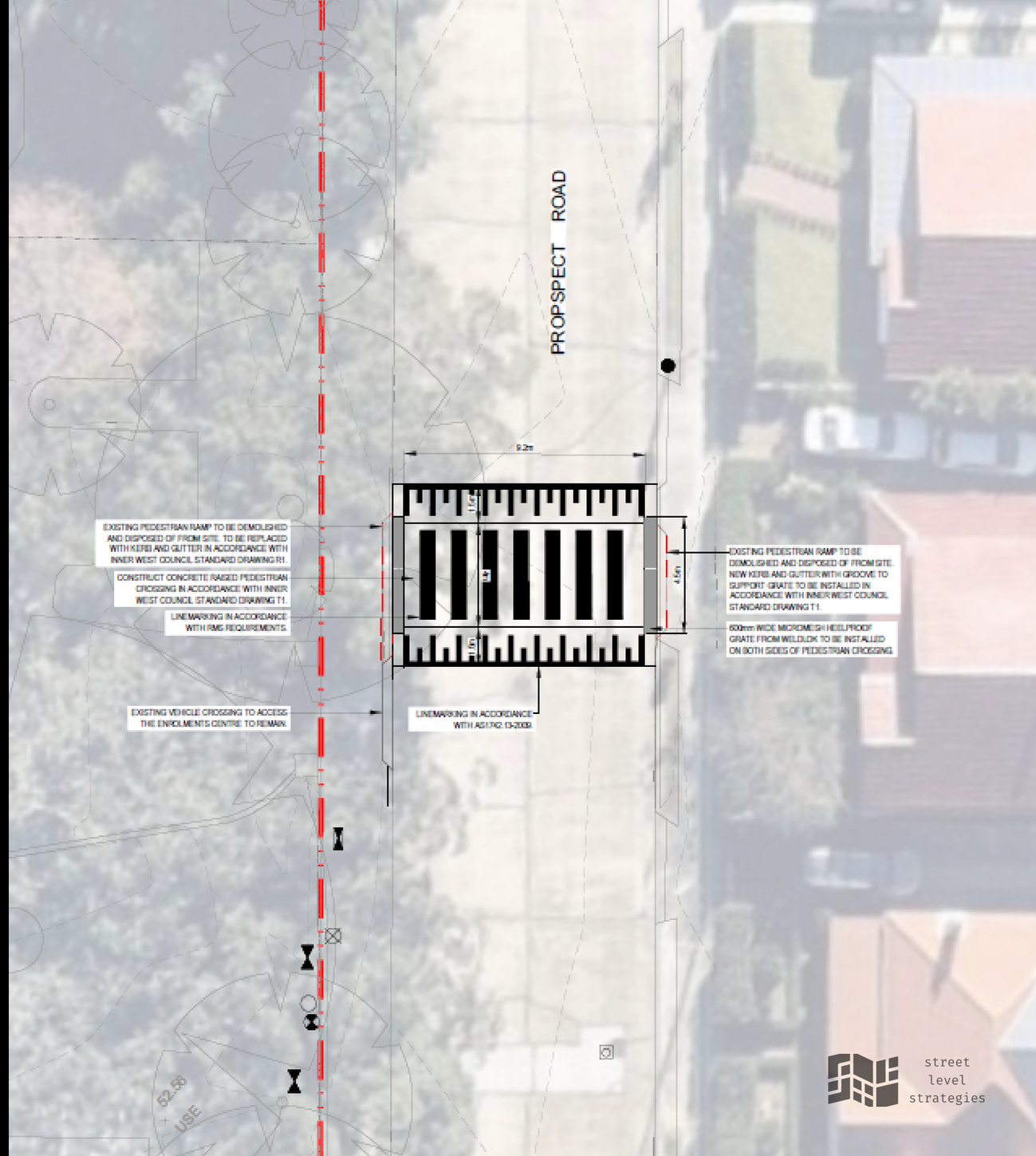
Prospect Road intersection

- Upgrade to include a left turn lane from Prospect Rd to Old Centerbury Rd
- Add a pedestrian refuge to improve crossing
- Swept paths tested for rigid buses
- All works to TfNSW requirements
- Consultation with TfNSW and IWC, in-principle agreement received



Prospect Road crossing

- Upgrade existing zebra crossing which is in a state of poor repair
- Add a raised pedestrian crossing in the same location
- Maintain access to all driveways
- All works to IWC standard drawings
- Consultation with TfNSW and IWC, in-principle agreement received



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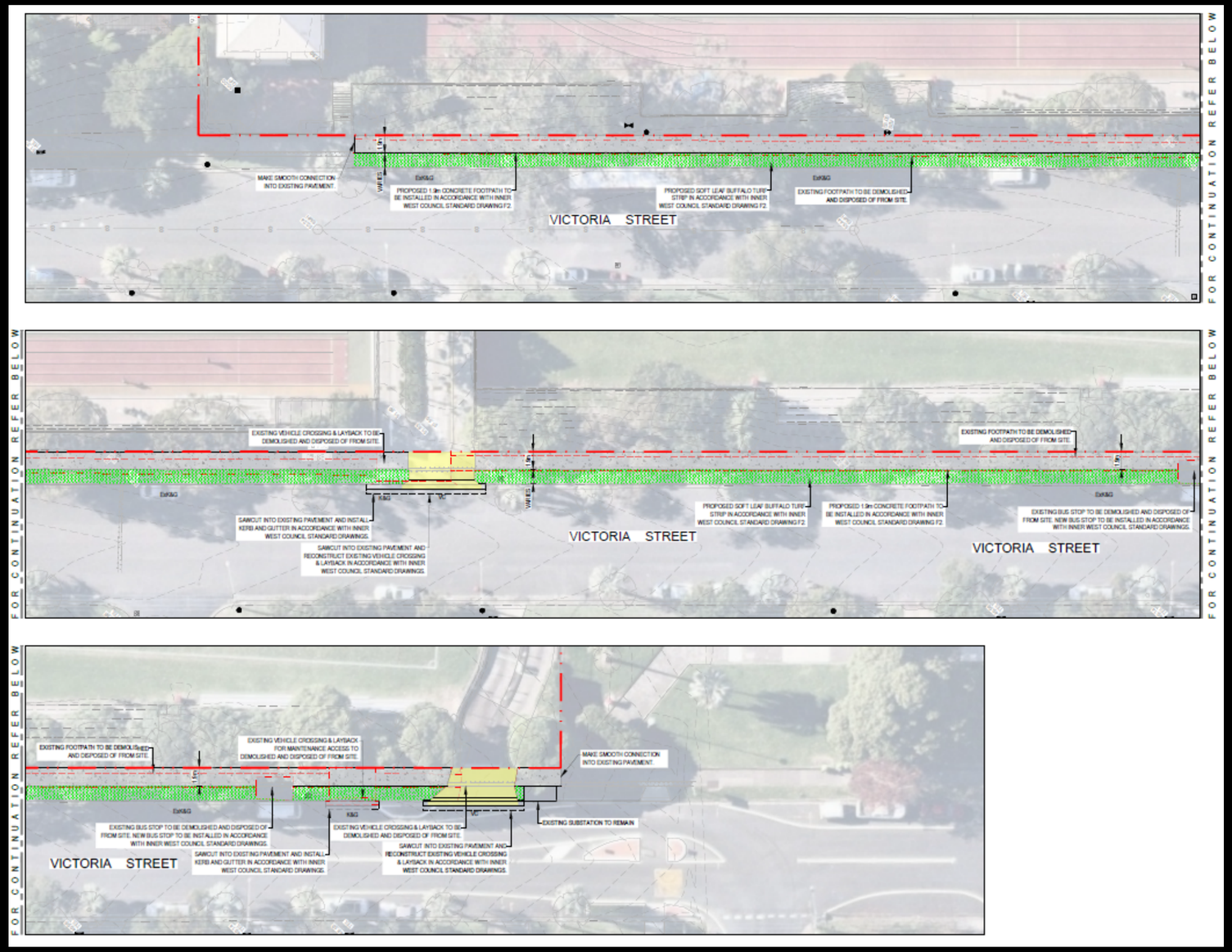
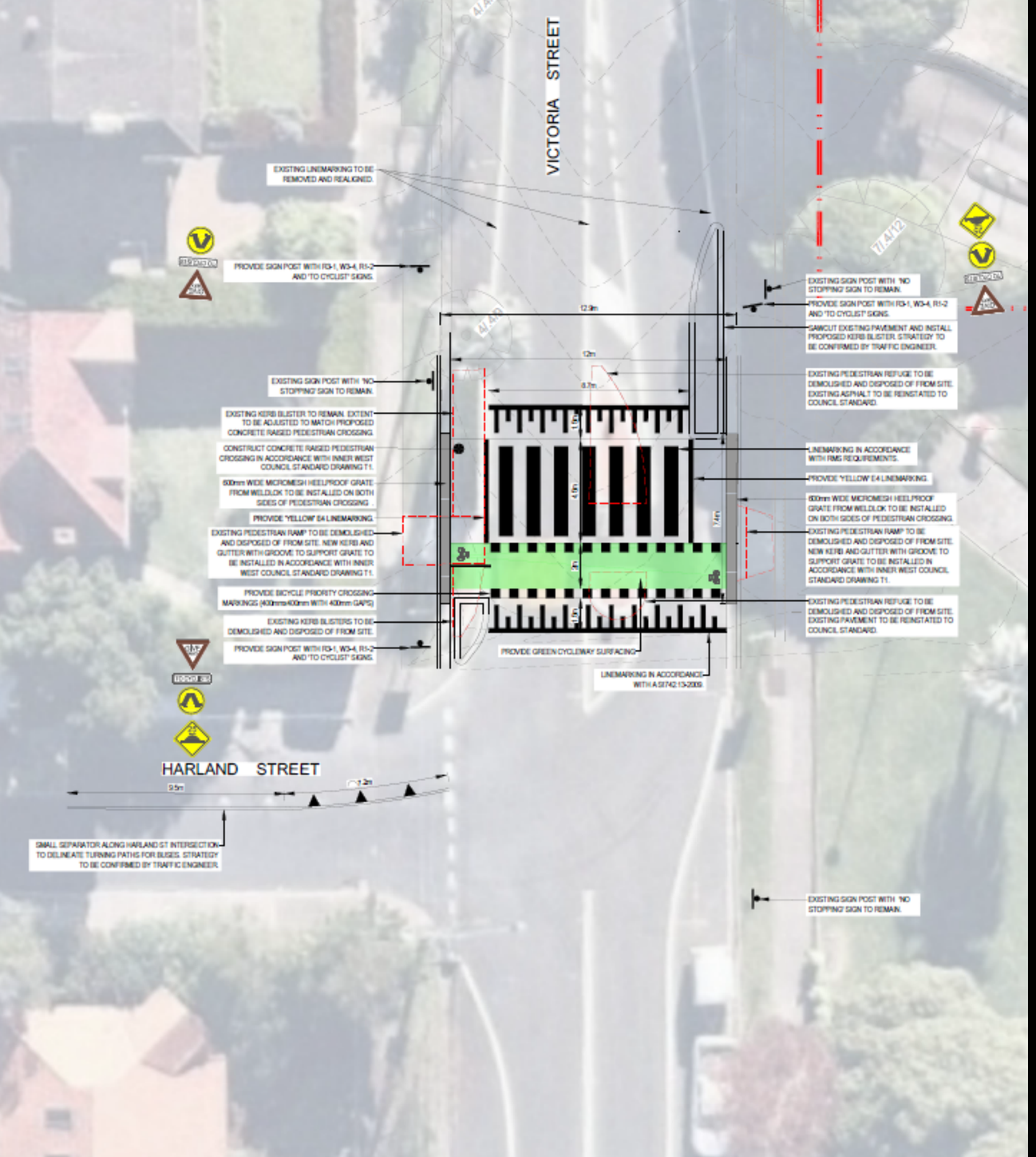


Victoria Street footpath

- Upgrade the footpath on the school frontage on Victoria Street
- Upgrade to IWC standard drawings
- Increase footpath width to 1.9m
- Maintain trees and grass verge
- Consultation with IWC and TfNSW. in-principle agreement received

street level strategies



Victoria St crossing

- Upgrade existing pedestrian refuge to a raised crossing with integrated cycle crossing
- Designed in accordance with Austroads and IWC standard drawings
- Improves truck/ bus turning paths
- Removes sightline issue
- Consultation with IWC in progress

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Thank you

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