



TRAFFIC IMPACT ASSESSMENT

PROPOSED INDUSTRIAL ESTATE (STAGE 2)

60 STAPYLTON – JACOBS WELL ROAD, STAPYLTON

LOT 51 ON SP295994

Prepared for

FRASERS PROPERTY

20 NOVEMBER 2020

PLANS AND DOCUMENTS
referred to in the REFERRAL
AGENCY RESPONSE



SARA ref:

2012-20251 SRA

Date:

19 April 2021

5.0 ROAD NETWORK IMPACT

5.1 General

Traffic modelling using SIDRA software has been carried out to determine the performance of the proposed Stapylton Jacobs Well Road / Site Access and Christensen Road / Site Access intersections under opening year (year 2023) and the projected project future (year 2030) conditions of the overall estate. In accordance with Section 3.5 and Table 4 of the Guide to Traffic Impact Assessments (2017), the assessment is required to examine impacts for the anticipated year of opening of each stage and the final stage. For the purposes of this assessment it has been assumed that the second stage of development would be completed by the year 2023, and the full development by the year 2030.

The estate access intersection with the Stapylton – Jacobs Well Road will be constructed to its ultimate layout (two through lanes in each direction plus turning lanes / traffic signal control) as part of the approved works for Stage 1. An additional access intersection of Christensen Road is proposed to be constructed to provide direct access to Stage 2.

It is noted that an assessment of impacts at the Exit 38 interchange has been carried out as part of the DA for a Preliminary Approval over the site.

5.2 Modelling of Overall Estate

Based on the analysis of the overall estate (prepared under a separate application) the signalised intersection with the Stapylton – Jacobs Well Road will improve the operation of the eastern roundabout at the Exit 38 interchange by bunching the traffic flow in the westbound direction. The operation of the Interchange is therefore expected to improve as a result of the first stage of development.

The traffic impact of the overall estate has been carried out as part of a separate application. The results of the analysis indicate that the following works are required upon the completion of Stage 2:

- Construction of new intersection with Christensen Road;
- Construction of the second approach lane on the northbound off ramp (western side of Exit 38 interchange);
- Construction of second departure lane on the Stapylton – Jacobs Well Road leg of the eastern roundabout at the Exit 38 interchange.

A concept design of the proposed Stage 2 works are in Shown in Figures 5.1 – 5.3.

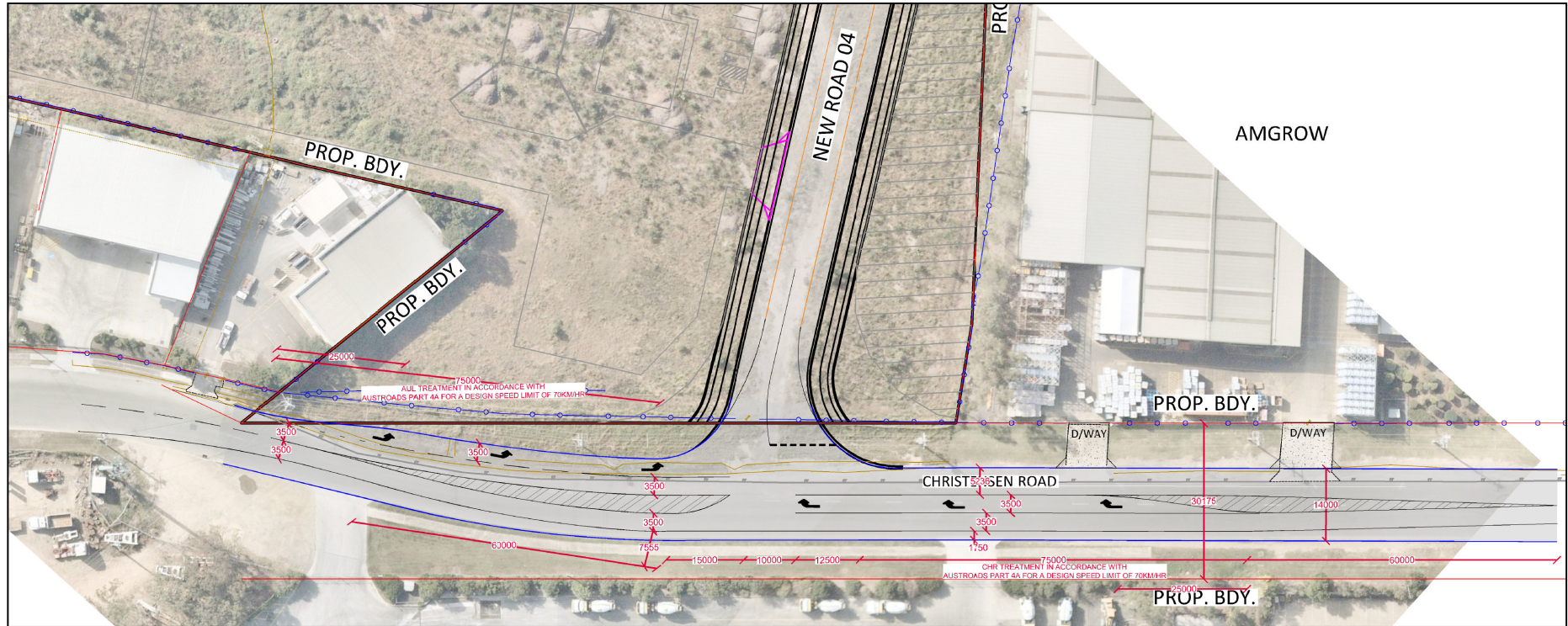


FIGURE 5.1 – CONCEPT DESIGN OF THE PROPOSED SITE ACCESS / CHRISTENSEN ROAD INTERSECTION



FIGURE 5.3 – CONCEPT DESIGN OF THE PROPOSED INTERCHANGE IMPROVEMENTS (DETAIL)

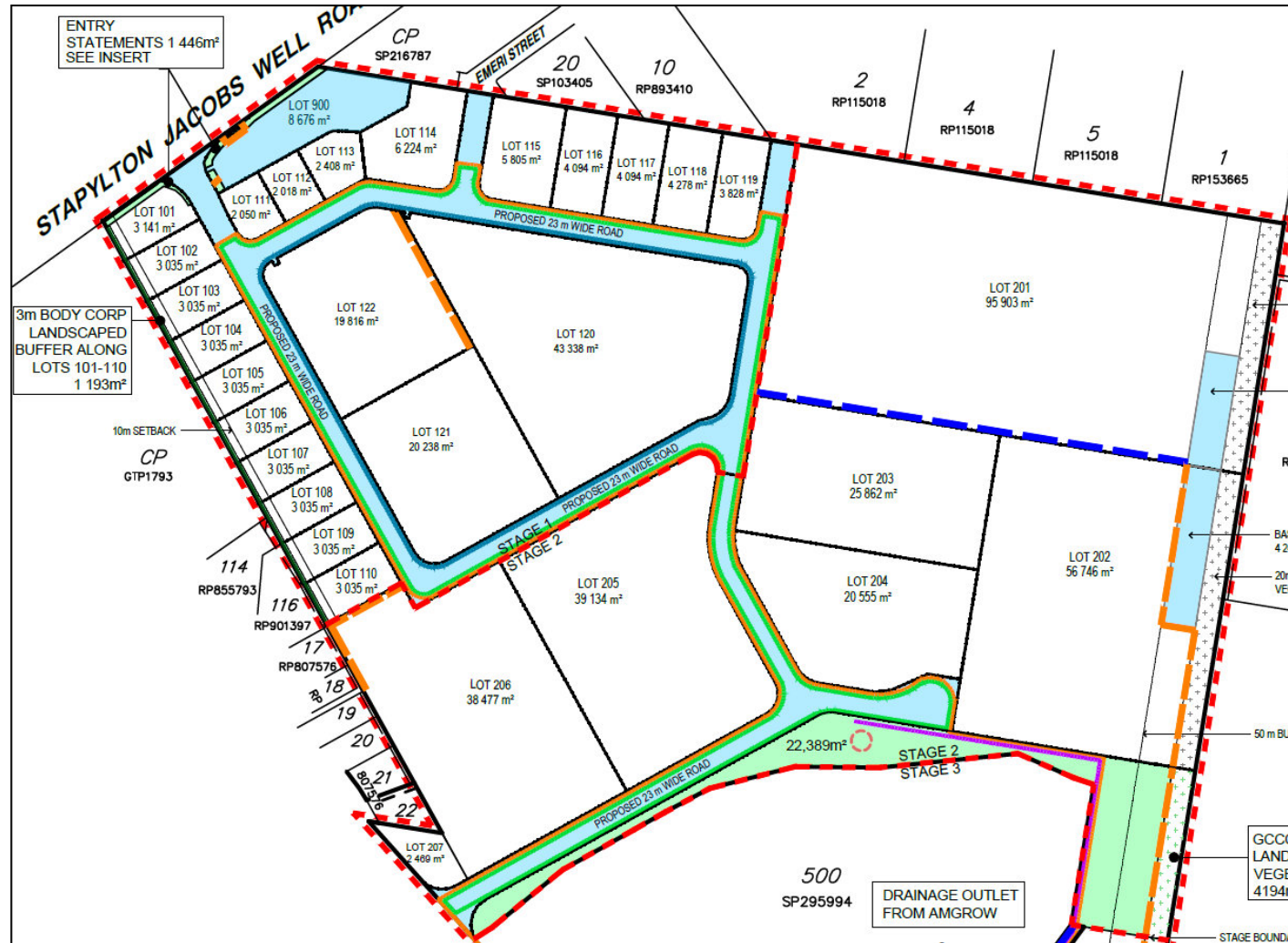


FIGURE 6.2 – PROPOSED ROAD LAYOUT