Western Bay of Plenty District Council

Operations & Monitoring Committee

Te Puke Town Centre Parking Review

Purpose

As per the minutes of OP9 Operations & Monitoring Committee, held on 15 February 2018, staff were requested to monitor the parking situation within the Te Puke town centre over 2018 and report back the Committee during the first quarter of 2019 (this report).

Recommendation

1. ***THAT the Senior Policy Analyst Built Environment and Urban Design's report dated 13/02/2019 and titled Te Puke Town Centre Parking Review be received.***
2. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***
3. ***THAT it be noted that:***
   - ***There are currently 520 public carparks in the Te Puke town centre, compared to 488 public carparks that existed prior to the town centre upgrade project.***
   - ***There are sufficient carparks within the Te Puke town centre.***
4. ***THAT it be recommended to the Policy Committee that the 10 carparks in Commerce Lane have a P120 parking restriction.***

Andries Cloete
Senior Policy Analyst Built Environment and Urban Design

Approved

Gary Allis
Deputy Chief Executive

1. Background and Purpose of the Study

In 2016 some of the shop owners in the Te Puke town centre expressed their concerns about the availability of public carparks in the town centre, especially along Jellicoe Street. This was mainly as a result of works undertaken along Jellicoe Street in 2016. A report on the parking situation in the Te Puke town centre was submitted to the Operations and Monitoring Committee in April 2017. This was followed by various discussions between Council staff, elected members and some of the business owners. On 15 February 2018 the Operations Committee and Monitoring Committee resolved that the parking situation be monitored throughout 2018 (especially during the kiwifruit season and the period before Christmas) and that staff report their findings back to the Committee during the first quarter of 2019 (this report).

The study area is shown in Photo 1.

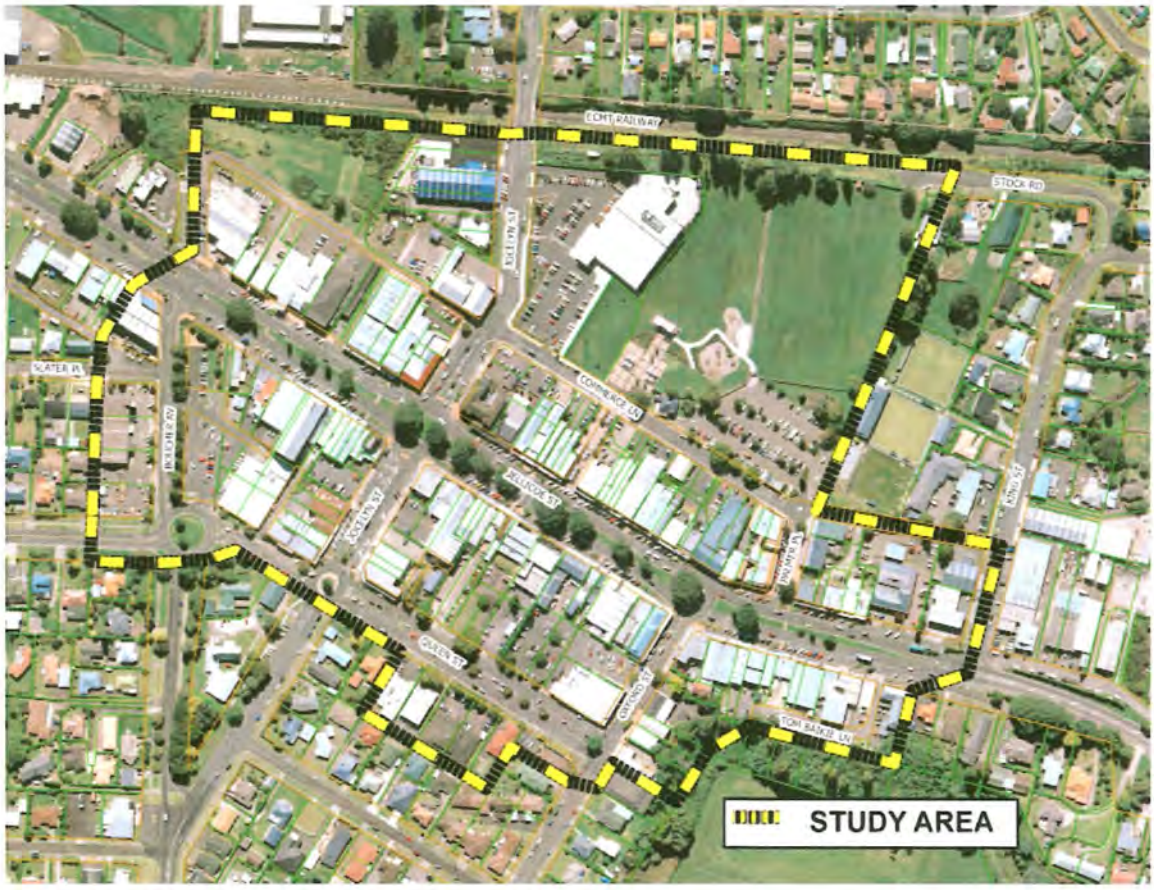


Photo 1: Study area

A detailed discussion regarding on-site parking was included in the April 2017 report and is therefore not repeated in this report.

2. Parking Supply: On-street parking and public carparks

The numbers of public carparks and mobility carparks within the study area are included in Table 1. This is the combination of carparks on the street and those in public carparks e.g. the Commerce Lane carpark.

Table 1: Number of carparks (on-street and within public carparks) in the study area.

Areas available for public parking	Number of parks		Mobility carparks	
	As on 25/01/19	Prior June 2016	As on 25/01/19	Prior June 2016
On-street parking in the study area				
Jellicoe St – Whakatane bound				
Boucher Ave/Jocelyn St	24	26	2	1
Jocelyn St/Main pedestrian crossing	6	7	0	0
Main pedestrian crossing/Palmer Pl	20	26	2	2
Palmer Pl/King St	13	14	0	0
Jellicoe St – Tauranga bound				
Tom Baikie Ln/Oxford St	19	21	1	0
Oxford St/Main pedestrian crossing	19	19	2	2
Main pedestrian crossing/Jocelyn St	6	7	0	0
Boucher Ave/Jocelyn St	26	28	2	1
Queen Street - East bound				
Boucher Ave/Jocelyn St	7	7	1	1
Jocelyn St/Oxford St	41	41	1	1
Queen Street - West bound				
Oxford St/Jocelyn St	38	38	1	1
Jocelyn St/Boucher Ave	5	5	0	0
Commerce Lane	10	10	0	0
Jocelyn St				
Queen St/Jellicoe St	18	18	2	2
Jellicoe St/Commerce Ln	11	11	0	0
Oxford St (demarcated)	16	16	0	0
Palmer Place	11	11	1	1
On-street parking sub-total	**290**	**305**	**15**	**12**
Parking in Public carparks				
Boucher Ave	28	28	0	0
Commerce Lane	143	143	0	0
New World**	30	0	0	0
86 Jellicoe Street***	12	0	2	0
Public carpark sub-total	**213**	**171**	**2**	**0**
Total number of public carparks	**503**	**476**	**17**	**12**

Notes:

** The public carparks in the New World carpark demarcated in 2018

*** Council has finalised a lease with the owner of 86 Jellicoe Street (the property directly east of the Heritage walkway) to develop 12 carparks and 2 mobility carparks. These carparks should be operational by the end of February 2019

Summary of Parking Supply

	On-street carparks	Public carparks	Mobility carparks	**TOTAL**
Pre Jellicoe Street upgrade	305	171	12	**488**
Current	290	213	17	**520**

There are currently 27 more public carparks and five more mobility carparks in the study area than prior to the Jellicoe Street upgrades of 2016/17.

3. Parking Uptake

3.1 Methodology

The parking uptake was surveyed on the dates included in Table 2 and the actions undertaken for each site visit are included in Table 3. As requested by some business owners, surveys have been undertaken during kiwifruit season and pre–Christmas period as it is the busiest time of the year.

Table 2: Site visit dates

Date	Time of the year
Tuesday 17 April 2019	School holiday
Thursday 17 May 2018	Kiwifruit season
Friday 1 June 2018	Kiwifruit season
Wednesday 12 December 2018	Pre-Christmas
Thursday 20 December 2018	Pre-Christmas

Table 3: Actions undertaken during each site visit

Time	Action
8 - 8.30am	Count freedom campers in Commerce Lane carpark
9-10am	Count vacant carparks and mark all cars parked in "all day"* carparks.
11am-12pm	Count vacant carparks
2-3pm	Count vacant carparks
3-3.30pm	Count vacant carparks. Count all cars parked in the "all-day"* carparks from 10am to 3.30pm.

Note:

* *"All day carparks" are carparks with no time restriction and include 143 carparks in Commerce Lane carpark, 11 carparks along Commerce Lane and 14 carparks in Boucher Ave carpark.*

3.2 Uptake of carparks

Table 4, which follows, illustrates the average number of carparks and mobility carparks available in the study area within three time slots. A complete set of the survey results is attached. **Attachment A**

Table 4: Average number of vacant carparks in the study area during site visits

Areas available for public parking	Average vacant carparks/Total number of carparks					
	9-10am		11am-12pm		2-3pm	
	All day	Time restricted	All day	Time restricted	All day	Time restricted
On-street parking in the study area						
Jellicoe St – Whakatane bound						
Boucher Ave/Jocelyn St	-	14/24		7/24		13/24
Jocelyn St/Main pedestrian crossing	-	2/6		1/6		0/6
Main pedestrian crossing/Palmer Pl	-	7/20		4/20		5/20
Palmer Pl/King St	-	5/13		5/13		6/13
Jellicoe St – Tauranga bound						
Tom Baikie Ln/Oxford St	-	5/19		5/19		6/19
Oxford St/Main pedestrian crossing	-	2/19		3/19		2/19
Main pedestrian crossing/Jocelyn St	-	0/6		0/6		1/6
Boucher Ave/Jocelyn St	-	11/26		8/26		11/26
Queen Street – East bound						
Boucher Ave/Jocelyn St	-	4/7		2/7		5/7
Jocelyn St/Oxford	-	19/41		16/41		21/41
Queen Street - West bound						
Oxford/Jocelyn St	-	17/38		15/38		13/38
Jocelyn St/Boucher Ave	-	3/5		2/5		3/5
Commerce Lane	1/10	-	1/10		2/10	
Jocelyn St						
Queen St/Jellicoe St	-	4/18		3/18		3/18
Jellicoe St/Commerce Ln	-	7/11		6/11		5/11
Oxford St (demarcated)	-	5/16		6/16		6/16
Palmer Place	-	2/11		3/11		2/11
Parking in Public carparks						
Boucher Ave	4/14	7/14	1/14	7/14	2/14	9/14
Commerce Lane	62/143	-	50/143		54/143	
New World**		12/30		10/30		13/30

a) Jellicoe Street

Vacant carparks between Jocelyn Street and Oxford Street (on both sides of Jellicoe Street) are limited throughout the day because of their central location and convenience.

The portion of Jellicoe Street between Jocelyn Street and Boucher Avenue has an average vacancy of 43%. The portion of Jellicoe Street to the east of Oxford Street has an average vacancy of 34%.

b) Other Streets Within the Study Area

Most of the carparks along the portion of Jocelyn Street between Queen Street and Jellicoe Street, are utilised from the early morning. These carparks are very convenient for people residing on the southern side of Jellicoe Street and are also used by customers of Te Puke Box Gym.

In contrast, the Jocelyn Street carparks on the northern side of Jellicoe Street have a 50% vacancy.

Queen Street is underutilised with a high vacancy rate of 43%.

Commerce Lane has 10 all-day carparks. At least 6 of the 10 carparks are utilised by employees and as a result are occupied for most of the day.

Due to its proximity to the retail area, the Heritage Walkway and Jubilee Park, the use of the Commerce Lane carparks for all day parking seems to be inappropriate. The carparks would be better used for time restricted parking and accordingly it is recommended they become P120s.

Palmer Place is well utilised (with a 20% vacancy rate) even though it's only a one-way street and only accessible from Jellicoe Street.

c) Public carparks

The all-day carparks in Boucher Ave carpark are well utilised. As per discussions with some of the occupants, these carparks are popular because they are in the shade during the afternoon. In contrast, the 14 time restricted carparks (which have no shade) are more than 50% vacant.

The Commerce Lane carpark has a high vacancy rate (40%). Between 8 and 23 of these carparks are utilised by self-contained vehicles, e.g. campervans and motorhomes. Some of the self-contained vehicles may leave after 9am, while an average of nine will utilise the carpark throughout the day.

The 30 public carparks in the New World carpark are also under-utilised with an average vacancy of 38%.

Council has finalised a lease with the owner of 86 Jellicoe Street (the property directly east of the Heritage Walkway) to provide an additional 12 carparks and two mobility parks. These carparks will become available to the public in February 2019.

d) Mobility carparks

There are 15 mobility carparks within the study area. These carparks are well spread and strategically located throughout the town centre, e.g. outside doctor consulting rooms, library and other medical facilities. As shown in Table 4, the mobility carparks are under-utilised. However, it is important to keep in mind that, within the Te Puke town centre, the mobility parking holders are the only people that pays for a parking permit.

4. Conclusion

The surveys have shown that the only time restricted carparks that have a vacancy of less than 10%, are the carparks along Jellicoe Street, between Jocelyn and Oxford Streets. The reason being that they are in the middle of the town centre and therefore very convenient. Most of the other time restricted carparks have a vacancy above 30%.

Research have shown that most successful town centres have:

- A parking vacancy of less than 5%.
- The majority carparks on the outer fringe of the town centre and within a 5 minute walk to the middle of the town centre.
- A quality urban environment that encourage people to spend more time within it than anticipated.

Professor Roelof Uytenbogaardt, a world renowned urban planner and architect used to say the following: "The question should not be whether there are enough parking for town centre customers? We should rather focus on what should be done to keep the carparks occupied" (1998-1999, personal communication).

I am also of the opinion that the newly leased parking area along the Heritage Walkway should only be temporary and should not replace the vision the community had for the urban space connecting Jellicoe Street with Jubilee Park.

ATTACHMENT A

Te Puke Parking Survey - 17 April 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	13/24	-	1/2	-	-	11/24	-	2/2	-	-	15/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	1/6	-	-	-	-	1/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	2/15	0/3	2/2	-	-	7/15	0/3	2/2	-	-	0/15	0/3	2/2
Palmer Pl - King St	-	-	4/13	-	-	-	-	8/13	-	-	-	-	9/15	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	02/19	-	1/1	-	-	7/19	-	1/1	-	-	6/19	-	1/1
Oxford St - main pedestrian crossing	-	-	1/15	0/3	2/2	-	-	2/15	1/3	1/2	-	-	3/15	0/3	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	1/6	-	-
Jocelyn St - Boucher Ave	-	3/5	8/14	0/7	2/2	-	0/5	7/14	1/7	0/2	-	2/5	7/14	1/7	2/2
Boucher Ave carpark	0	1/14	-	-	-	3/14	5/14	-	-	-	2/14	4/14	-	-	-
											-				
Jocelyn St															
Jellicoe - Queen St	-	5/17	-	1/1	2/2	-	1/17	-	1/1	1/2	-	3/17	-	1/1	2/2
Jellicoe - Commerce Ln	-	-	9/10	-	-	-	-	7/10	-	-	-		3/10	-	-
Oxford St	-	-	5/16	-	-	-	-	7/16	-	-	-	-	12/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	2/7	-	-	1/1	-	2/7	-	-	1/1	-	6/7	-	-	1/1
Jocelyn St - Oxford St	-	21/43	-	-	1/1	-	16/43	-	-	1/1	-	22/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	21/38	-	-	1/1	-	18/38	-	-	1/1	-	17/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	2/5	-	-	-	-	3/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	1/11	-	-	-	-	1/11	-	-	-	-	2/11	-	-	-	-
Commerce Carpark	45/142	-	-	-	-	69/142	-	-	-	-	63/142	-	-	-	-
New World carpark	-	4/30	-	-	-	-	4/30	-	-	-	-	8/30	-	-	-
Palmer Pl	-	-	1/11	-	0/1	-	-	2/11	-	1/1	-	-	2/11	-	1/1

Te Puke Parking Survey - 17 May 2018

Demarketed Parking Areas	Vacant car parks in area between 9 - 10am					Vacant car parks in area between 11am -12pm					Vacant car parks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	15/24	-	2/2	-	-	5/24	-	2/2	-	-	18/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	2/6	-	-	-	-	1/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	8/17	1/3	2/2	-	-	3/17	0/3	1/2	-	-	4/17	2/3	2/2
Palmer Pl - King St	-	-	0/13	-	-	-	-	5/13	-	-	-	-	6/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	01/19	-	1/1	-	-	6/19	-	1/1	-	-	5/19	-	1/1
Oxford St - main pedestrian crossing	-	-	3/15	0/3	2/2	-	-	0/15	1/3	1/2	-	-	0/15	0/3	0/2
Main pedestrian crossing - Jocelyn St	-	-	1/6	-	-	-	-	2/6	-	-	-	-	2/6	-	-
Jocelyn St - Boucher Ave	-	3/5	6/14	2/7	2/2	-	0/5	10/14	0/7	0/2	-	0/5	5/14	0/7	2/2
Boucher Ave carpark	4/14	7/14	-	-	-	4/14	6/14	-	-	-	5/14	6/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	3/17	-	1/1	2/2	-	1/17	-	0/1	2/2	-	2/17	-	1/1	1/2
Jellicoe - Commerce Ln	-	-	9/10	-	-	-	-	7/10	-	-	-	-	3/10	-	-
Oxford St	-	-	5/16	-	-	-	-	7/16	-	-	-	-	7/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	4/7	-	-	1/1	-	3/7	-	-	0/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	22/43	-	-	1/1	-	19/43	-	-	1/1	-	9/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	19/38	-	-	1/1	-	18/38	-	-	1/1	-	13/38	-	-	1/1
Jocelyn St - Boucher Ave	-	4/5	-	-	-	-	2/5	-	-	-	-	2/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	1/11	-	-	-	-	2/11	-	-	-	-	2/11	-	-	-	-
Commerce Carpark	62/142	-	-	-	-	41/142	-	-	-	-	52/142	-	-	-	-
New World carpark	-	12/30	-	-	-	-	11/30	-	-	-	-	10/30	-	-	-
Palmer Pl	-	-	4/11	-	1/1	-	-	2/11	-	1/1	-	-	3/11	-	1/1

Te Puke Parking Survey - 1 June 2018

Demarketed Parking Areas	Vacant car parks in area between 9 - 10am					Vacant car parks in area between 11am -12pm					Vacant car parks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	17/24	-	2/2	-	-	16/24	-	2/2	-	-	18/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	0/6	-	-	-	-	1/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	7/17	0/3	2/2	-	-	9/17	0/3	2/2	-	-	5/17	3/3	2/2
Palmer Pl - King St	-	-	8/13	-	-	-	-	6/13	-	-	-	-	8/13	-	-
Jellicoe St (Tauranga bound)															
Tom Balkie Ln - Oxford St	-	-	8/19	-	1/1	-	-	0/19	-	1/1	-	-	5/19	-	1/1
Oxford St - main pedestrian crossing	-	-	4/15	2/4	1/2	-	-	4/15	1/3	0/2	-	-	2/15	0/3	2/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	2/5	10/14	5/7	2/2	-	1/5	9/14	0/7	1/2	-	3/5	11/14	2/7	2/2
Boucher Ave carpark	1/14	12/14	-	-	-	0/14	12/14	-	-	-	3/14	11/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	5/17	-	1/1	1/2	-	4/17	-	1/1	2/2	-	5/17	-	0/1	2/2
Jellicoe - Commerce Ln	-	-	3/10	1/1	-	-	-	9/10	0/1	-	-	-	5/10	1/1	-
Oxford St	-	-	6/16	-	-	-	-	5/16	-	-	-	-	2/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	3/7	-	-	1/1	-	3/7	-	-	1/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	19/43	-	-	1/1	-	20/43	-	-	1/1	-	22/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	19/38	-	-	1/1	-	19/38	-	-	0/1	-	15/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	2/5	-	-	-	-	4/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	3/11	-	-	-	-	1/11	-	-	-	-	4/11	-	-	-	-
Commerce Carpark	65/142	-	-	-	-	64/142	-	-	-	-	59/142	-	-	-	-
New World carpark	-	12/30	-	-	-	-	11/30	-	-	-	-	12/30	-	-	-
Palmer Pl	-	-	2/11	-	0/1	-	-	3/11	-	1/1	-	-	3/11	-	0/1

Te Puke Parking Survey -12th December 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	13/24	-	2/2	-	-	2/24	-	2/2	-	-	10/24	-	1/2
Jocelyn St - main pedestrian crossing	-	-	3/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	11/17	0/3	2/2	-	-	3/17	1/3	0/2	-	-	2/17	2/3	1/2
Palmer Pl - King St	-	-	10/13	-	-	-	-	3/13	-	-	-	-	1/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	4/19	-	1/1	-	-	3/19	-	1/1	-	-	8/19	-	1/1
Oxford St - main pedestrian crossing	-	-	2/15	0/4	0/2	-	-	4/15	0/4	1/2	-	-	3/15	0/4	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	0/5	5/14	0/7	2/2	-	0/5	7/14	4/7	1/2	-	4/5	9/14	4/7	1/2
Boucher Ave carpark	1/14	13/14	-	-	-	1/14	7/14	-	-	-	0/14	10/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	4/17	-	0/1	2/2	-	3/17	-	1/1	2/2	-	1/17	-	0/1	1/2
Jellicoe - Commerce Ln	-	-	7/10	1/1	-	-	-	6/10	1/1	-	-	-	6/10	1/1	-
Oxford St	-	-	4/16	-	-	-	-	3/16	-	-	-	-	5/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	7/7	-	-	1/1	-	1/7	-	-	1/1	-	6/7	-	-	1/1
Jocelyn St - Oxford St	-	16/43	-	-	0/1	-	12/43	-	-	1/1	-	20/43	-	-	1/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	15/38	-	-	1/1	-	8/38	-	-	1/1	-	10/38	-	-	1/1
Jocelyn St - Boucher Ave	-	5/5	-	-	-	-	2/5	-	-	-	-	2/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	2/11	-	-	-	-	2/11	-	-	-	-	4/11	-	-	-	-
Commerce Carpark	46/142	-	-	-	1/1	41/142	-	-	-	1/1	64/142	-	-	-	-
New World carpark	-	17/30	-	-	-	-	14/30	-	-	-	-	20/30	-	-	-
Palmer Pl	-	-	4/11	-	1/1	-	-	5/11	-	1/1	-	-	3/11	-	1/1

Te Puke Parking Survey - 20th December 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	11/24	-	2/2	-	-	0/24	-	2/2	-	-	3/24	-	0/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	3/17	2/3	1/2	-	-	0/17	0/3	2/2	-	-	2/17	0/3	0/2
Palmer Pl - King St	-	-	2/13	-	-	-	-	5/13	-	-	-	-	7/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	10/19	-	1/1	-	-	2/19	-	0/1	-	-	7/19	-	0/1
Oxford St - main pedestrian crossing	-	-	0/15	1/4	1/2	-	-	1/15	0/4	0/2	-	-	0/15	0/4	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	4/5	4/14	2/7	2/2	-	1/5	0/14	0/7	0/2	-	3/5	3/14	0/7	2/2
Boucher Ave carpark	0/14	0/14	-	-	-	1/14	10/14	-	-	-	0/14	12/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	0/17	-	1/1	1/2	-	2/17	-	0/1	0/2	-	2/17	-	1/1	2/2
Jellicoe - Commerce Ln	-	-	/10	1/1	-	-	-	1/10	1/1	-	-	-	3/10	1/1	-
Oxford St	-	-	/16	-	-	-	-	7/16	-	-	-	-	7/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	3/7	-	-	1/1	-	3/7	-	-	1/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	18/43	-	-	0/1	-	14/43	-	-	1/1	-	12/43	-	-	1/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	12/38	-	-	1/1	-	13/38	-	-	1/1	-	11/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	3/5	-	-	-	-	3/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	0/11	-	-	-	-	1/11	-	-	-	-	1/11	-	-	-	-
Commerce Carpark	56/142	-	-	-	1/1	35/142	-	-	-	1/1	32/142	-	-	-	1/1
New World carpark	-	21/30	-	-	-	-	13/30	-	-	-	-	13/30	-	-	-
Palmer Pl	-	-	0/11	-	1/1	-	-	4/11	-	1/1	-	-	0/11	-	0/1

Western Bay of Plenty District Council
Operations & Monitoring Committee
Review of Te Puke Main Street Project

Purpose

As per the minutes of the OP9, held on 15 February 2018, staff were requested to monitor and report back on the Te Puke Main Street Project; specifically the 4 items below:

1. Landscaping and vegetation on Main Street
2. Te Puke Main Street Plaza between the Heritage Walkway and the pedestrian crossing
3. Traffic Impact Assessment
4. Parking (refer to separate report).

Note: this report is being presented to the Committee, it has not been referred to the Te Puke Community Board. The Committee could receive the report and then refer it to the Community Board for comment prior to decision making.

Recommendation

1. ***THAT the Engineering and Special Projects Manager's report dated 13 February 2019 and titled "Review of Te Puke Main Street Project" be received.***
2. ***THAT the report relates to issues that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***
3. ***THAT the committee notes that there will be replacement of vegetation at intersections to increase visibility for motorists and pedestrians.***
4. ***THAT either***
   Option 4.1 - The Te Puke Main Street Plaza remains as constructed.

   OR

   Option 4.2 - Te Puke Main Street Plaza area be reduced by 80m² with the construction of two or three additional carparks at an estimated costs of $90,000.

   OR

   Option 4.3 – A level platform be constructed on the eastern section (150m²) of the plaza in either pavers or timber decking, at an indicative cost of $70-$100,000.
5. ***THAT the Committee notes the traffic data for Te Puke Highway, that there is only minor congestion within Te Puke and requests an update on traffic volumes and associated issues in the first quarter 2020.***

Raj Sumeran
Engineering and Special Projects Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

The Te Puke Main Street upgrade works were constructed over a two-year period from 2015-2018. The works included public consultation on the design, refinement and endorsement through the Project Control Group (PCG) and the Te Puke Community Board with final approval by the Operations Committee.

The outcome has both been supported and criticised. There have been public meetings, presentations to the Operations and Monitoring Committee, independent research by Key Research and other researchers arranged by the Te Puke business owners.

The former PCG group continued through the construction and post construction stages in providing an operations link to the business community.

There were a number of issues raised in regards to the Te Puke Main Street upgrade which included loss of carparks, the new landscaping and vegetation through the main centre, the new Te Puke Main Street Plaza between the Heritage Walkway and the impact of traffic through Te Puke following the opening of the Tauranga Eastern Link motorway. This report does not deal with parking (separate report) but deals with the landscape and vegetation, the Heritage Plaza and the traffic flows through the Te Puke CBD area and the entrances to the township.

At the Operations and Monitoring Committee meeting (OP9) on 15 February 2018 staff were requested to monitor on the performance of the Te Puke main street upgrade over a 12 month period and report back to the committee on their findings on the first quarter of 2019 (this report).

2. Main Street Landscaping and Vegetation

Council staff in conjunction with WestLink obtained the number of contact centre requests (CCR's) data pertaining to Jellicoe Street (Te Puke CBD) and both entranceways to the town between the periods of 5 June 2017 – 31 January 2019. The CCR's were mainly on the new landscape and vegetation plantings and public feedback. There were 43 CCR's received and recorded in the CCR database.

We analysed the 43 CCR's and identified the following information:

Subcategory	No of CCRs	Comment
Maintenance	2	Asking for trimming of vegetation for existing plantings
Plant Species etc.	3	Commenting on species choice e.g. thinking Jasmine is pest plant
Safety/Visibility	34	Complaints about excessive growth blocking paths, obscuring vision at roundabouts, intersections, pedestrian crossings.
Furniture	2	Metal studs coming out of pedestrian crossing, seat replacement, wooden fence too high.
Vandalism	2	Plants pulled out of ground
TOTAL	**43**	

The stand out complaint (yellow highlight) relates to overgrown vegetation obscuring sightlines at roundabouts, some intersections and pedestrian crossings and pathways.

Location of the complaints are shown on an aerial photograph attached.

Attachment A

Most common issues and suggestions are around the following:

- Dunlop Rd/Jellicoe intersection – these two intersections have the most complaints and are considered dangerous from a path user and a vehicles perspective. Require removal of larger plants at intersection and sides of pathways. These could be replaced with some low growing plants.
- Atuaroa Ave /Jellicoe intersection – as for Dunlop and is worse.
- Pedestrian Crossings in CBD – wholesale removal of lomandra in the median island and replaced with low growing plants or put back in grass. Annual beds are also difficult and expensive to maintain.
- Oxford St, Jocelyn St, Boucher Ave roundabouts (RABs) – there are only isolated pockets of problem vegetation at roundabouts so small amounts of removal. Some drivers expect to be able to see through roundabouts, this is not the design intention but sight lines need to be kept clear.
- General CBD – some flaxes and coprosma, jasmine are now needing occasional trimming – may be 2x per year to keep them back off kerbs and footpaths.
- Isolated areas e.g. outside Hospice Shop (opposite Dunlop St) and RT bay into Our Place will need larger plants removed.
- 6 intersections if allowed to mature. Should be transplanted in winter.

Based on the findings from the CCR's the Council staff consider that these items are not significant and mainly relate to maintenance and operational matters and can be dealt with by maintenance works and by appropriate plantings and remedial measures.

The alterations to vegetation to improve sight lines will occur in autumn. They will mainly focus on the 2 or 3m lead into the intersection. Note the vegetation also assists in reducing vehicle speeds.

There has also been positive feedback around the vegetation and how good it is looking. There is no suggestion to undertake major changes.

3. Te Puke Main Street Plaza

The Puke Main Street Plaza between the Heritage Walkway and the pedestrian crossing were modified after the initial upgrading work as follows:

- Hardwood bench (2.0m X 2.0m) with staggered 200mm X 200mm slats in the middle of the plaza at the cost of $9,000 installed.
- Two additional "L" shaped seats 2.8m long along the plaza area at the cost of $13,876 installed.

- Upright timber bollards cut by 200mm at the pedestrian crossing ends and tapered to reach horizontal with the fence height. These were done to improve sightlines at the middle pedestrian crossing.

- In addition to the above, three other options were presented to the Operations & Monitoring Committee meeting on the 15 February 2018 to modify the plaza area.

The three options were:

1. The Te Puke Main Street Plaza remains status quo. **Attachment B1**

2. Reduce the length of the plaza area, rearrange the seating and plantings and introduce three additional carparks on Jellicoe St. Cost - $90,000. **Attachment B2**

3. Retain the plaza, create a flat seating area (either paved or timber), construct steps, and rearrange the seating and plantings at an estimated cost of $70-$100,000. **Attachment B3**

The options were debated by the Operations & Monitoring Committee on 15 February 2018 and the resolution was made to retain the plaza area and to review in the first quarter of 2019 after one year's operation.

From our search in the CCR, we have not identified any feedback (positive or negative) from the Te Puke community on the existing plaza area. We also have no records on the utilisation of the plaza area for public events etc.

A suggestion has been by the Te Puke Economic Development Group (TPEDG) to overlay the existing plaza with a timber platform so the community can use for holding events and displays. We have not fully investigated this option, however, the cost of this could be in the order of $70-$100,000. **Attachment B3**

A sculpture in the plaza area has also been discussed but the details has not been investigated or costed for this report.

4. Traffic Impact Assessment

For this report, we identified five traffic counting sites on the Te Puke Highway to assess the average daily traffic flows (ADT) through the Te Puke Main Street and both sides of the CBD area. The main reason for the counts were to assess what the traffic volumes were prior to the opening of the TEL, the current traffic volumes and time projection to determine when the current traffic volumes are likely to reach the traffic volumes prior to the opening of the TEL.

The five traffic counting sites are shown on the google map as sites 38, 39, 40, 41 and 42. **Attachment C**

Traffic Count Summary (*Recommendation 5*)

Count Station	Location	Pre TEL 2014	Current 2018/19
40.	Te Puke Highway (East No 3 Road)	18714 (Dec 14)	13819
39.	Te Puke Highway Eastbound (Near Jocelyn Street)	9384 (Dec 11)	8024
41.	Te Puke Highway Westbound (Near Jocelyn Street)	9384 (Dec 11)	8930
38.	Te Puke Highway (West of No 1 Road)	19748 (Dec 14)	15887
42.	Te Puke Highway (East No 1 Road)	16743 (Dec 14)	14105

For example, at site 38, the traffic volumes through Te Puke prior to the opening of the TEL was approximately 19,748 vpd (1.7% growth) and currently at 15,887 vpd. It is forecasted to reach similar traffic volumes as prior to the opening of the TEL by 2024.

The data between 2005 to Jan 2019 was previously managed by NZTA and handed to the WBOPDC after the Te Puke Highway revocation. Trend lines for sites 39, 40, 41, and 42 are all subjected to seasonal variation as less than three counts were gathered (i.e. a full year of 3 monthly cycles have not been completed yet).

Our traffic assessment did not concentrate on any particular intersection or the CBD area for any detailed traffic movements, queues or delays etc.

We have not focussed on the pedestrian counts or changes to the existing pedestrian crossings in Te Puke town. Our assessment is predominantly focused on traffic volumes rather than traffic densities as we consider that apart from the morning and afternoon peaks, the average traffic volumes are below the levels prior to the opening of the TEL.

With the new counting stations, we do not have sufficient and accurate data at this stage to analyse the traffic flows and congestion in Te Puke.

We have only made some traffic growth assumptions based on the estimated traffic data and the limited actual counts so the accuracy of the growth projections can only be confirmed once we have more data.

The graphs in attachment C also shows the 7 day count plots, 24 hour traffic flows and linear trend lines for traffic growth for each counting sites.

Community Feedback on Congestion

- Mid afternoon peak, No 1 Road area westbound. The data shows that this peak occurs but is lower than morning peak.
- No 3 Road morning peak at roundabout.
- Minor delays on Jellicoe Street at the intersections.
- Minor congestion occurring when pack house shifts change and the normal morning and evening commuter traffic.

From this analysis, we consider that doing a detail study of traffic flows through Te Puke is not warranted at this stage but can be undertaken in another year's time when we have collected more data to do a detail analysis.

Overall, it is considered that the traffic flows in Te Puke are reasonable, there is limited congestion and delays for short periods.

5. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

6. Engagement, Consultation and Communication

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	Te Puke Project Control Group Te Puke Community Board
Tangata Whenua	
General Public	Te Puke Community

This report is being presented to the Committee without feedback from the Te Puke Community Board. The Committee may wish to refer it to the Community Board for comment.

7. Issues and Options Assessment

Option 4.1 - Te Puke Main Street Plaza **The Te Puke Main Street Plaza remains as constructed**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option to leave the Main Street Plaza as it is will not disrupt the community and no costs involved.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Nil cost
Option 4.2 – Te Puke Main Street Plaza **Te Puke Main Street Plaza be reduced by 80m² with the construction of two or three additional carparks at an estimated cost of $90,000.**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option will increase the number of carparks. There will be financial implications and disruption to the Te Puke community.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	$90,000
Option 4.3 – Te Puke Main Street Plaza **A level platform be constructed on the eastern side of the plaza in either pavers or timber decking at an estimated cost of $70-100,000.**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option will change the character and look of the Main Street Plaza and there are costs associated with the project and cause disruption to the community.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	$70-100,000

8. Statutory Compliance

This report meets:

- Legislative requirements/legal requirements
- Current council plans/policies/bylaws
- Regional/national policies/plans.

9. Funding/Budget Implications

Budget Funding Information	Relevant Detail
Te Puke Main Street Upgrade	Any significant changes to the scheme will have to be sourced from any remaining budget of the Te Puke Main Street/TEL revocation budget.

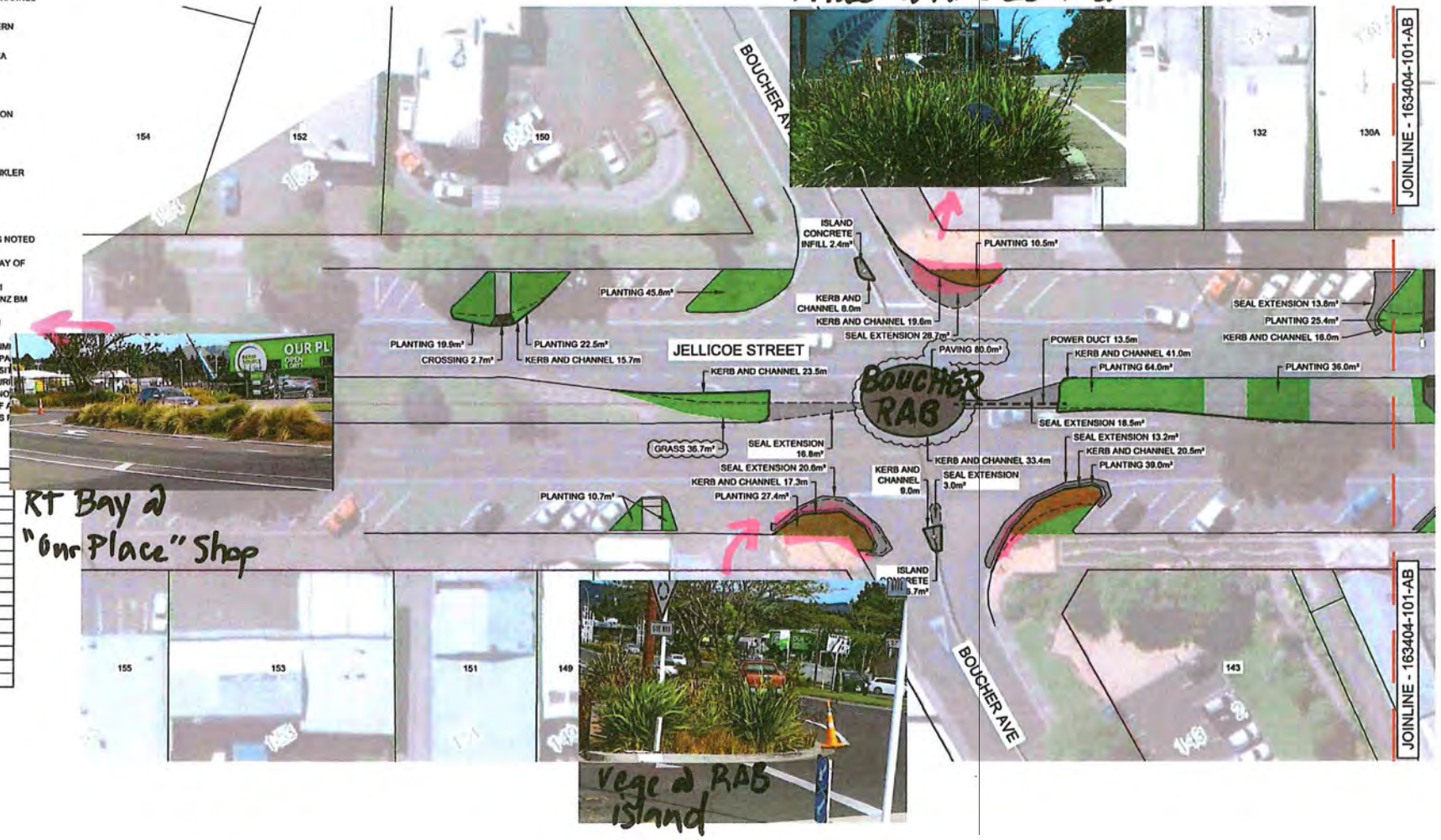
LEGEND - AS BUILT

- NEW KERB AND CHANNEL
- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
- EXTENT OF NEW SEAL
- PAVING - INTERNAL PATTERN
- PAVING - BORDER
- PLANTING / GRASSED AREA
- MANHOLE
- CATCHPIT
- SIGN POST
- TELECOM PILLAR / JUNCTION
- STREET LIGHT
- RUBBISH BIN
- BENCH SEAT
- IRRIGATION POP UP SPRINKLER

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. COORDINATES IN TERMS OF NZGD2000 BAY OF PLENTY CIRCUIT.
3. ALL LEVELS ARE IN METERS TO MOTURIKI DATUM. ORIGIN OF LEVELS C17 (AGNO) LINZ BM RL=17.6676m.
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNM MAY HAVE BEEN OBTAINED FROM THIRD PA RECORDS AND SHOULD BE VERIFIED ON SI PRIOR TO COMMENCEMENT OF ANY FUTURI WORKS. LYSAGHT CONSULTANTS DOES NO ANY WAY GUARANTEE THE ACCURACY OF A UNDERGROUND SERVICE SHOWN ON THIS

As Built Quantities		
Feature	Quantity	Units
Paving (Internal)	1403.5	m²
Paving (Border)	166.5	m²
Footpath seal	21.1	m²
Fence (Timber)	89.2	m
Kerb & Channel	714.1	m
Island conc. infill	14.3	m³
Seal extension	255.3	m²
Conc. crossings	57.1	m³
Benchseats	9	ea
Rubbish bins	12	ea
Street lights	6	ea
Bike Racks	3	ea
Irrigation pipes	1576	m
Pop up sprinkler	8	ea



AS BUILT

No.	Date	Revision Details	By
C	23/05/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

Drawn: JC | Signed | Date: 09/05/17
Designed | Signed | Date
Approved | Signed | Date

LYSAGHT

SURVEYING, ENGINEERING & LAND DEVELOPMENT
19 Totara St, Mount Maunganui 3116 Ph 07 578 8798 www.lysaght.net.nz

THIS DRAWING REMAINS THE PROPERTY OF LYSAGHT CONSULTANTS LTD.
NO LIABILITY SHALL BE ACCEPTED FOR THE UNAUTHORISED USE OF THIS DRAWING
DISTANCES NOT TO BE SCALED OFF DRAWING

Project: WESTERN BAY OF PLENTY
TE PUKE TOWN CENTRE REDEVELOPMENT
TE PUKE

Drawing Title: AS BUILT PLAN
SHEET 1 OF 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-100-AB
Rev. C

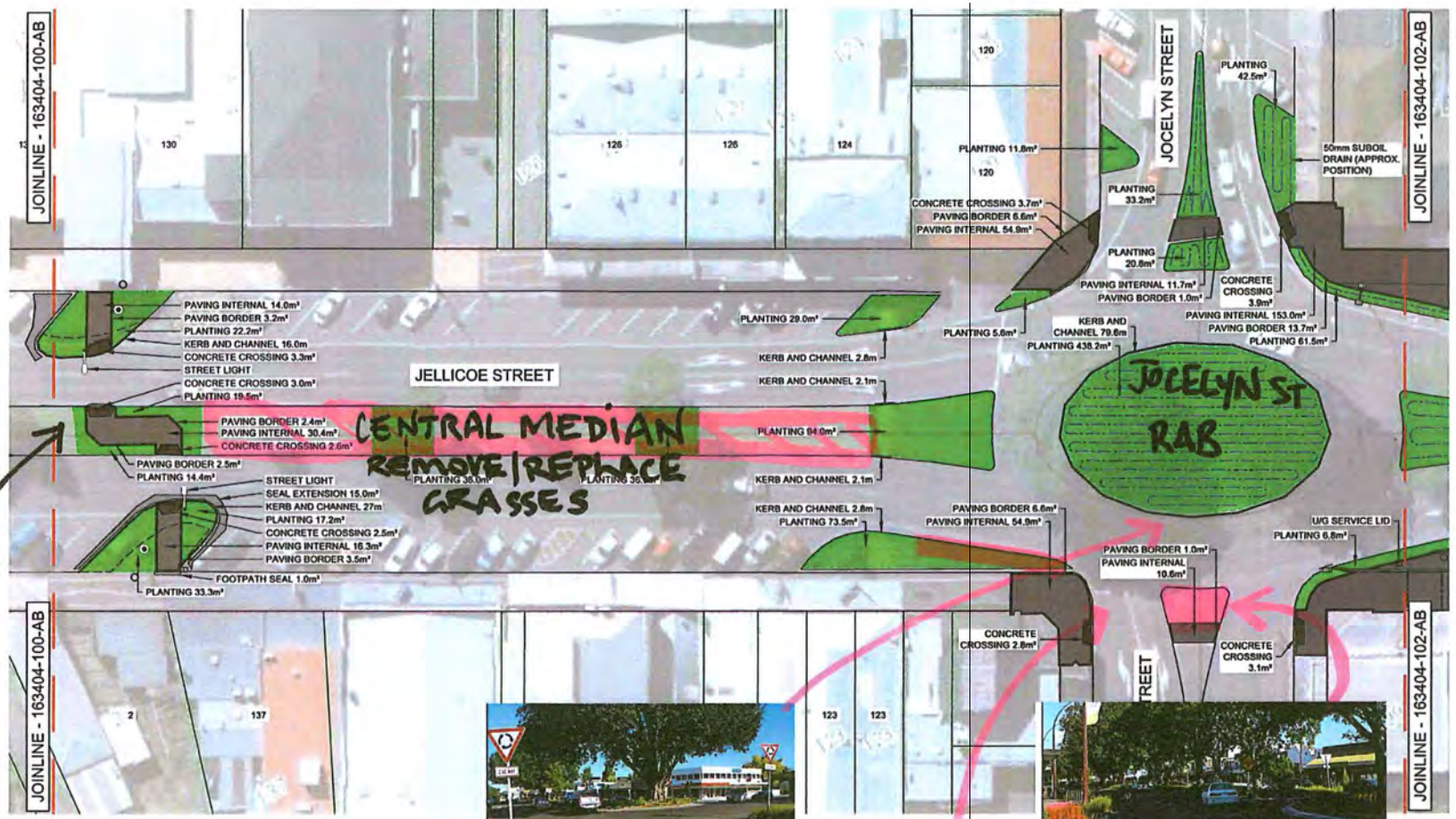
X:\Projects 1\16 Jobs\163404 KM Surveying Te Puke Main St\CAD\Drawings\163404-100_103-AB

LEGEND - AS BUILT

- NEW KERB AND CHANNEL
- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
- EXTENT OF NEW SEAL
- PAVING - INTERNAL PATTERN
- PAVING - BORDER
- PLANTING / GRASSED AREA
- MANHOLE
- CATCHPIT
- SIGN POST
- TELECOM PILLAR / JUNCTION
- STREET LIGHT
- RUBBISH BIN
- BENCH SEAT
- IRRIGATION POP UP SPRINKLER

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. COORDINATES IN TERMS OF NZGD2000 BAY OF PLENTY CIRCUIT.
3. ALL LEVELS ARE IN METERS TO MOTURIKI DATUM. ORIGIN OF LEVELS C17 (AGNO) LINZ BM RL=17.6676m.
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNMENT MAY HAVE BEEN OBTAINED FROM THIRD PARTY RECORDS AND SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY FUTURE WORKS. LYSAGHT CONSULTANTS DOES NOT IN ANY WAY GUARANTEE THE ACCURACY OF ANY UNDERGROUND SERVICE SHOWN ON THIS PLAN.



AS BUILT

No.	Date	Revision Details	By
C	23/06/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

Drawn: JC | Signed | Date: 09/05/17
Designed | Signed | Date
Approved | Signed | Date

LYSAGHT
SURVEYING, ENGINEERING & LAND DEVELOPMENT
19 Tolara St, Mount Maunganui 3116 Ph 07 578 8798 www.lysaght.net.nz

THIS DRAWING REMAINS THE PROPERTY OF LYSAGHT CONSULTANTS LTD.
NO LIABILITY SHALL BE ACCEPTED FOR THE UNAUTHORISED USE OF THIS DRAWING
DISTANCES NOT TO BE SCALED OFF DRAWING

Project:
WESTERN BAY OF PLENTY
TE PUKE TOWN CENTRE REDE
TE PUKE

Sheet 2 of 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-101-AB
Rev. C

X:\Projects 1\16 Jobs\163404 KM Surveying Te Puke Main St\CAD\Drawings\163404-100_103-AB

LEGEND - AS BUILT

- NEW KERB AND CHANNEL
- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
- EXTENT OF NEW SEAL
- PAVING - INTERNAL PATTERN
- PAVING - BORDER
- PLANTING / GRASSED AREA
- MANHOLE
- CATCHPIT
- SIGN POST
- TELECOM PILLAR / JUNCTION
- STREET LIGHT
- RUBBISH BIN
- BENCH SEAT
- IRRIGATION POP UP SPRINKLER

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. COORDINATES IN TERMS OF NZGD2000 BAY OF PLENTY CIRCUIT.
3. ALL LEVELS ARE IN METERS TO MOTURIKI DATUM. ORIGIN OF LEVELS C17 (AGNO) LINZ BM RL=17.6676m.
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNMENT MAY HAVE BEEN OBTAINED FROM THIRD PARTY RECORDS AND SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY FUTURE WORKS. LYSAGHT CONSULTANTS DOES NOT IN ANY WAY GUARANTEE THE ACCURACY OF ANY UNDERGROUND SERVICE SHOWN ON THIS PLAN.

AS BUILT

No.	Date	Revision Details	By
C	23/05/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

Drawn: JC | Signed: | Date: 09/05/17
Designed: | Signed: | Date:
Approved: | Signed: | Date:

LYSAGHT

SURVEYING, ENGINEERING & LAND DEVELOPMENT
19 Totara St, Mount Maunganui 3116 Ph 07 578 6798 www.lysaght.net.nz

THIS DRAWING REMAINS THE PROPERTY OF LYSAGHT CONSULTANTS LTD.
NO LIABILITY SHALL BE ACCEPTED FOR THE UNAUTHORISED USE OF THIS DRAWING
DISTANCES NOT TO BE SCALED OFF DRAWING

Project: WESTERN BAY OF PLENTY TE PUKE TOWN CENTRE REDEVELOPMENT TE PUKE

Drawing Title: AS BUILT PLAN SHEET 3 OF 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-102-AB
Rev. C

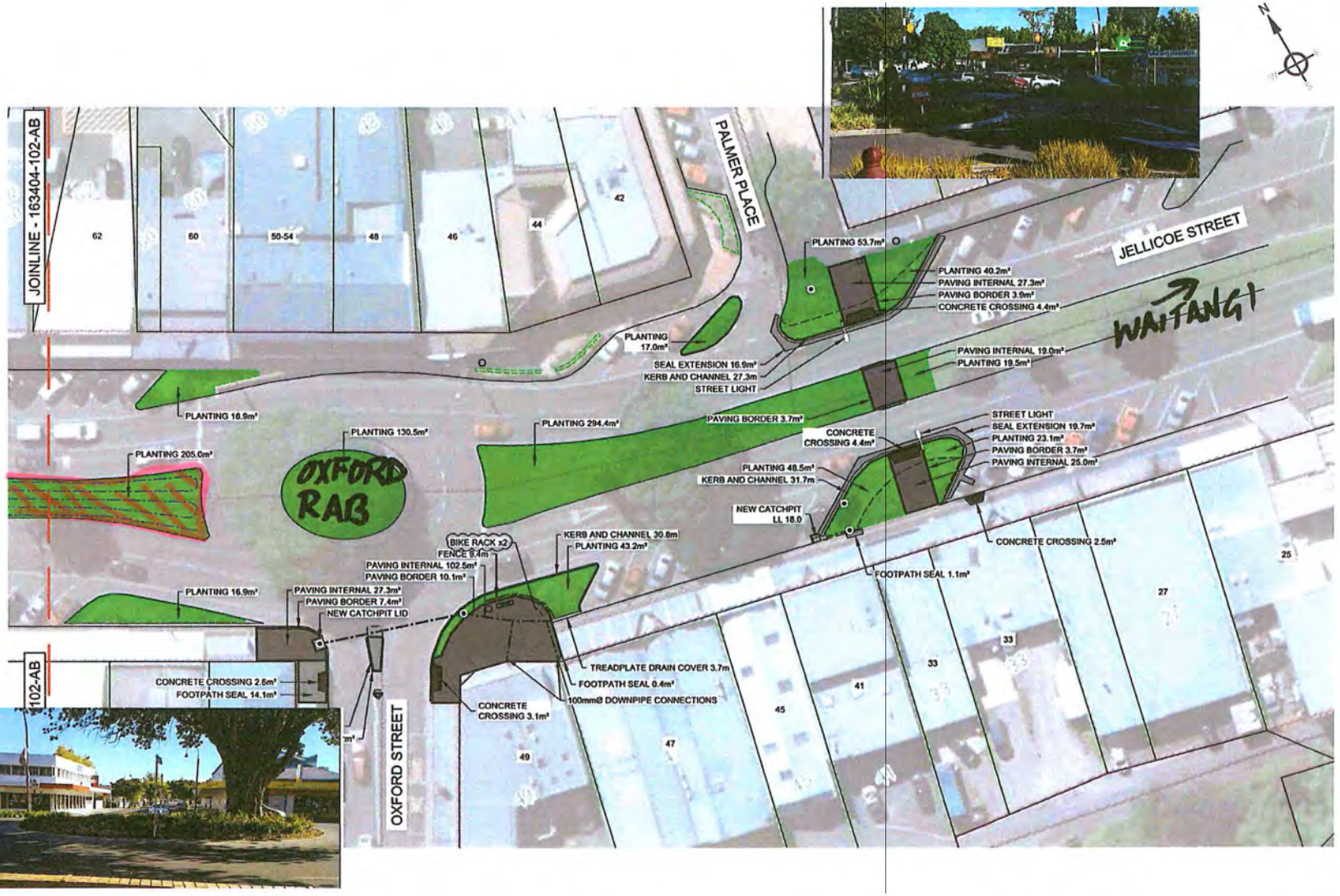
X:\Projects 1\16 Jobs\163404 KM Surveying Te Puke Main St\CAD\Drawings\163404-100_103-AB

LEGEND - AS BUILT

- NEW KERB AND CHANNEL
- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
- EXTENT OF NEW SEAL
- PAVING - INTERNAL PATTERN
- PAVING - BORDER
- PLANTING / GRASSED AREA
- MANHOLE
- CATCHPIT
- SIGN POST
- TELECOM PILLAR / JUNCTION
- STREET LIGHT
- RUBBISH BIN
- BENCH SEAT
- IRRIGATION POP UP SPRINKLER

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. COORDINATES IN TERMS OF NZGD2000 BAY OF PLENTY CIRCUIT.
3. ALL LEVELS ARE IN METERS TO MOTURIKI DATUM. ORIGIN OF LEVELS C17 (AGNO) LINZ BM RL=17.6676m.
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNMENT MAY HAVE BEEN OBTAINED FROM THIRD PARTY RECORDS AND SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY FUTURE WORKS. LYSAGHT CONSULTANTS DOES NOT IN ANY WAY GUARANTEE THE ACCURACY OF ANY UNDERGROUND SERVICE SHOWN ON THIS PLAN.



AS BUILT

No.	Date	Revision Details	By
C	23/05/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

Drawn: JC | Signed: | Date: 09/05/17
Designed: | Signed: | Date:
Approved: | Signed: | Date:

LYSAGHT

SURVEYING, ENGINEERING & LAND DEVELOPMENT
19 Totara St, Mount Maunganui 3116 Ph 07 578 6798 www.lysaght.net.nz

THIS DRAWING REMAINS THE PROPERTY OF LYSAGHT CONSULTANTS LTD.
NO LIABILITY SHALL BE ACCEPTED FOR THE UNAUTHORISED USE OF THIS DRAWING
DISTANCES NOT TO BE SCALED OFF DRAWING

Project: WESTERN BAY OF PLENTY TE PUKE TOWN CENTRE REDEVELOPMENT TE PUKE

Drawing Title: AS BUILT PLAN SHEET 4 OF 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-103-AB
Rev. C

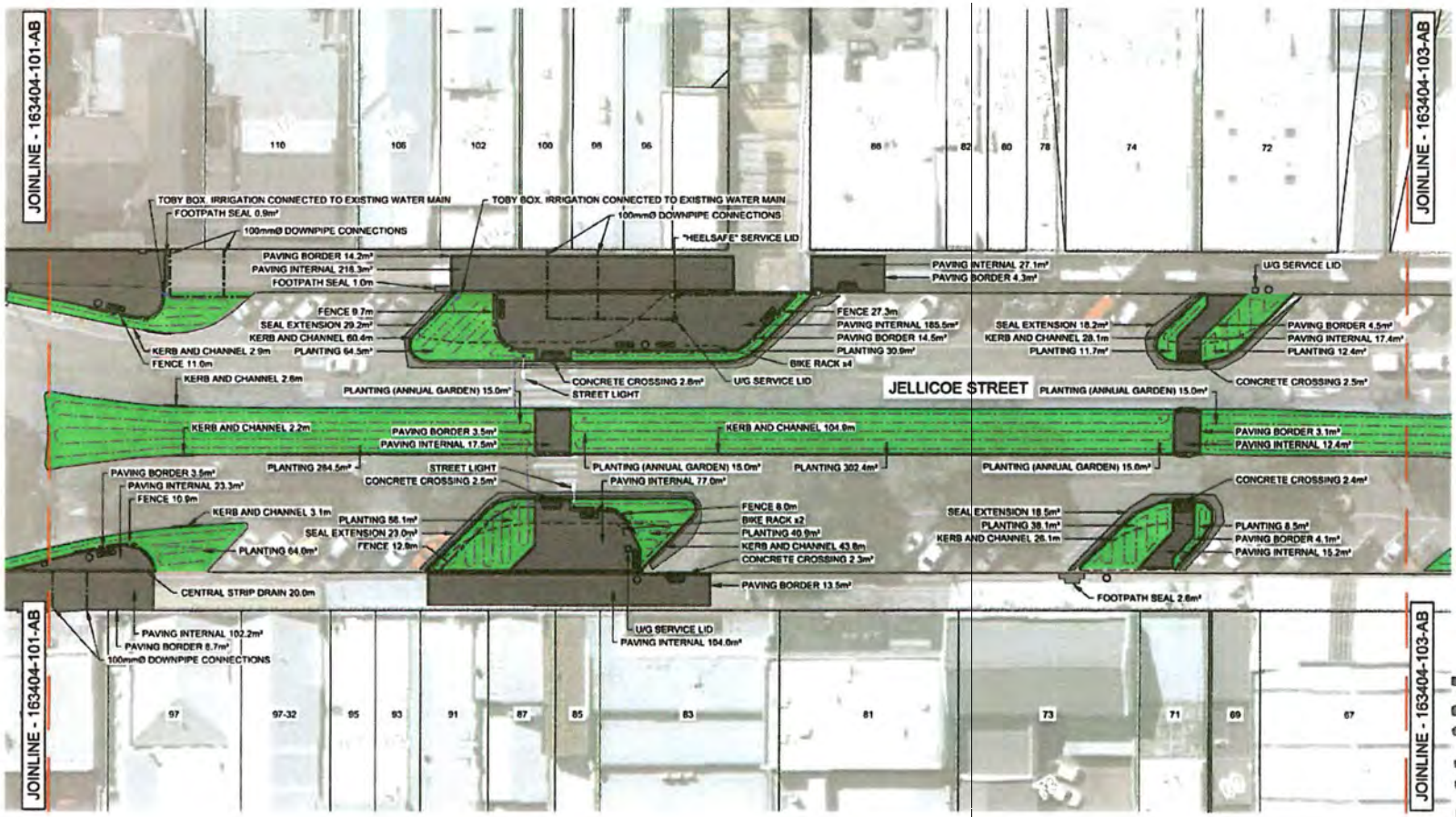
X:\Projects 1\16 Jobs\163404 KM Surveying Te Puke Main St\CAD\Drawings\163404-100_103-AB

LEGEND - AS BUILT

- NEW KERB AND CHANNEL
- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
- EXTENT OF NEW SEAL
- PAVING - INTERNAL PATTERN
- PAVING - BORDER
- PLANTING / GRASSED AREA
- MANHOLE
- CATCHPIT
- SIGN POST
- TELECOM PILLAR / JUNCTION
- STREET LIGHT
- RUBBISH BIN
- BENCH SEAT
- IRRIGATION POP UP SPRINKLER

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. COORDINATES IN TERMS OF NZGD2000 BAY OF PLENTY CIRCUIT.
3. ALL LEVELS ARE IN METERS TO MOTURIKI DATUM. ORIGIN OF LEVELS C17 (AGNO) LINZ BM RL=17.6576m
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNMENT MAY HAVE BEEN OBTAINED FROM THIRD PARTY RECORDS AND SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY FUTURE WORKS. LYSAGHT CONSULTANTS DOES NOT IN ANY WAY GUARANTEE THE ACCURACY OF ANY UNDERGROUND SERVICE SHOWN ON THIS PLAN.



No	Date	Revision Details	By
D	16/06/17	ADDITIONAL IRRIGATION LINES ADDED	JC
C	23/05/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

	Signed	Date
Drawn: JC		09/05/17
Designed		
Approved		

LYSAGHT

SURVEYING, ENGINEERING & LAND DEVELOPMENT
19 Totara St, Mount Maunganui 3116 Ph 07 575 6780 www.lysaght.net.nz

THIS DRAWING REMAINS THE PROPERTY OF LYSAGHT CONSULTANTS LTD
NO LIABILITY SHALL BE ACCEPTED FOR THE UNAUTHORISED USE OF THIS DRAWING
DISTANCES NOT TO BE SCALED OFF DRAWING

Project:
WESTERN BAY OF PLENTY
TE PUKE TOWN CENTRE REDEVELOPMENT
TE PUKE

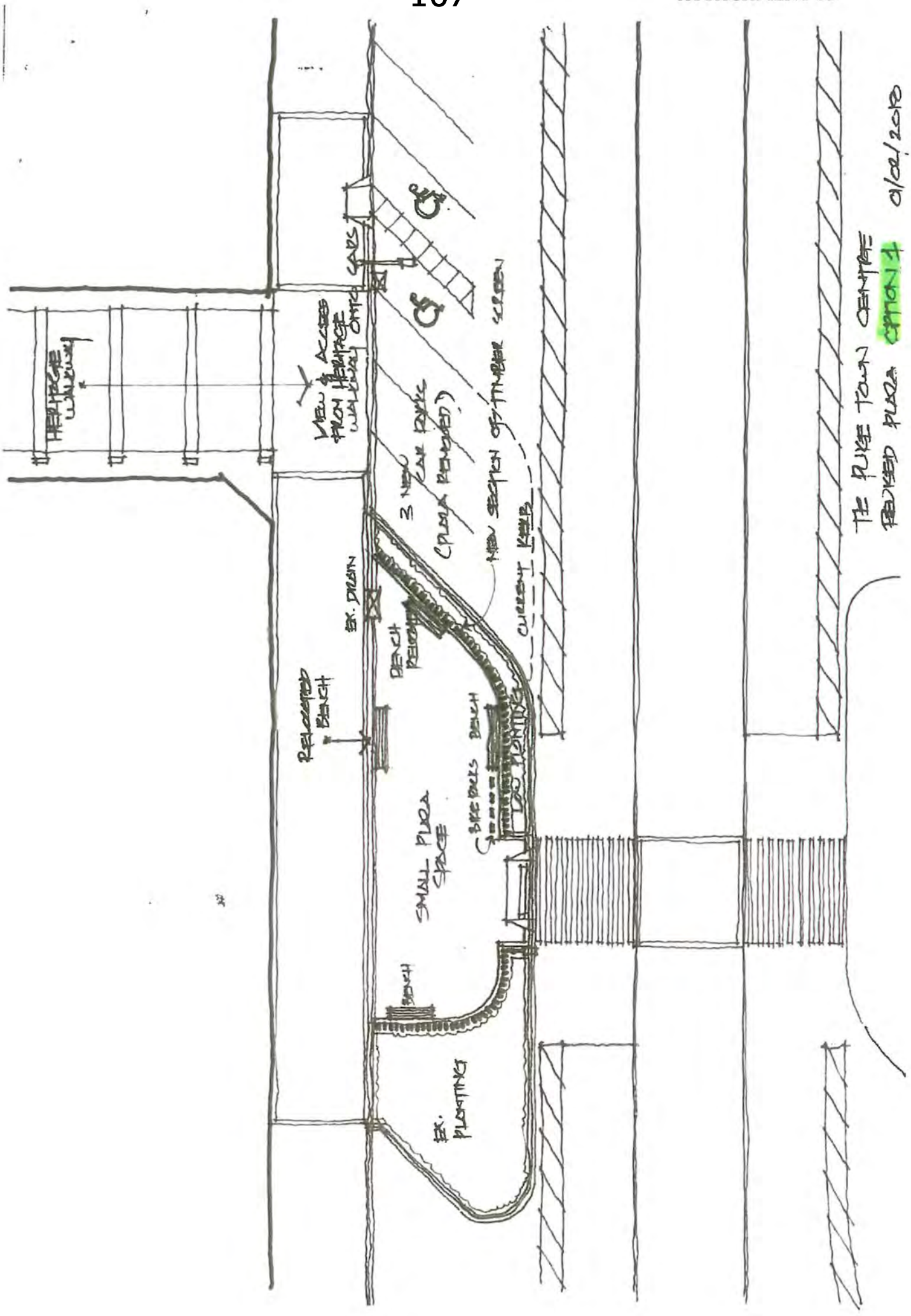
Drawing Title:
AS BUILT PLAN
SHEET 3 OF 4

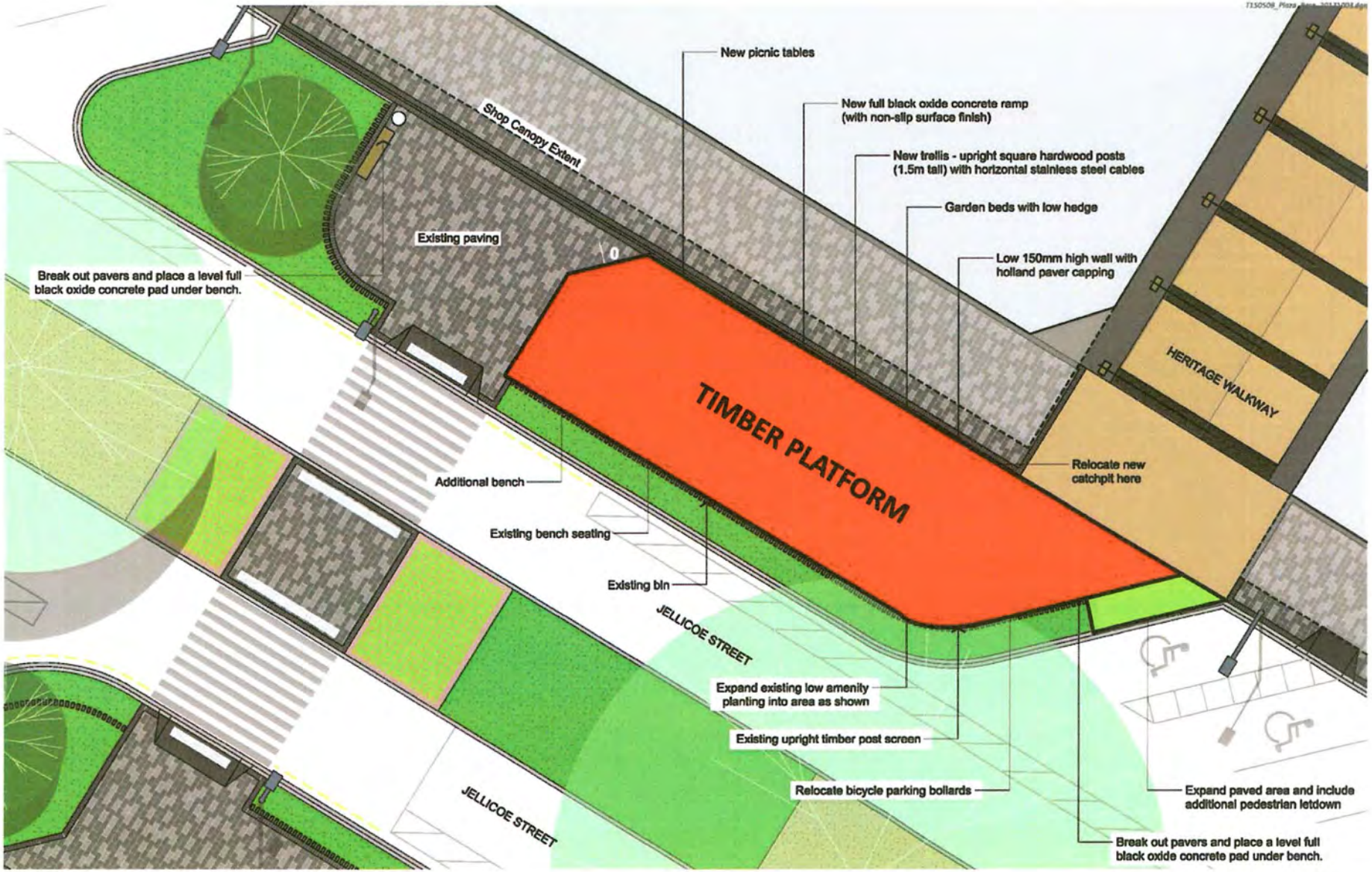
AS BUILT

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-102-AB
Rev D

X:\Projects 1\16 Jobs\163404 KM Surveying Te Puke Main St\CAD\Drawings\163404-100_103-AB

ATTACHMENT B


THE RUKE TOWN CENTRE
REVISED PLAZA OPTION 4
9/04/2018
NEW SECTION OF TIMBER SCREEN
CURRENT KERB
RELOCATED BENCH
SMALL PLAZA SPACE
BENCH
PLANTING



Boffa Miskell
www.boffamiskell.co.nz

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

N

0 5m

Scale: 1:125 @ A3

TE PUKE TOWN CENTRE UPGRADE

Central Crossing Plaza Space - Alternative Design

Date: 09 October 2017 | Revision: 0 |

Plan prepared for Western Bay of Plenty District Council by Boffa Miskell Limited

Project Manager: bryan.samson@boffamiskell.co.nz | Drawn: BSa | Checked: MHu

Te Puke Highway

Traffic Count Analysis

Te Puke CBD Area (NO 3 ROAD to NO 1 ROAD)

Prepared by: Chris Cummings 14/02/2019

© WestLink 2019

TE PUKE HIGHWAY – BACKGROUND

- Traffic Estimate and Count data sourced from RAMM
- Traffic Counting Sites:
  - Details of the road and location are shown on each graph
  - The Counting sites are counted as part of a 3monthly cycle
    - Nov-Dec-Jan, Feb-Mar-Apr, May-Jun-Jul, Aug-Sep-Oct
    - Count Site 38 was always part of 3monthly cycle since start of contract Nov 2014, however there were inconsistent counts up to 2017. Since 2017 it has been counted every 3months (Jan 18, Apr 18, Jun 18, Sep 18, Dec 18)
    - Further to this, count site 39, 40, 41, 42 were only added to the 3 monthly count cycle since the period Aug-Sep-Oct 2018. So their first recordings were end of September 2018.
  - The below table shows when they were last counted and for what period.(i.e the latest datapoint on each graph)

Site	Counter Install Date	Counter Removal End Date	7day count period	Direction
38	Thurs 6/12/2018	Fri 14/12/2018	Fri 07/12/2018 00:00 to Fri 14/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)
39	Wed 12/12/2018	Sat 22/12/2018	Thurs 13/12/2018 00:00 to Thurs 20/12/2018 00:00	Eastbound only towards Paengaroa
40	Sat 22/12/2018	Tue 08/01/2019	Sun 23/12/2018 00:00 to Sun 30/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)
41	Wed 12/12/2018	Sat 22/12/2018	Thurs 13/12/2018 00:00 to Thurs 20/12/2018 00:00	Westbound only towards Tauranga
42	Thurs 6/12/2018	Fri 14/12/2018	Fri 07/12/2018 00:00 to Fri 14/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)

- Assumed 31/10/2015 as TEL Bypass implementation date
  - to allow initial embedding in of traffic and to coincide with gap in count and estimate data

© WestLink 2019

TE PUKE HIGHWAY – METHODOLOGY 1 of 2

- Map locations of Control Sites on Google maps basemap
- Extract Estimate and Count data from RAMM (Jan 2005 to Jan 2019)
  - Only had estimate data (no counts) between 2005 and 2016, as Te Puke Highway was previously managed by NZTA. WestLink nor WBOPDC have access to any further historical estimates or counts other than what I have extracted and reported from RAMM.
  - For Count Site 39 (eastbound carriageway), there were no estimates in RAMM between 2005 and 2016. A decision was made to use the same count data as count site 41 (westbound carriageway) so that an estimate could be used to determine the pre bypass ADT for this site. This is noted on the site 39 graphs.
- Determine linear trend linear using a simple regression method for both pre and post bypass.
  - $Y(t) = \alpha + \beta t$, where t is the time index. The parameters alpha and beta (the "intercept" and "slope" of the trend line). In this case t = count date which is plotted on x axis.
  - Trendlines for sites 39, 40, 41, 42 are all subjected to seasonal variation, as less than 3 counts were gathered (i.e a full year of 3 monthly cycles has not been completed). Only count site 38 had more than 3 data points to provide any meaningful forecasting. Ideally, there would be at least 2 years worth of data (i.e each site counted for each season at least twice)

© WestLink 2019

TE PUKE HIGHWAY – METHODOLOGY 2 of 2

- For Estimate and Count graphs;
  - Plot both estimates and counts, and include line for bypass implementation date
  - Plot calculated trend line for pre and post bypass
- For forecast graph;
  - Using the calculated linear trend line, extrapolate until the increase in post bypass traffic is greater than the pre bypass estimate.
  - Count site 38 was chosen for this forecasting as it is the only count site which had more than 3 data points post bypass. All other sites did not have enough data points to provide a meaningful forecast as they were still subjected to seasonal variation.
- For weekly and hourly graphs
  - Source 7 Day hourly data by direction (eastbound and westbound) from each count site for most recent count period (Nov 2018 to Jan 2019).
  - Plot each direction hourly counts by day
  - Plot each direction hourly counts by 7 day average
  - Plot each direction

© WestLink 2019

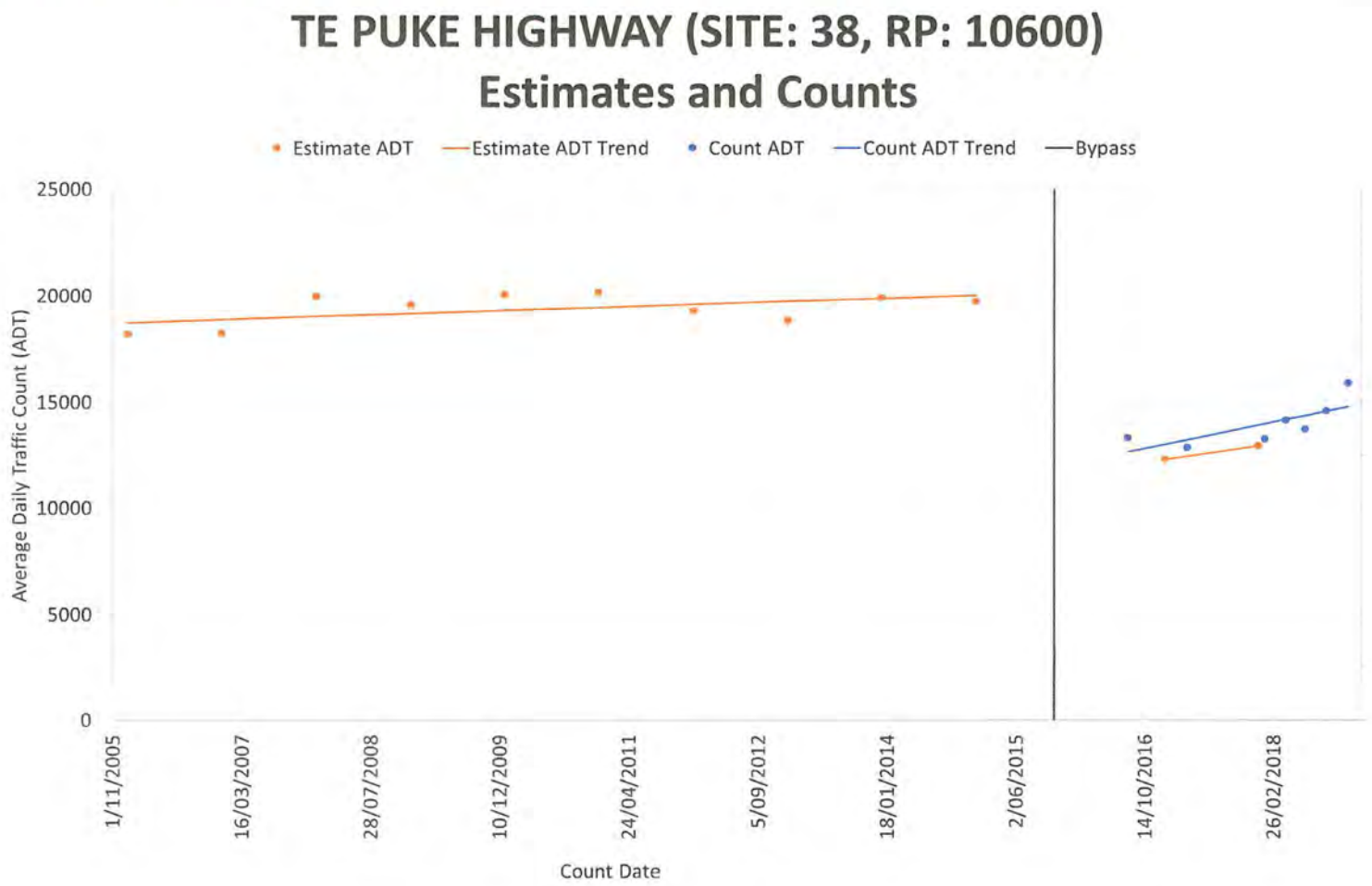
TE PUKE HIGHWAY – TRAFFIC CONTROL SITES MAP

ATTACHMENT C

Prepared by: Chris Cummings 14/02/2019

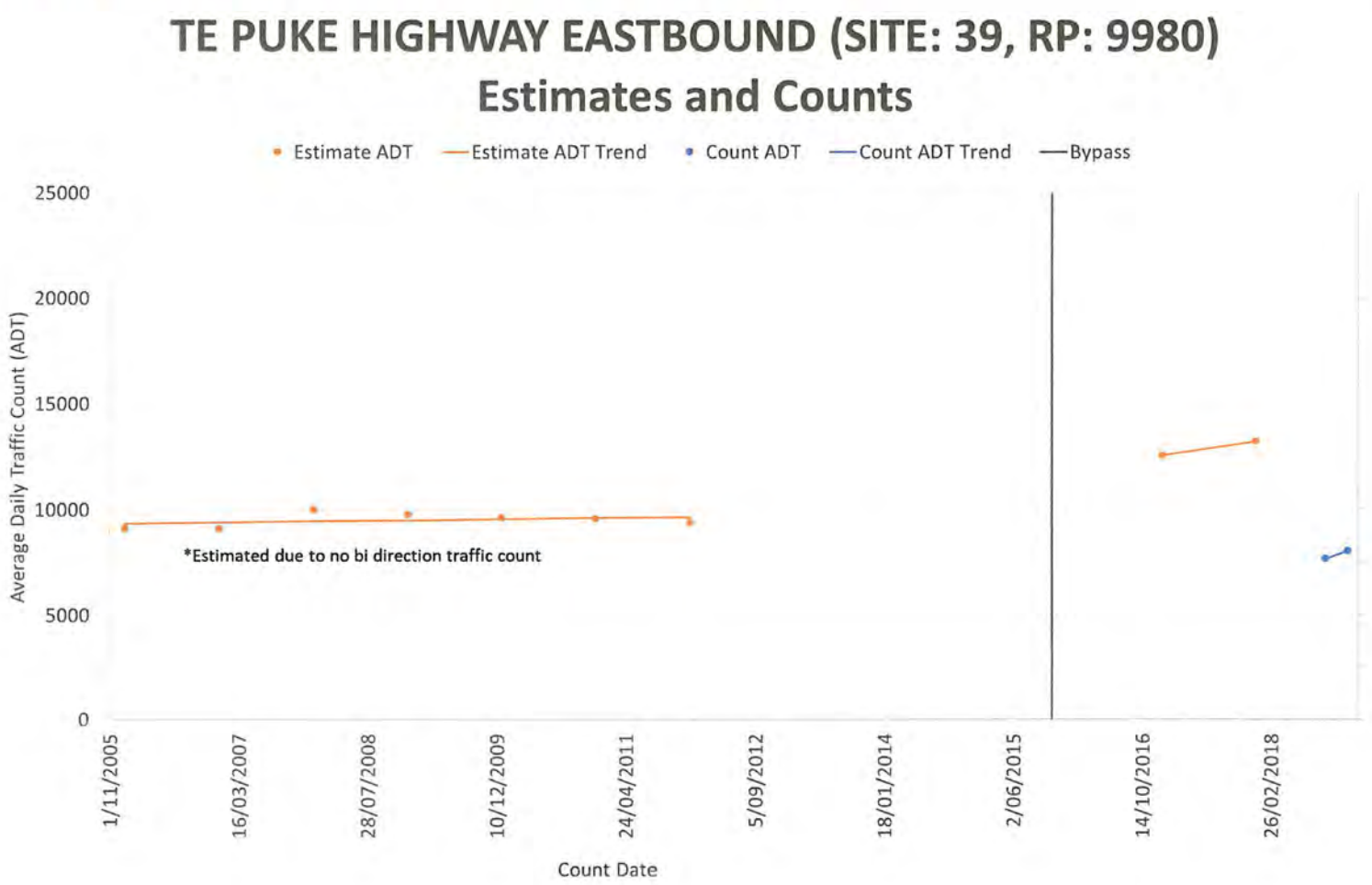
© WestLink 2019

TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS



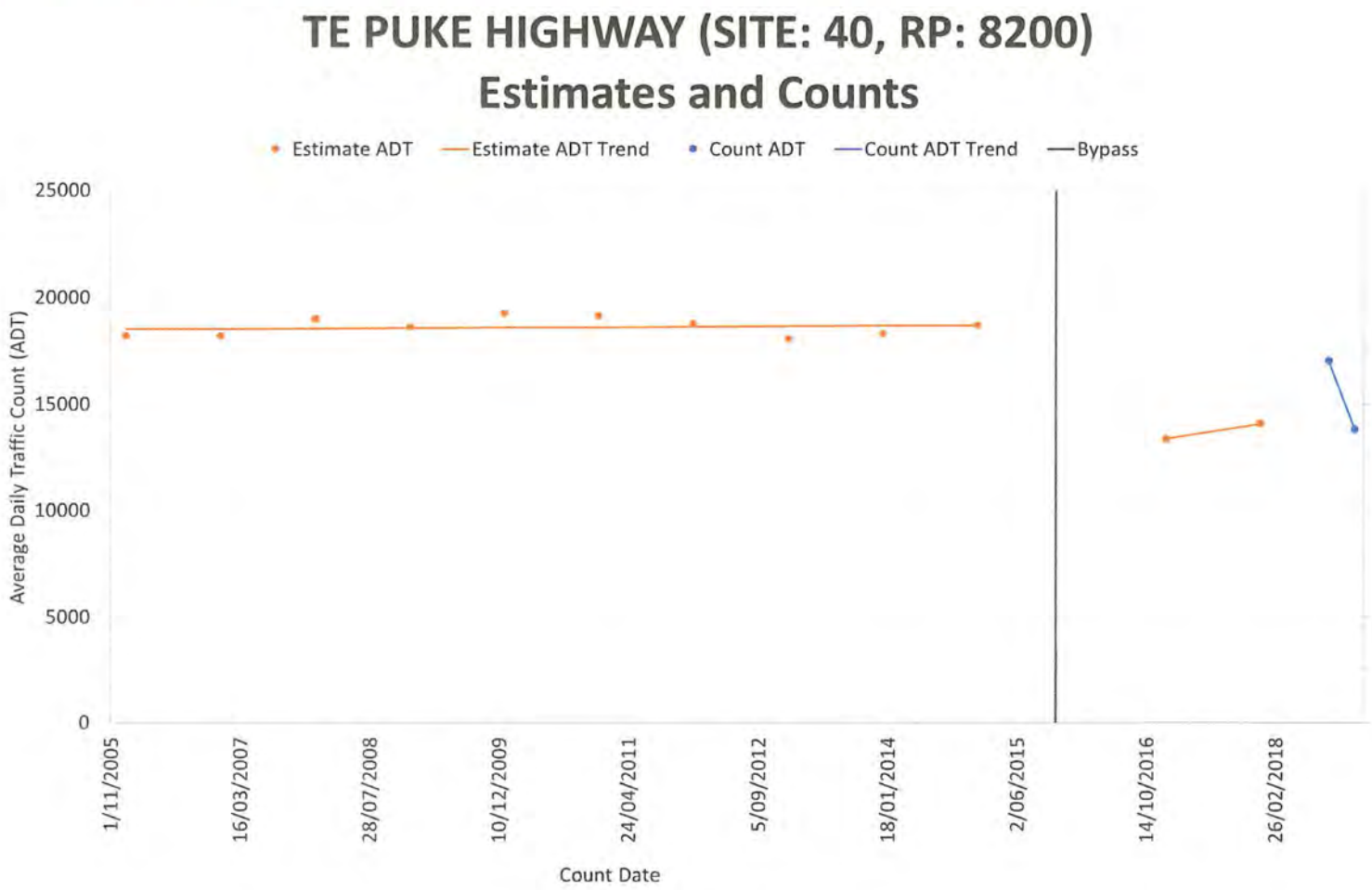
© WestLink 2019

TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS



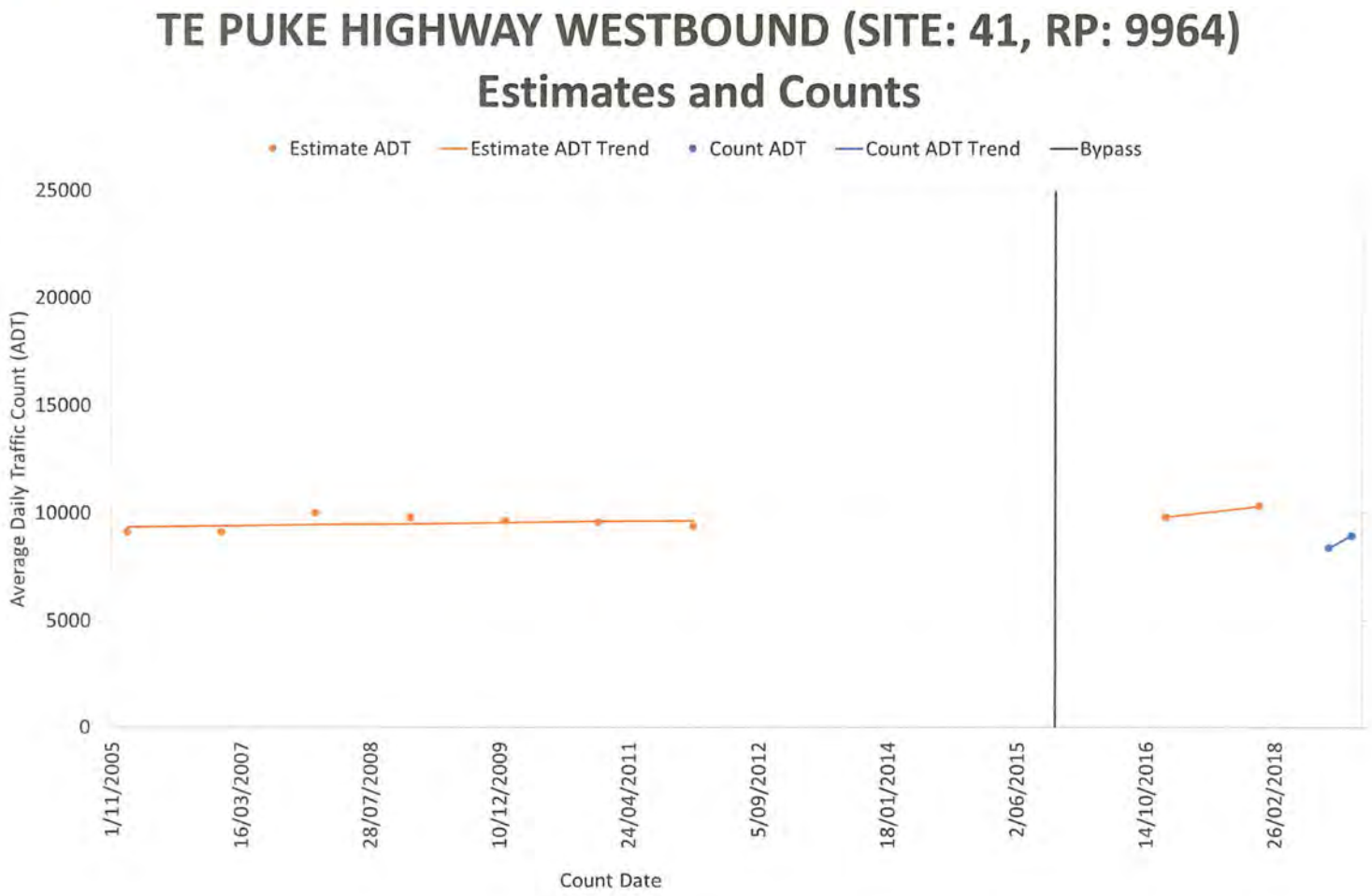
© WestLink 2019

TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS



© WestLink 2019

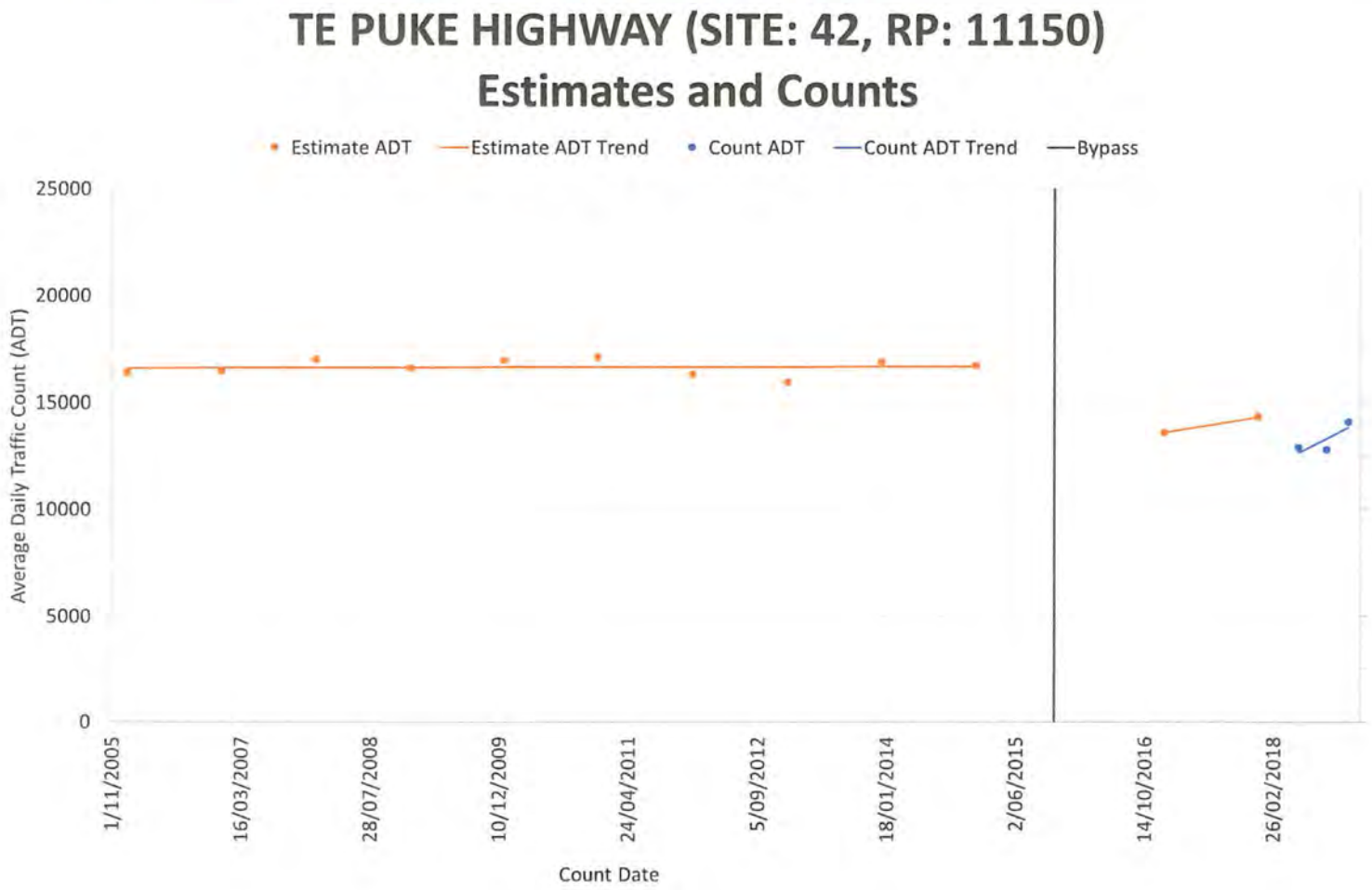
TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS



© WestLink 2019

TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS

ATTACHMENT C



© WestLink 2019