



High Street Revitalisation Options, Parking Analysis

Prepared for City of Melton

August, 2022

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Contents

1.	Parking Supply - Existing conditions	4
1.1	Existing conditions	7
1.2	Methodology	8
2.	Parking changes - Scenario 1.....	9
3.	Parking changes – Scenario 2.....	14
4.	Parking changes – Scenario 3.....	19

List of figures

Figure 1	Share of car parking ownership.....	5
Figure 2	Ownership of parking supply in Melton Town Centre.....	6
Figure 3	Section map of High Street.....	7
Figure 4	Cross section of 271-273 High Street, Melton	8
Figure 5	Scenario 1 cross-section.....	10
Figure 6	Scenario 1 Sections A and B.....	11
Figure 7	Scenario 1 Sections C and D	12
Figure 8	Scenario 1 Sections E and F	13
Figure 9	Scenario 2 cross-section.....	15
Figure 10	Scenario 2 Sections A and B.....	16
Figure 11	Scenario 2 Sections C and D.....	17
Figure 12	Scenario 2 Sections E and F	18
Figure 13	Scenario 3 cross-section.....	20
Figure 14	Scenario 3 Sections A and B.....	21
Figure 15	Scenario 3 Sections C and D	22
Figure 16	Scenario 3 Sections E and F	23

List of tables

Table 1	Scenario 1 carparking changes.....	10
Table 2	Scenario 2 carparking changes	15
Table 3	Scenario 3 carparking changes.....	20

1. Parking Supply - Existing conditions



This report provides an analysis of car parking under current conditions on High Street, Melton, as well as the changes to parking supply based on three scenarios that were previously presented to Council.

A total of **2,992** parking lots were counted for the survey. Council manages and owns 62.4% of the parking lots counted in the Town Centre, with Private ownership the largest for off-street parking (shown in Figure 1). Off-street parking makes up 52.5% of the total parking offered in the area, however, there are more offerings (unmarked) within the residential area.

Most of Council’s off-street carparks are located on the eastern and southern sides of Melton Town Centre (see Figure 2).

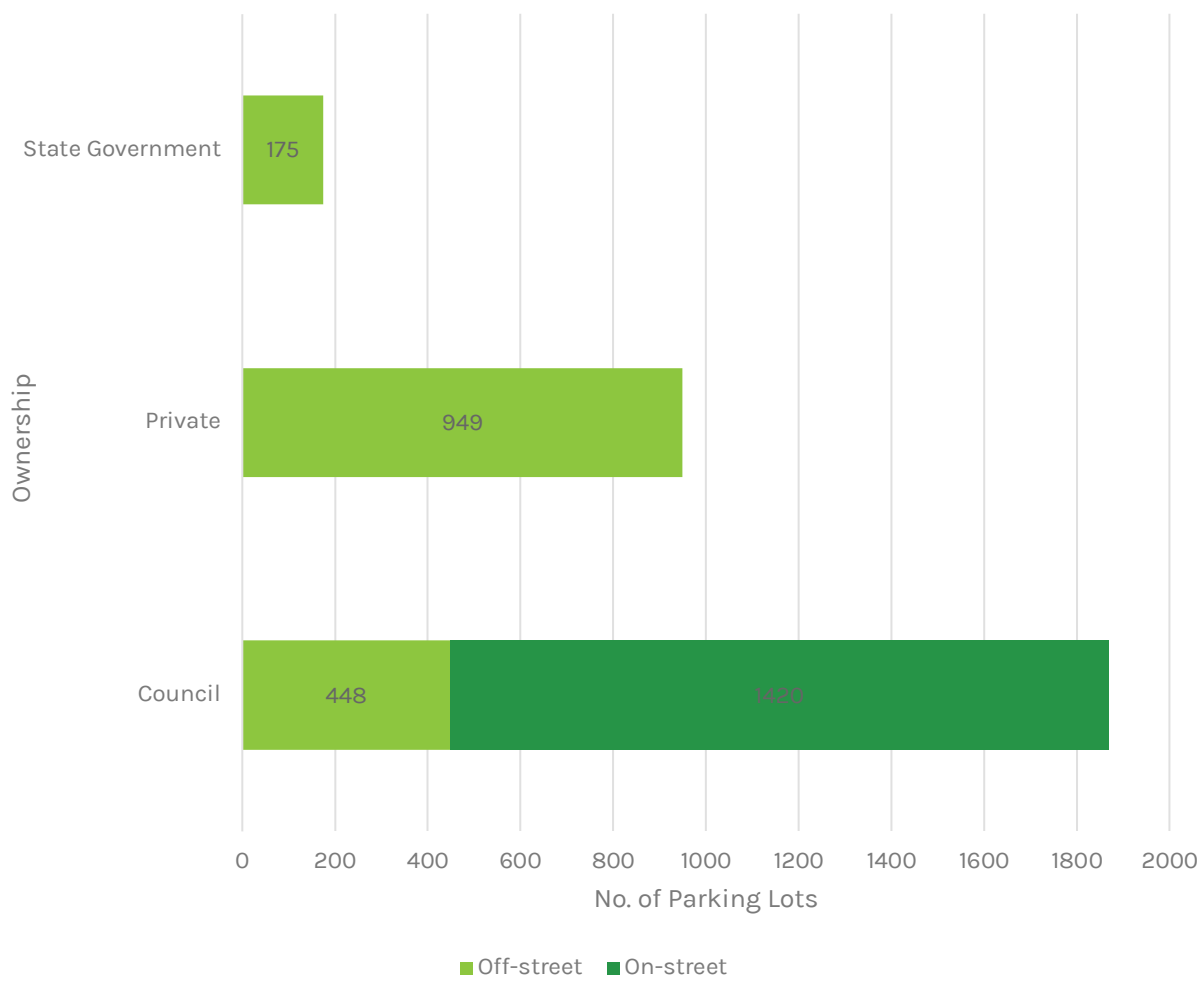


Figure 1 Share of car parking ownership



Figure 2 Ownership of parking supply in Melton Town Centre

Source: Nearmap image from Tue Oct 1, 2019 2:53PM

Based on the cross-sections shown in Figure 5, Figure 9 and Figure 13, graphical representation for how the street space would be reallocated was created for each of the three scenarios. The parking assessment was further divided into sections (as shown in Figure 3). Within these six sections, there an estimated total of **1,798** carparking lots, of which 59% is owned by council.



Figure 3 Section map of High Street

1.1 Existing conditions

The current street space allocation is visualised in the cross section for 271-273 High Street, Melton shown in Figure 4. Using aerial imagery from Nearmap, the length of the spaces were approximated to be:

- 23.2m for roads
- 20m for parking
- 8m for pedestrian footpaths
- 7.8m for green space



Figure 4 Cross section of 271-273 High Street, Melton

1.2 Methodology

A pre-Covid period was chosen for conducting the parking inventory to better reflect the assumed occupancy. Nearmap imagery from Tue Oct 1, 2019 2:53PM was used to conduct this assessment. The aerial image used in graphics depicting the different scenarios in the following sections, was taken on March 16, 2020. This image was selected for its clarity and resolution as it bore no implication to the proposed parking changes. When calculating the actual parking changes, Nearmap aerial imagery across the past 3 years were used alongside Google Street View to better determine the count of current parking spaces. Where changes to parking allocation were proposed, the count of parking was approximated from existing parking spaces in Melton.

The approximation was calculated visually by measuring length of the space from the aerial imagery, then dividing that by an assumed specification. For example, for parallel parking, a measured length of 20m would yield approximately 3 parking spaces of 6m each. This was then compared against a polygon drawing of an existing parallel parking space nearby. Where there was a conflict or extra space, a more conservative figure was applied to the count. This two-step process was repeated for each of the new parking spaces. This method purely representational and does not account for easements and existing infrastructure unidentifiable from aerial imagery.



Figure 5 Scenario 1 cross-section

Scenario 1 provides the best outcome for urban vibrancy and sustainable mobility. Bicycle lanes are buffered, and more green space is provided in the streetscape. Additional tree cover provides shade for pedestrians, cyclists and over car parking lots. This provides greater comfort while lowering the urban heat island (UHI) effect. A total of 12 carparking lots are estimated to be loss in this scenario. Graphical representations for this scenario can be seen in Figure 6, Figure 7 and Figure 8.

Table 1 Scenario 1 carparking changes

	Section A	Section B	Section C	Section D	Section E	Section F	Total
Existing Parking Lots	17	38	50	73	73	56	307
Scenario 1	34	48	53	52	58	50	295

There is a loss of 3.9% carparking spaces along High Street in Scenario 1, and a 0.7% loss when compared against the total parking for the six sections.

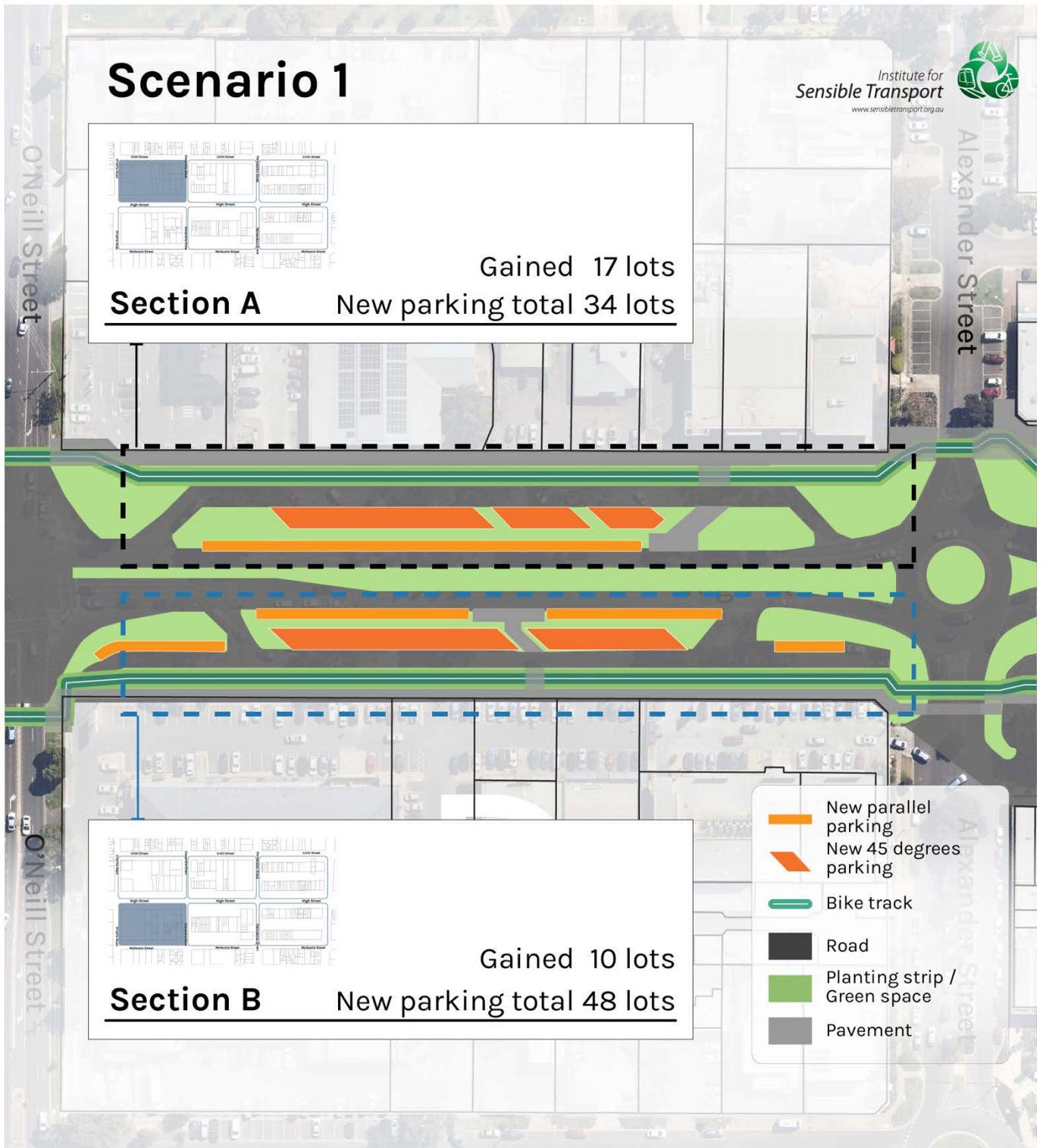


Figure 6 Scenario 1 Sections A and B

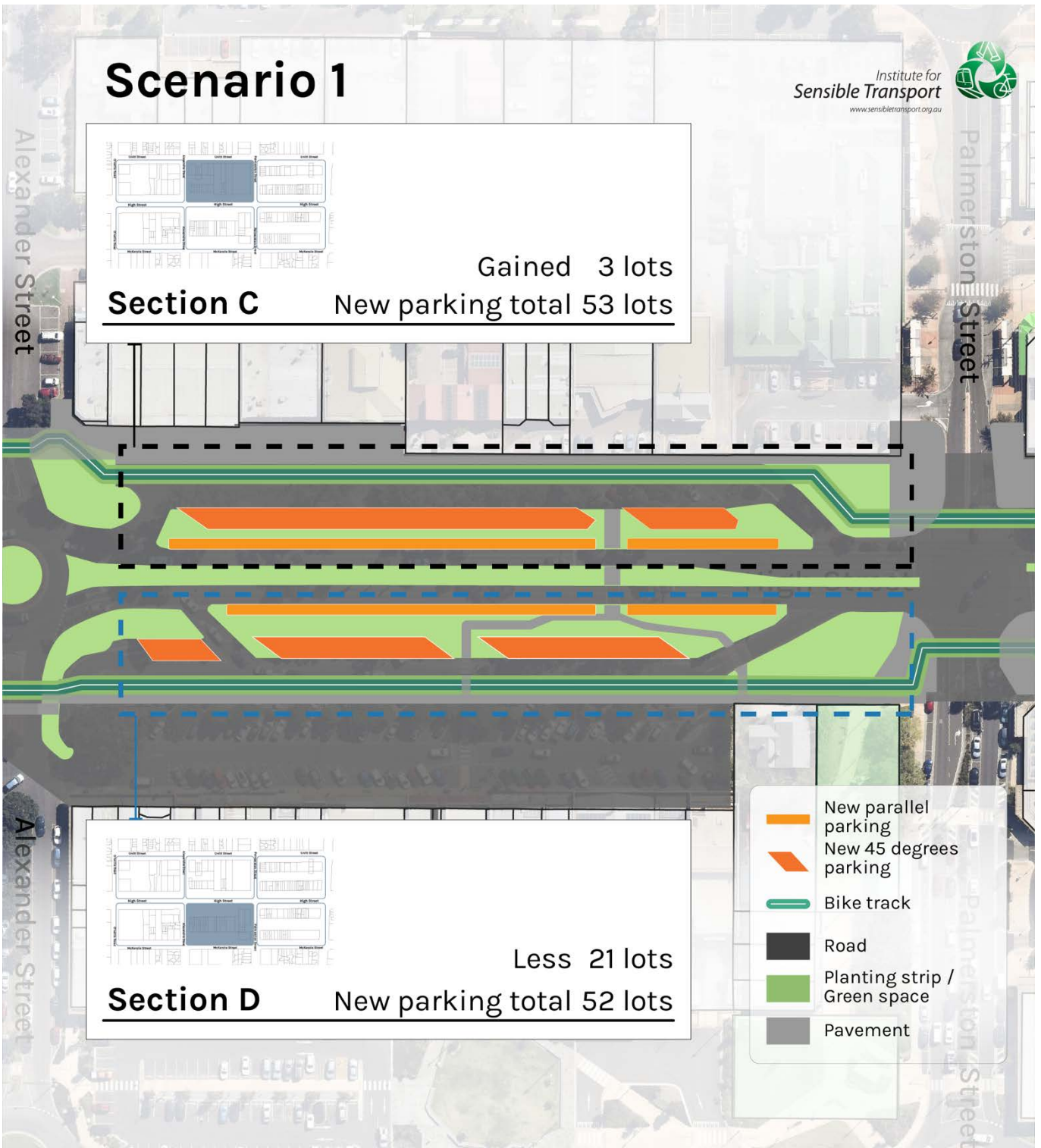


Figure 7 Scenario 1 Sections C and D

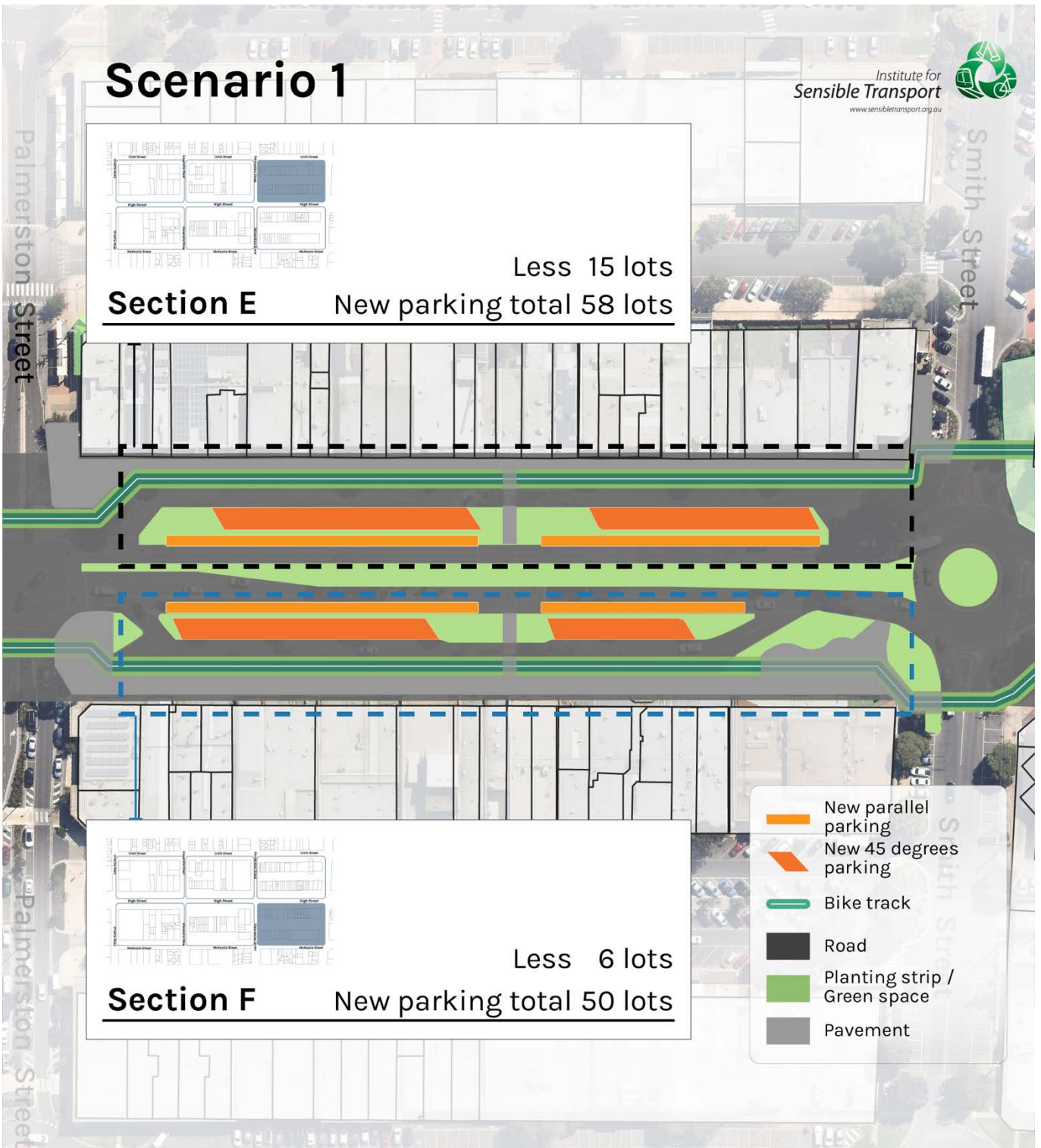


Figure 8 Scenario 1 Sections E and F

3. Parking changes – Scenario 2



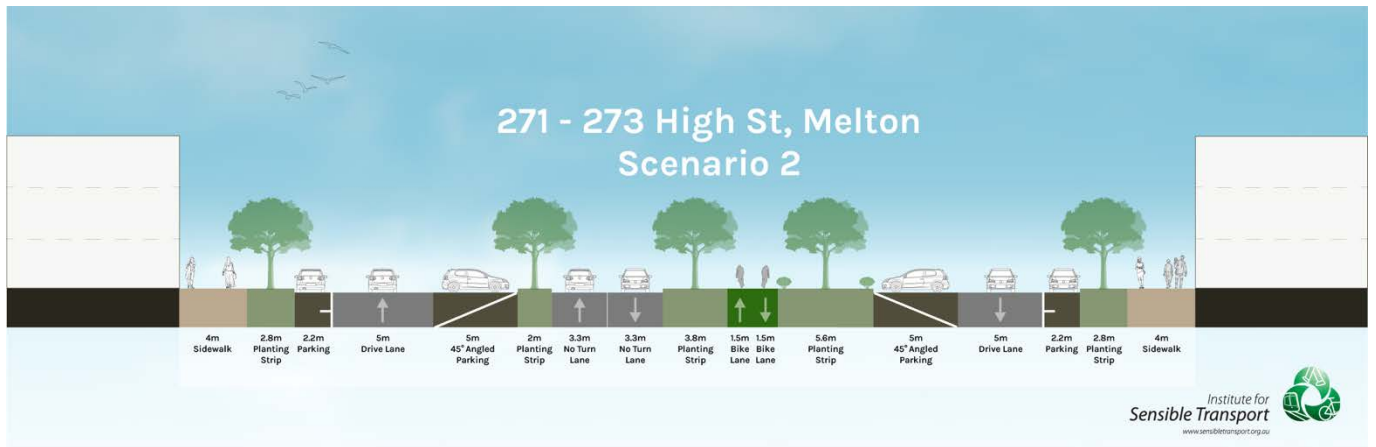


Figure 9 Scenario 2 cross-section

Scenario 2 provides bicycle lanes sheltered from road traffic and independent of pedestrian footpaths, with generous green space allotted in the centre median. Additional tree cover provides shade for pedestrians, cyclists and over car parking lots, in effect providing greater comfort while lowering the UHI effect. A total of 51 carparking lots are estimated to be loss in this scenario. Graphical representations for this scenario can be seen in Figure 10, Figure 11 and Figure 12.

Table 2 Scenario 2 carparking changes

	Section A	Section B	Section C	Section D	Section E	Section F	Total
Existing Parking Lots	17	38	50	73	73	56	307
Scenario 2	17	51	33	54	57	44	256

There is a loss of 16.6% carparking spaces along High Street in Scenario 2, and a 2.8% loss when compared against the total parking for the six sections.

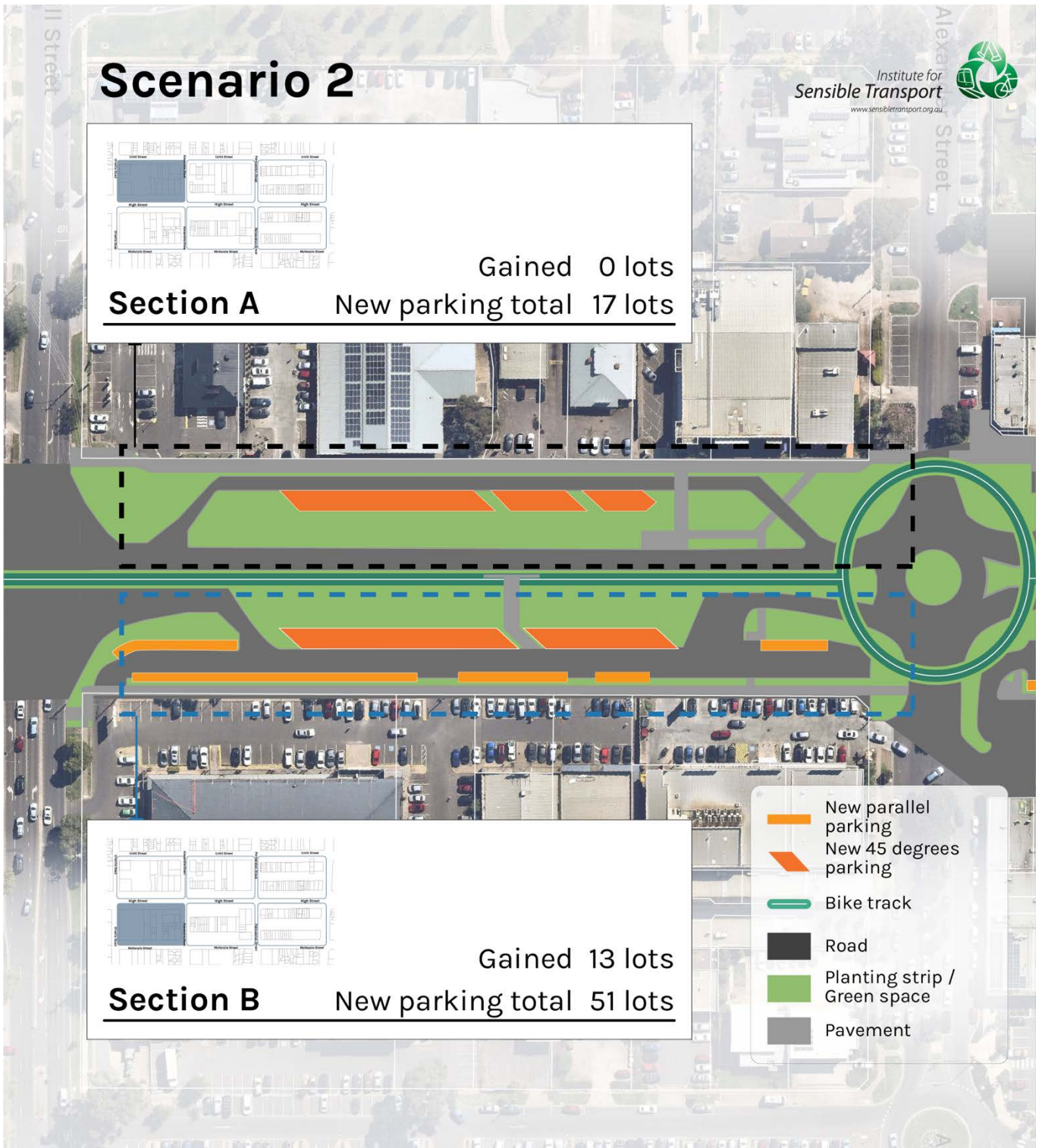


Figure 10 Scenario 2 Sections A and B

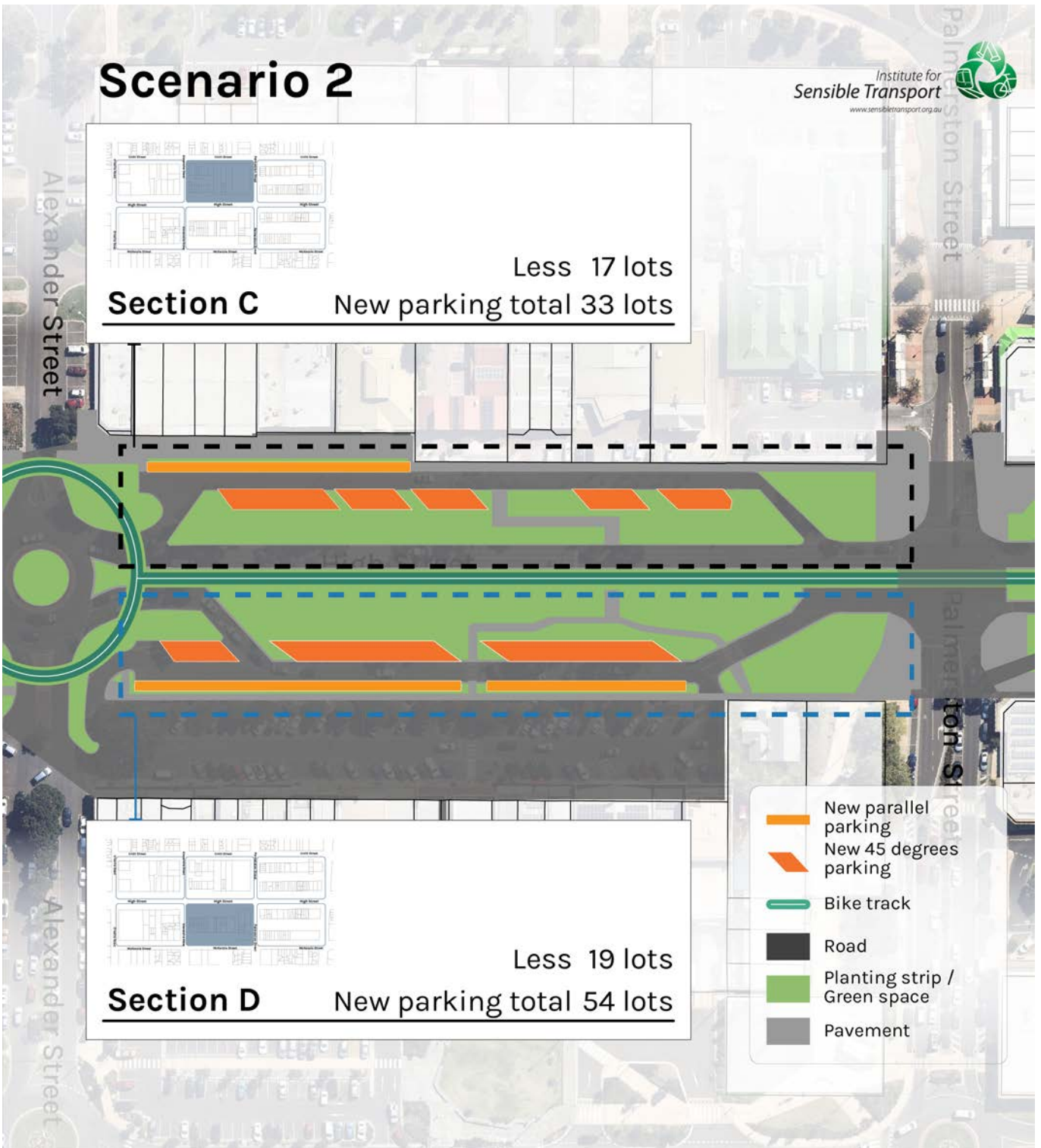


Figure 11 Scenario 2 Sections C and D

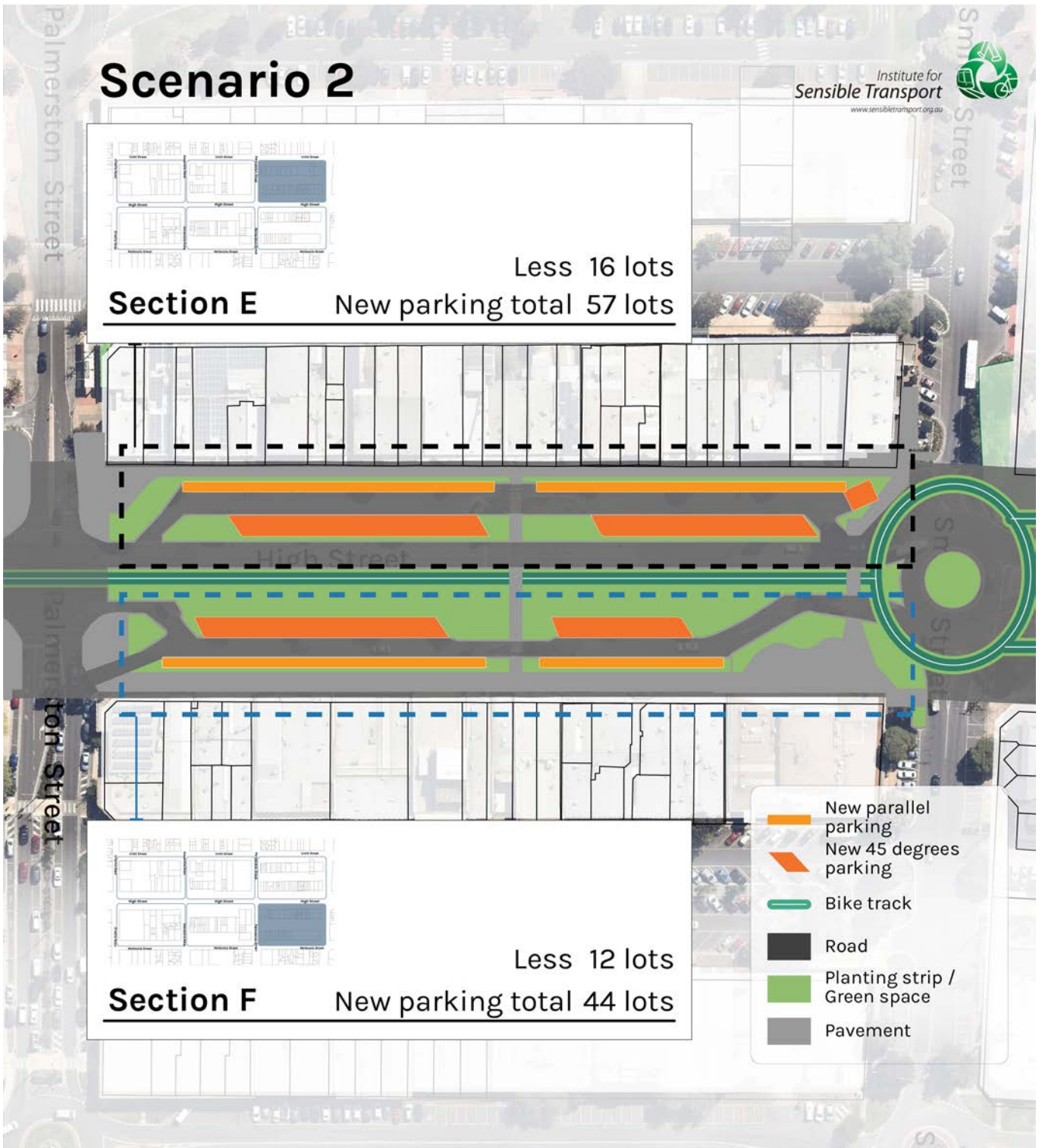


Figure 12 Scenario 2 Sections E and F

4. Parking changes – Scenario 3





Figure 13 Scenario 3 cross-section

Scenario 3 has one-way bicycle lanes alongside the driving lane and independent of pedestrian footpaths. The centre median has generous green space with the additional tree cover all around providing shade for pedestrians, cyclists and over car parking lots. In effect, this provides greater comfort while lowering the UHI effect. With carparking, there is no change between Scenarios 2 and 3 as the only change occurs in the centre space where green space and bike lanes are consolidated in Scenario 2 or split in Scenario 3. Therefore, the estimated reduction in carparking remains at 51 carparking in this scenario. Graphical representations for this scenario can be seen in Figure 14, Figure 15 and Figure 16.

Table 3 Scenario 3 carparking changes

	Section A	Section B	Section C	Section D	Section E	Section F	Total
Existing Parking Lots	17	38	50	73	73	56	307
Scenario 3	17	51	33	54	57	44	256

There is a loss of 16.6% carparking spaces along High Street in Scenario 3, and a 2.8% loss when compared against the total parking for the six sections.

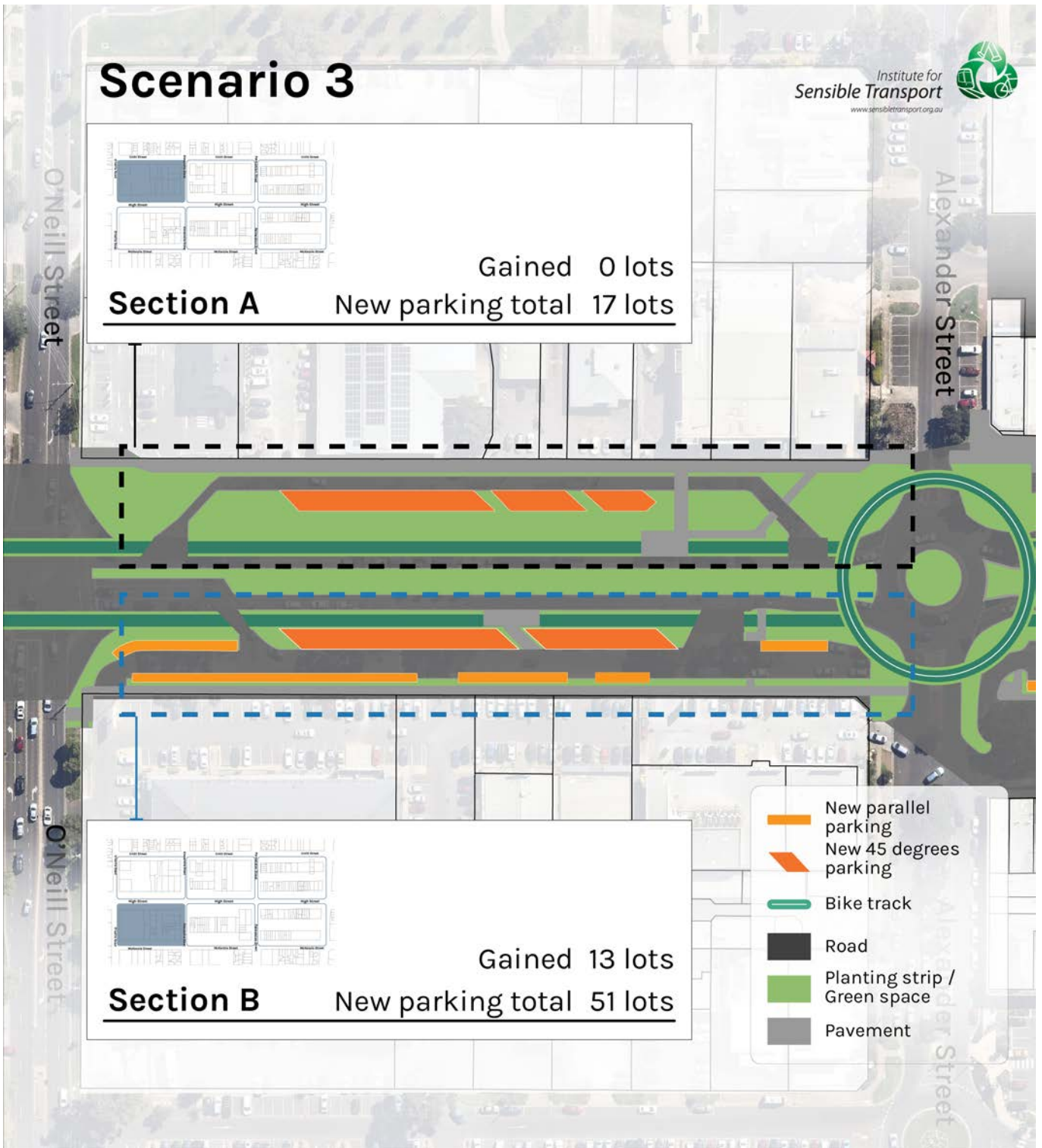


Figure 14 Scenario 3 Sections A and B

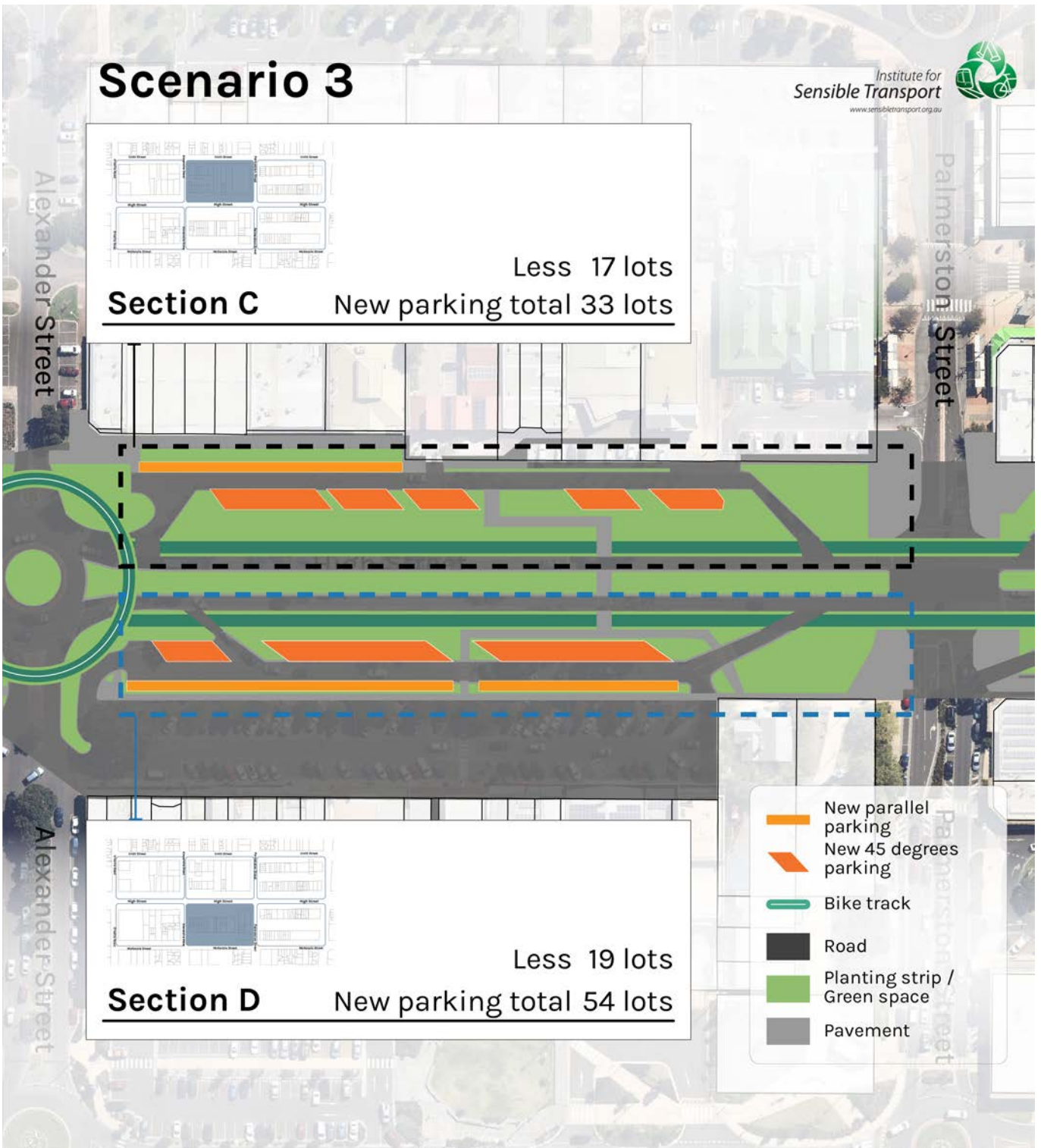


Figure 15 Scenario 3 Sections C and D

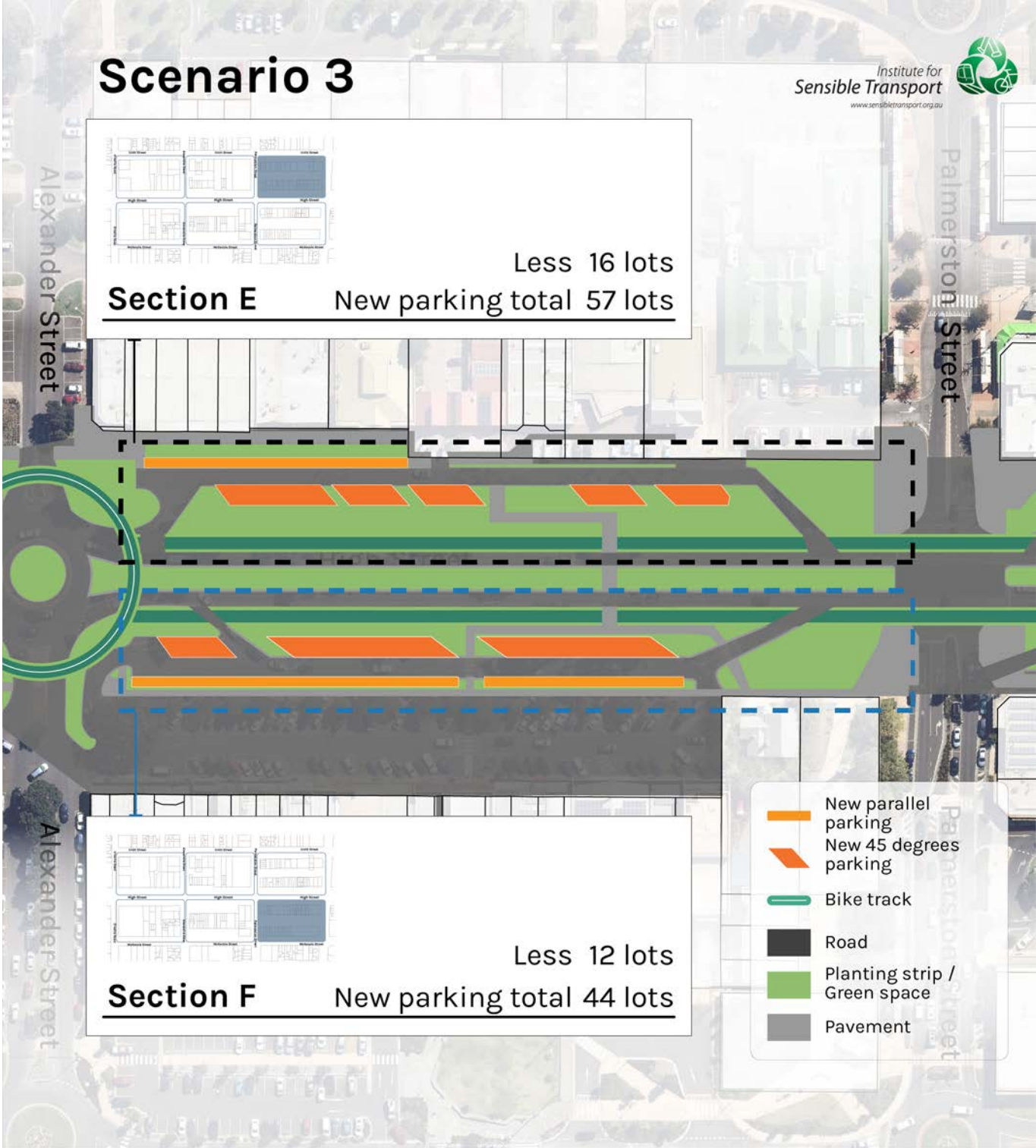


Figure 16 Scenario 3 Sections E and F

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