# Proposed Landsdale Child Care Centre

TRANSPORT IMPACT STATEMENT



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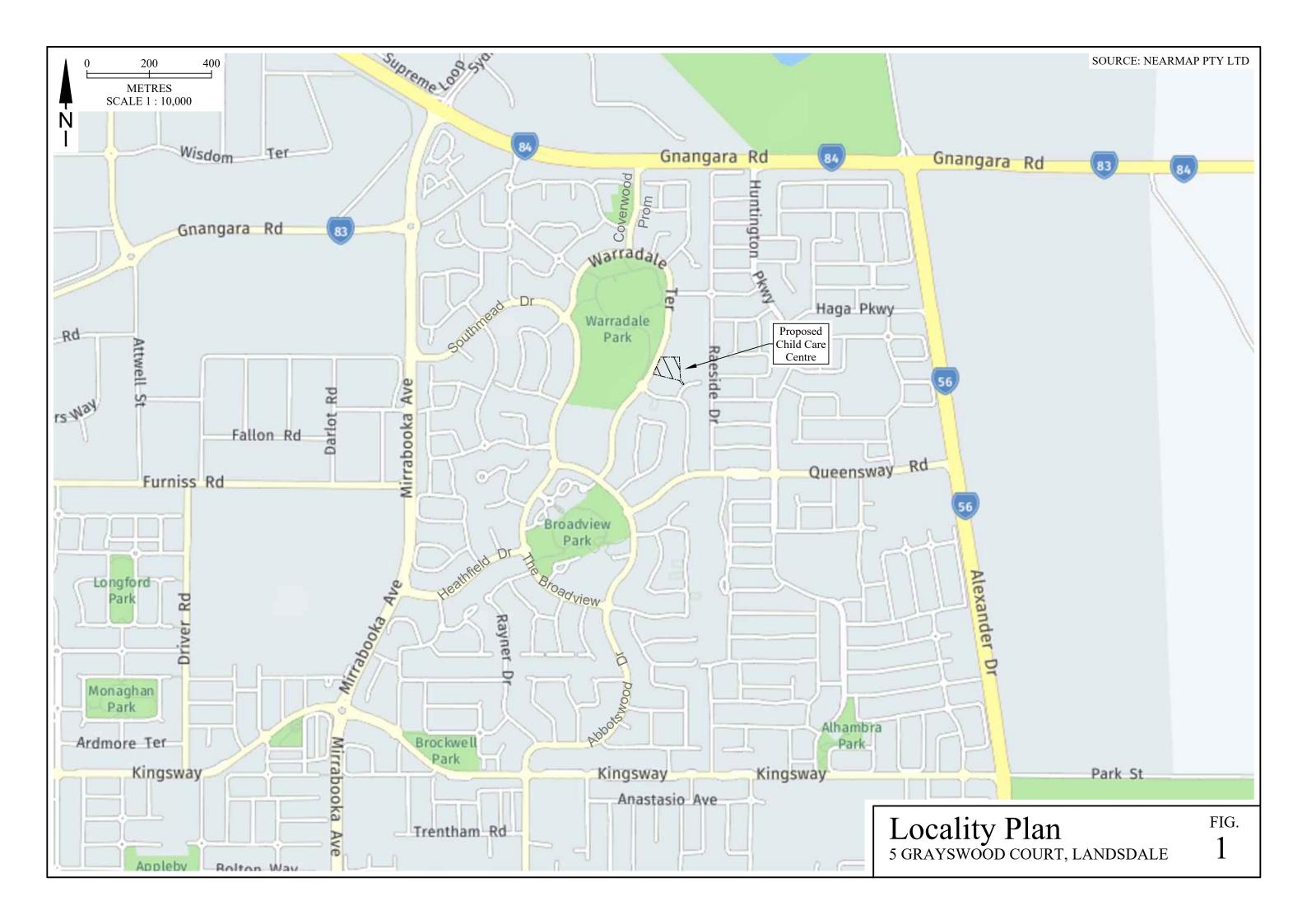
# 1. INTRODUCTION

Atlantis Group is preparing a Development Application for a proposed a Child Care Centre at No. 5 Grayswood Court, which is located in the northern part of Landsdale, opposite Warradale Park, as shown in the Locality Plan in Figure 1.

Uloth and Associates has been appointed to prepare a Transport Impact Statement in support of the proposed development.

# 1.1 STUDY OBJECTIVES

The overall study objectives are to identify the existing situation in the vicinity of the development site, to confirm the required parking provision and access arrangements for the proposed development plan, and to identify the expected trip generation, access routes and traffic impacts of the proposal.



#### 2. EXISTING SITUATION

The Locality Plan in Figure 1 shows the overall road network providing access to and from the proposed development site on Warradale Terrace, including Coverwood Promenade (to/from the north off Gnangara Road), Queensway Road (to/from the east off Alexander Drive), Abbotswood Drive (to/from the south off Kingsway), plus Southmead Drive and Heathfield Drive (to/from the west of Mirrabooka Avenue). The existing roads and intersections in the vicinity of the proposed development site are then shown in the aerial photograph in Figure 2, while the existing situation within and immediately adjacent to the site is shown in more detail in Figure 3.

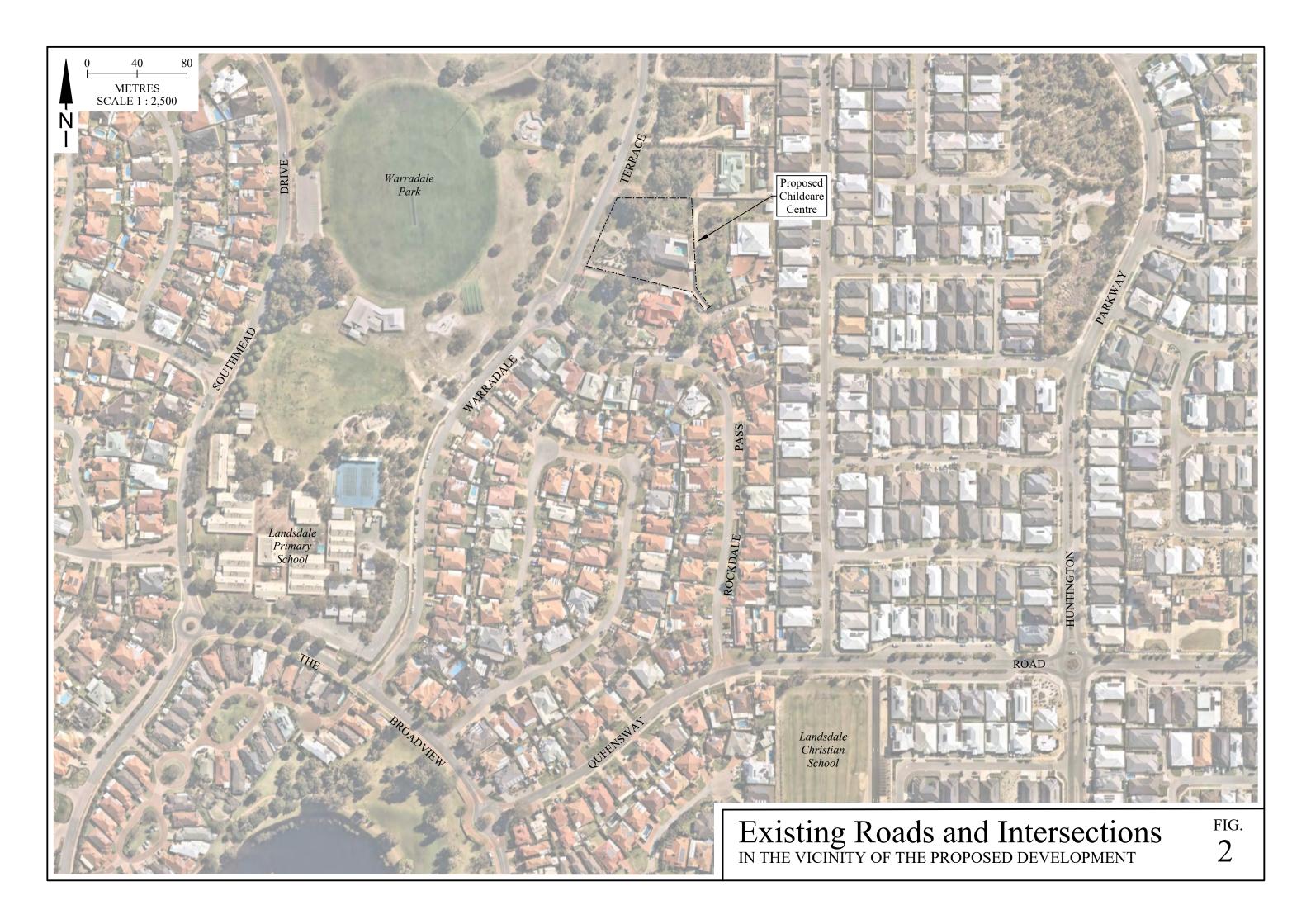
It can be seen in Figure 2 that the development site is located on the eastern side of Warradale Terrace just north of the roundabout at Warradale Terrace - Rockdale Pass, and approximately 300 metres north of Landsdale Primary School, while Figure 3 shows that the site is currently occupied by a large residential dwelling with two access driveways off Warradale Terrace plus a battleaxe driveway off Grayswood Terrace. It can also be seen in Figure 3 that there is an existing parking embayment on the western side of Warradale Terrace, immediately opposite the site, which appears to have previously been used as a Bus stop, but could now accommodate up to 6 or 7 parking spaces.

Warradale Terrace is a 2-lane undivided road with a 6.5 metre pavement width within a 19 metre road reserve. It has a speed limit of 50 kilometres per hour, and is classified as a Local Distributor road within the Main Roads WA functional road hierarchy, but would likely be classified as Neighbourhood Connector B under Liveable Neighbourhoods, with an indicative maximum traffic flow of 3,000 vehicles per day.

Rockdale Pass and Grayswood Court are both Access Roads, with speed limits also of 50 kilometres per hour, and with indicative maximum traffic flows of 1,000 vehicles per day under Liveable Neighbourhoods.

Whilst there is currently no footpath immediately in front of the site along the eastern side of Warradale Terrace, it can be seen in Figure 3 that there is a footpath available on the western side, within Warradale Park, which provides good connections to and from the north and south, including Landsdale Primary School. It can also be seen in Figure 3 that there is an existing footpath from Warradale Terrace along the northern side of Rockdale Pass to Grayswood Court, with a further link from Grayswood Court to Raeside Drive, providing good pedestrian access to and from the east.

The overall area is also well serviced by public transport, with regular bus services operating to the west of Warradale Park along Southmead Drive (to/from Mirrabooka Station and Whitfords Station), and to the east of the site along Huntington Parkway (to/from Warwick Station via Kingsway Shopping Centre).





#### 3. PROPOSED DEVLOPMENT

The proposed development site plan is shown in Figure 4, as prepared by architects Meyer Shircore. The proposal includes refurbishment of the existing residential dwelling into a purpose-built Child Care Centre with an outdoor play area, to accommodate up to 128 children with 23 staff. The attached Figure 5 then shows the proposed development plan superimposed on the aerial photo from Figure 4, identifying the proposed development in the context of the adjacent road network.

It can be seen in Figure 5 that parking for the Child Care Centre is proposed along the western edge of the site, with two access driveways off Warradale Terrace. The plan includes a total of 36 parking spaces (including 4 tandem spaces) for staff and visitors, also including 1 accessible (disabled) space near the building entrance.

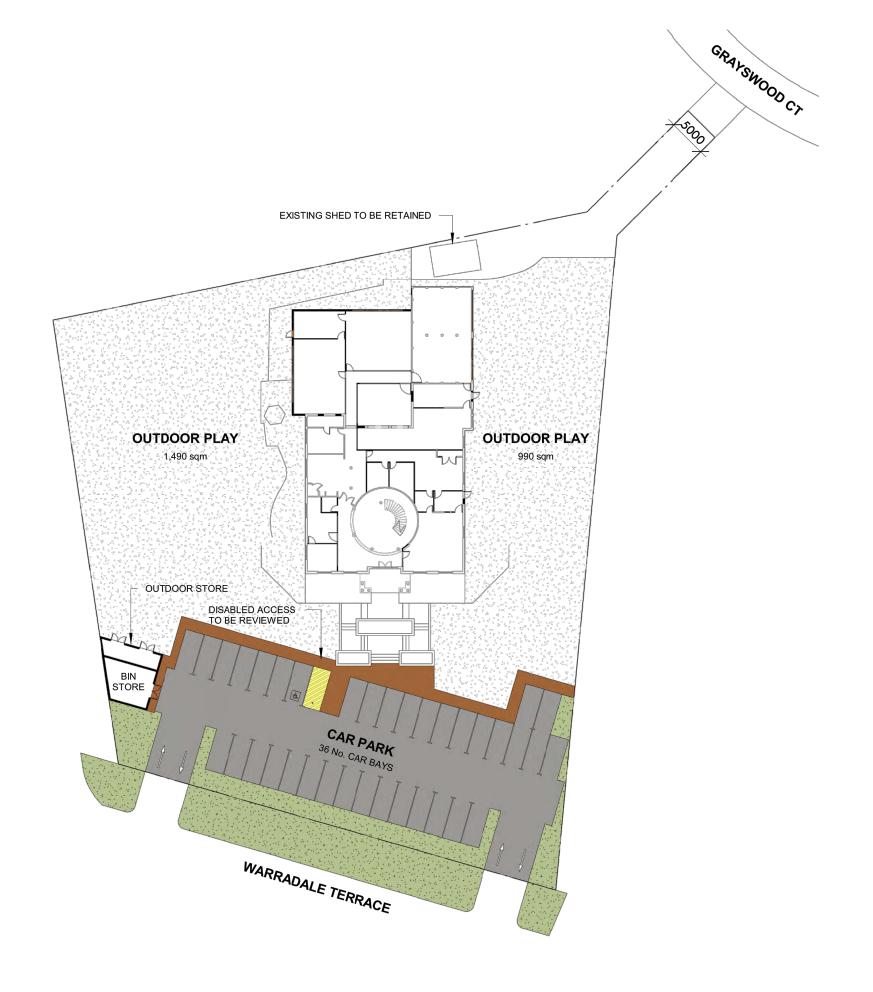
With the bin store located at the northern end of the proposed car park, rubbish collection for the Child Care Centre is proposed to occur on-site within the car park, as further discussed in Chapter 5.

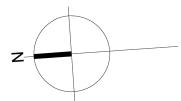
# 4. PARKING REQUIREMENTS AND ACCESS

Car parking requirements for Child Care Centres are specified in Section 5.4 under City of Wanneroo Local Planning Policy 2.3.

For Child Care Centres accommodating more than 55 children, parking is required at 1 space per employee plus 9 spaces for the first 54 children, plus 1 space per 8 children in excess of 54. With a specified 23 staff for the maximum 128 children, the proposed Child Care Centre therefore requires a total of 42 car parking spaces, resulting in a shortfall of 6 spaces for the currently proposed site plan. However, as noted above in Chapter 1, there is capacity for up to 6 or 7 vehicles to park within the onstreet parking embayment within Warradale Terrace, if required.

Figure 6 shows the swept paths for a 10-metre Rubbish Truck accessing the Bin Store within the proposed car park. The plan identifies some minor widening of the two access driveways to accommodate the required swept paths, but with no changes to the proposed parking provision.

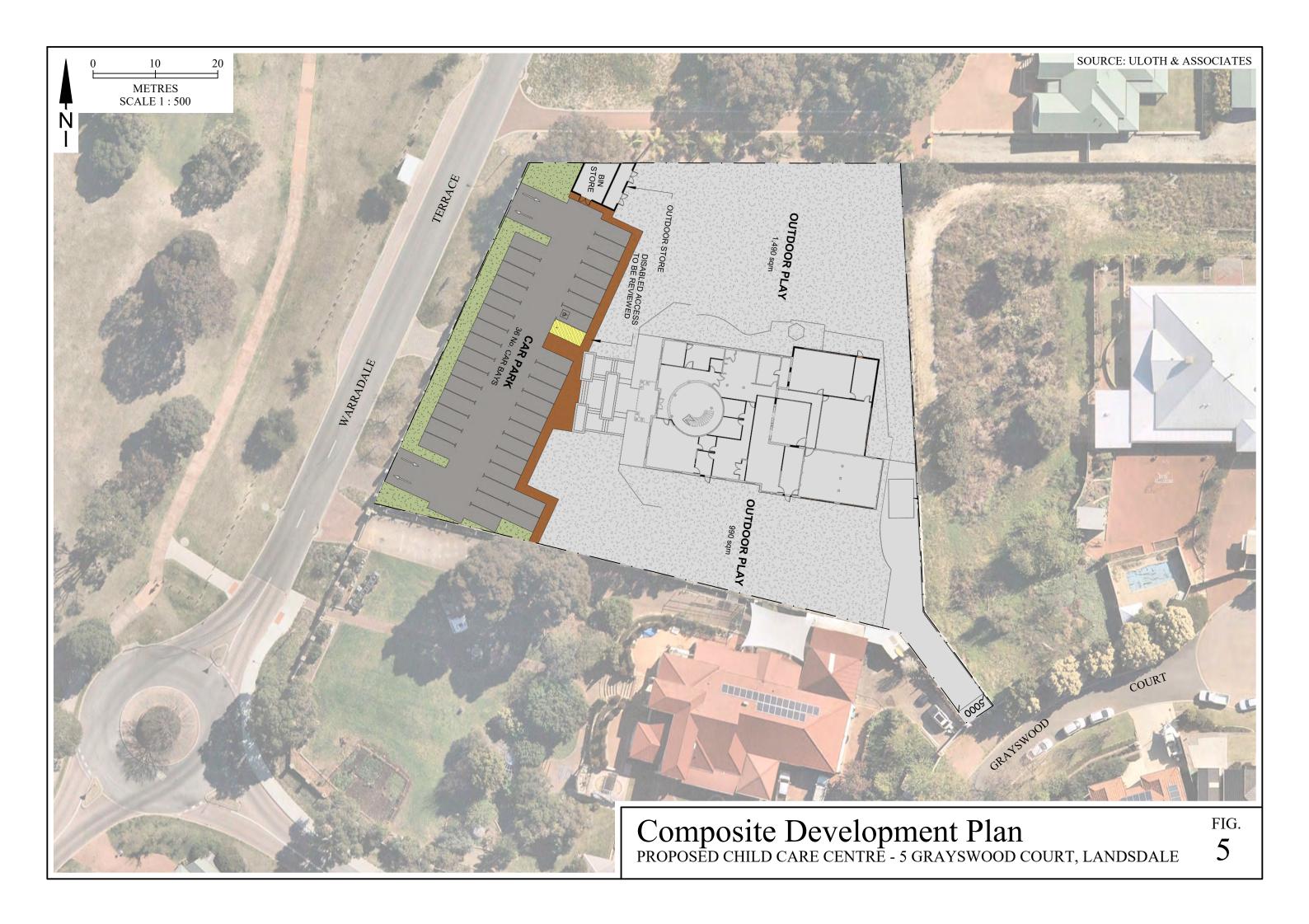


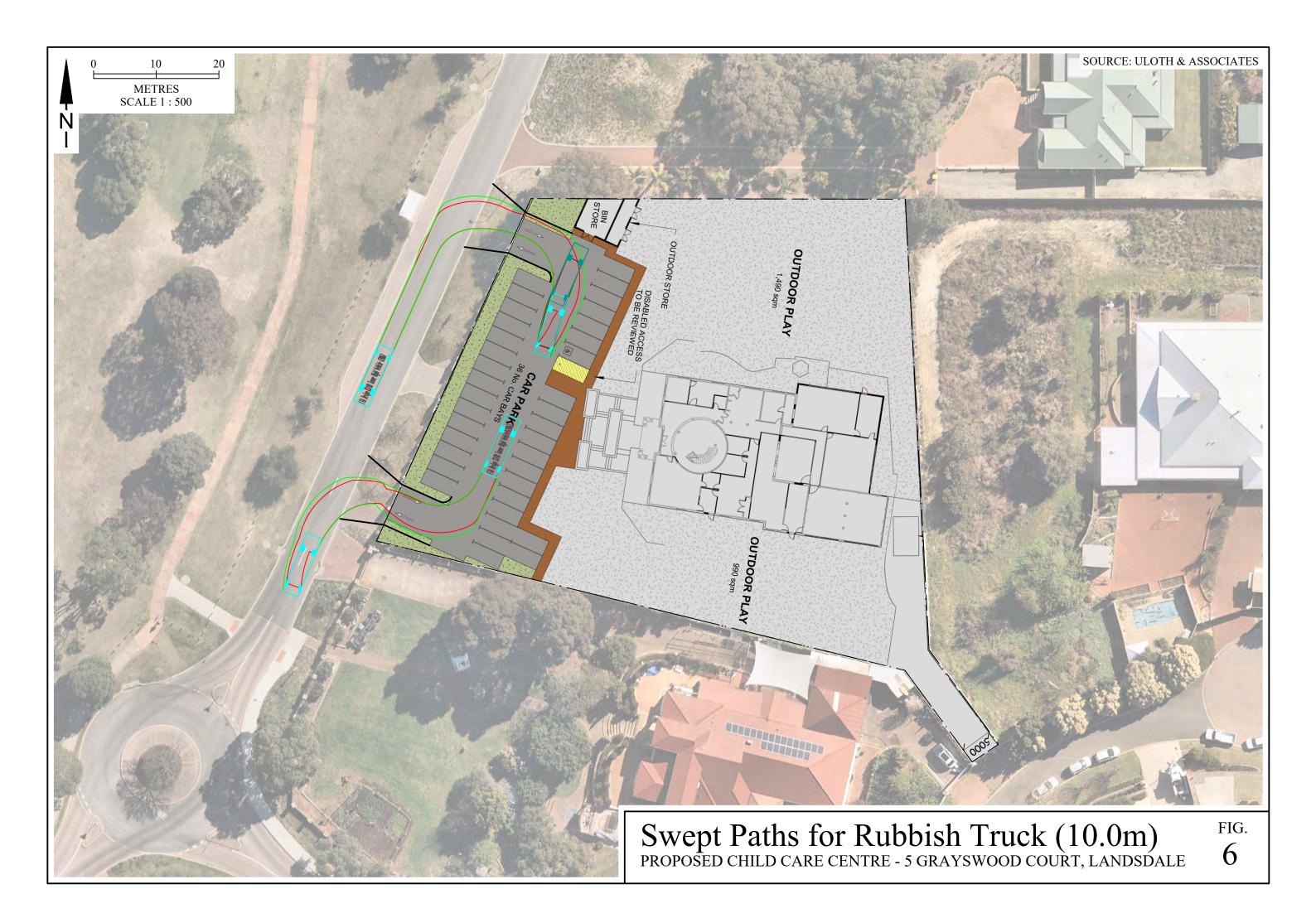


# **SITE PLAN**

SCALE: 1:500

FIG.





#### 5. TRIP GENERATION AND ACCESS ROUTES

On the basis of previous surveys and available data, it is estimated that a Child Care Centre generates a total of 3.5 vehicle trips per child per day, including 3.25 vehicle trips between the hours of 7am to 10am and 3pm to 6pm, with a maximum hourly flow of 0.7 trips per child during both the morning and evening peak hours. The proposed Child Care Centre is therefore estimated to generate a total of 448 vehicle trips per day, with a peak hour flow of 90 vehicle trips per hour during both the AM and PM peak hours.

Figure 7 shows the anticipated travel routes for vehicles accessing the proposed child care centre from the surrounding areas, noting that access to the site itself is only proposed off Warradale Terrace. However, it is also noted that traffic to/from the site can access Gnangara Road (to the north) via Warradale Terrace and Coverwood Promenade, Alexander Drive (to the east) via Rockdale Pass and Queensway Road, Kingsway (to the south) via The Broadview and Abbotswood Drive, and Mirrabooka Avenue (to the west) via The Broadview and Heathfield Drive.

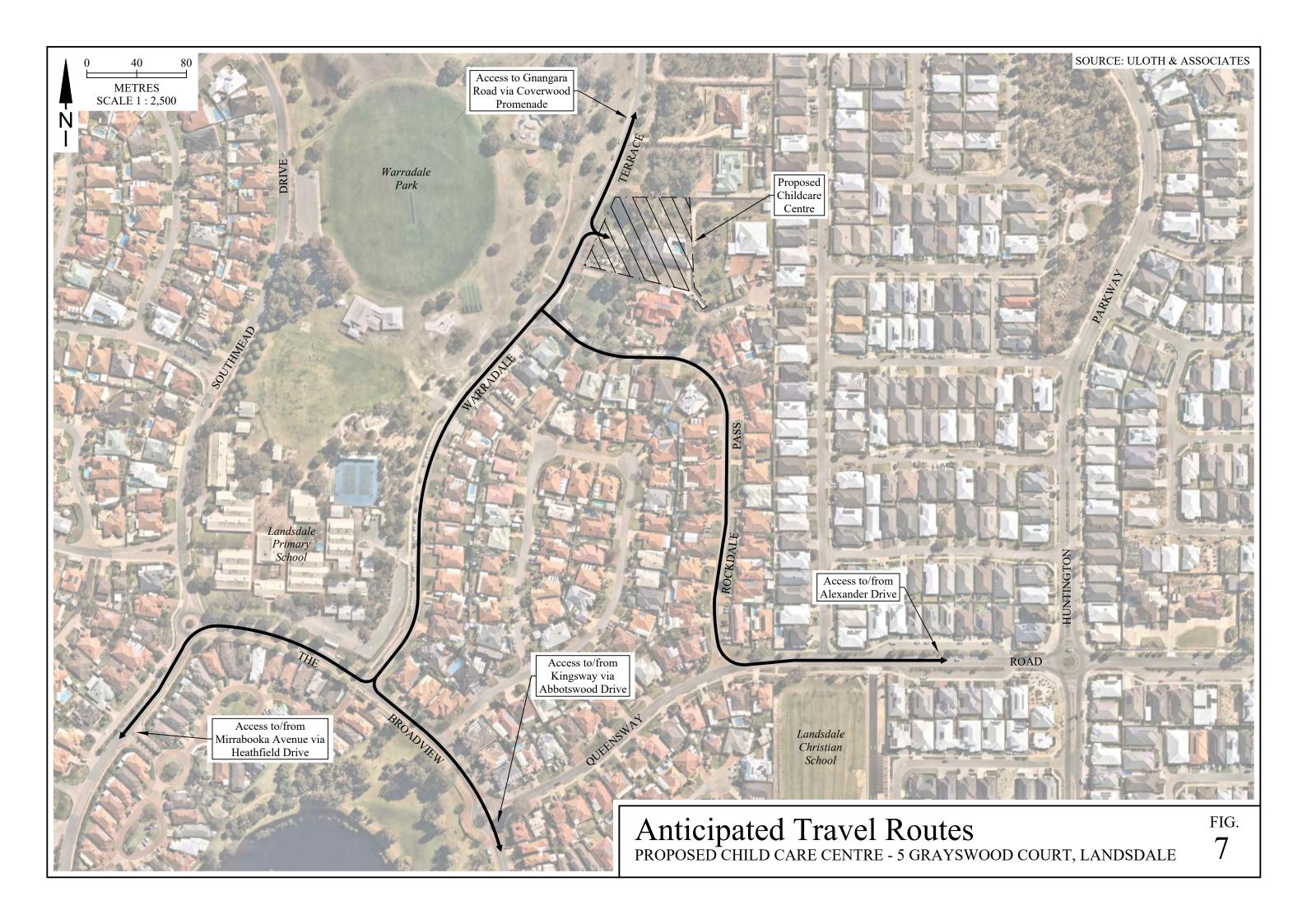
Taking into account the surrounding residential areas and adjacent road network, it is estimated that perhaps 30 percent of the total trip generation will access the site to/from the north, 20 percent to/from the west, 15 percent to/from the east, and 35 percent to/from the south. However, it is also likely that a significant proportion of the total traffic generation for the proposed Child Care Centre will be 'passing trips' that are already on the road network, travelling from the surrounding residential area to and from the adjoining regional roads; it is also expected that some trips will be linked with the pick-up and drop-off of children at the nearby Landsdale Primary School and Landsdale Christian School.

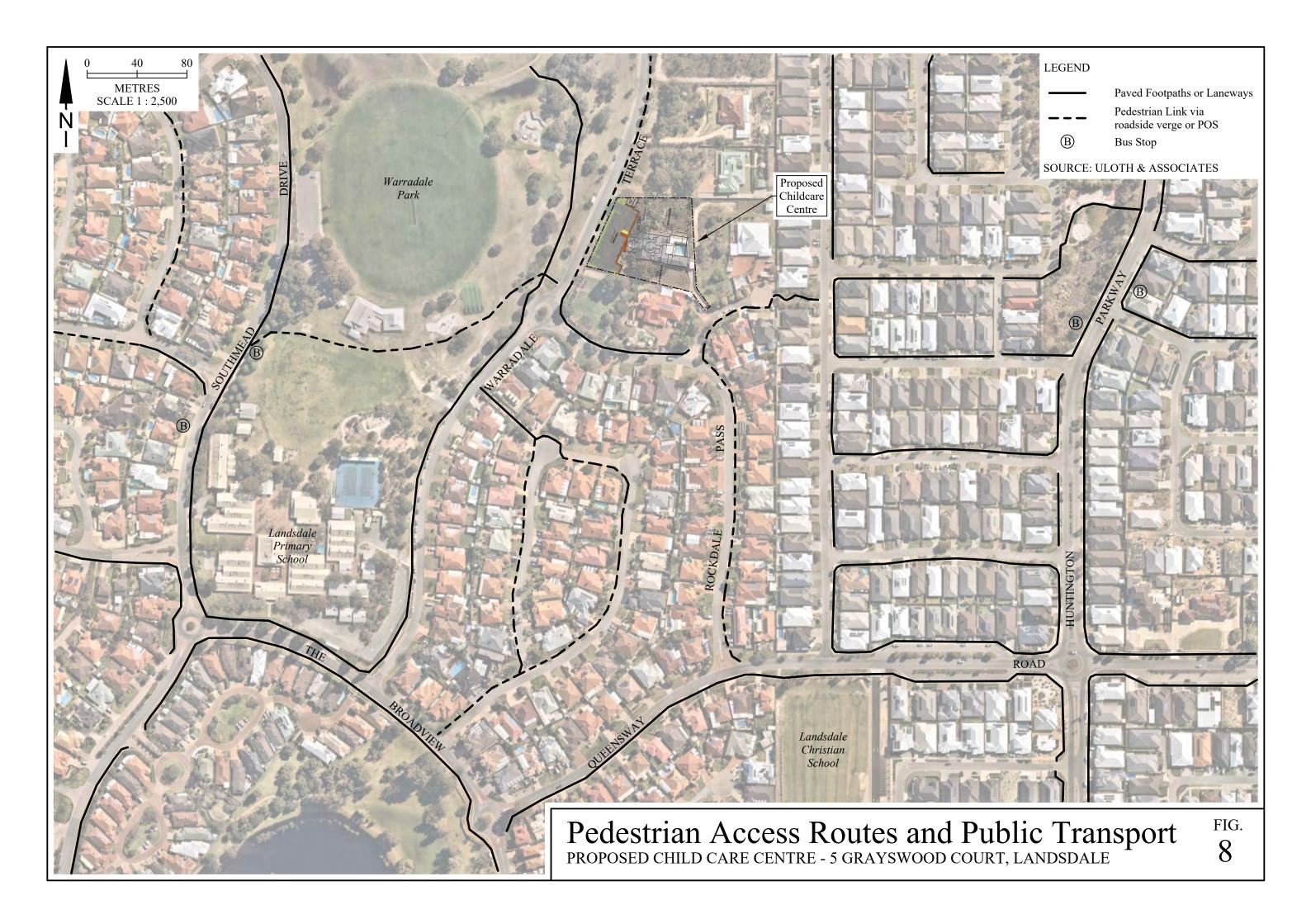
It is therefore clear that the proposed Child Care Centre will have no significant traffic impact on the existing road network.

# 6. PEDESTRIAN ROUTES AND PUBLIC TRANSPORT

Figure 8 shows the available pedestrian access routes to and from the proposed Child Care Centre from the surrounding residential areas, the 2 nearby Schools, and the Bus Stops in Southmead Drive and Huntington Parkway.

It can be seen that good connectivity is available in all directions, although some connections will require walking along the roadside verge or through public open space.





### 7. OVERALL CONCLUSIONS AND RECOMMENDATIONS

The overall conclusions and recommendations regarding the proposed development are detailed in this chapter, on the basis of the study findings and conclusions presented and discussed above in Chapters 2 to 6, as follows:

- The total car parking requirement for the proposed Child Care Centre, in accordance with Local Planning Policy 2.3, is 42 spaces. The proposed plan therefore provides an on-site shortfall of 6 spaces; however, the remaining 6 spaces can be accommodated within the existing parking embayment in front of the site on Warradale Terrace.
- In order to accommodate the proposed on-site rubbish collection, minor modifications are recommended to the proposed access driveway off Warradale Terrace, as shown in Figure 6 in Chapter 4. This also ensures good access and egress for all vehicles accessing the proposed car park.
- With a maximum additional traffic flow of 448 vehicles per day for the proposed Child Care Centre, it is expected that Warradale Terrace will remain well below its indicative maximum traffic flow of 3,000 vehicles per day (as specified under Liveable Neighbourhoods), noting that a significant number of trips are likely to be existing 'passing trips' from residents travelling to and from work and also 'linked trips' with the pick-up and drop-off of children at the nearby Landsdale Primary School and Landsdale Christian School, as discussed above in Chapter 5.
- The proposed development is therefore expected to have no significant traffic impact on the existing residential road network.
- The existing road network also provides good pedestrian access to and from the site from the surrounding residential areas, the 2 nearby Schools and the nearby Bus Stops, as shown in Figure 8 in Chapter 6.