Appendix T7 - Te Awamutu Dairy Manufacturing Site

T7.1 Explanation

Permitted Gate Movement Threshold

T7.1.1 These represent the maximum vehicle movements permitted at individual gates to and from the site per day based on a seven-day average demand. They provide operational flexibility, allow growth on the wider road network and allow for the diversion of traffic from one gate to another within the stated maximum values. The effects of trip generation above these thresholds must be assessed in accordance with Rule 16.4.2.25.

Permitted Network Threshold

T7.1.2 These thresholds represent the limit of Heavy Commercial Vehicle (HCV) trips on the surrounding network per day, based on a seven day average demand, which can occur without the need for more detailed investigation. The effects of Heavy Commercial Vehicle volumes above these thresholds must be assessed in accordance with Rule 16.4.2.25.

T7.1.3 The seven day average traffic demands and trip generation values are maxima and take into account seasonal variation i.e. are based on peak season traffic demands. They are to be calculated by dividing seven continuous days' traffic data by seven to find the average daily demand or trip generation.

T7.2 Permitted Gate Movement Thresholds

T7.2.1 An Integrated Transport Assessment in accordance with Rule 16.4.2.25 shall be required if the daily trip generation based on the seven day average trip generation of all gates at the Te Awamutu Dairy Factory exceeds:

(a) 400 light vehicle movements per day; or

(b) 1,182 Heavy Commercial Vehicle movements per day.

T7.2.2 An Integrated Transport Assessment in accordance with Rule 16.4.2.25 shall be required if the total daily traffic accessing Factory Road from Gates 1A, 1B, 2, 3, 4, 5A and 5B exceeds 407 vehicle movements per day.

T7.2.3 An Integrated Transport Assessment in accordance with Rule 16.4.2.25 shall be required if the daily trip generation based on the seven day average trip generation at any individual gate of the Te Awamutu Dairy Factory exceeds the limits set out in Table 1. The gate locations are identified on Figure 1.

Table 1: Maximum permitted trip generation for individual gates at the Te Awamutu Dairy Factory

Gate No.	Description	Daily trip generation limit (vehicle movements per day based on a seven day average)				
		HCV		AND / OR	Light Vehicles	
		In	Out		In	Out
1A	Entry-only for HCVs and Forklifts	210	0	OR	210	0
1B	Exit-only for HCVs and forklifts	0	210	OR	0	210
2	Exit only from coal store (HCVs)	0	205	OR	0	205
3	Exit only. HCVs and some staff parking	0	210	OR	0	210
4	Entry only for staff parking	0	0	AND	210	0
5A	Exit-only for dry store and waste water treatment	0	210	OR	0	210
5B	Entry-only for coal store, dry store, waste water treatment	210	0	OR	210	0
6	Exit only from dry store	0	8	AND	0	5
7	Entry to dry store	224	0	OR	224	0
8	Two-way access to staff parking	0	0	AND	140	140
9	Exit-only from learning centre (light vehicles)	0	0	AND	0	10
10	Entry-only to learning centre (light vehicles)	0	0	AND	210	0
11	Two-way access to staff parking and HCV depot	600	600	AND	80	80
12	Exit only from cold store (HCVs)	0	220	OR	0	220
13	Two-way. Maintenance access to rail corridor	0	0	AND	1	1
14	Entry only. HCV access to stores	210	0	AND	0	0
15	Entry only. Tanker reception (HCVs) and office visitors	200	0	AND	80	0
		380[1]	0	AND	0	0
16	Exit only for HCVs. Two-way access for staff parking	0	380	AND	190[1]	190

Specific Requirements

[1] If Gate 15 remains available for light vehicle access, the number of light vehicles entering Gate 16 shall not exceed 110 vehicle movements per day.

- Where the daily trip generation limit in Table 1 specifies "AND", this represents the upper limit for each vehicle type. The daily trip generation at each gate should not exceed this upper limit for each vehicle type. For example, the daily limit for Gate 11 is 1,200 Heavy Commercial Vehicles and 160 light vehicles.
- Where the daily trip generation limit in Table 1 specifies "OR", this represents the combined upper limit for both vehicle types. The daily trip generation at each gate shall not exceed this upper limit. For example, the daily limit for Gate 1B is 210 Heavy Commercial Vehicles or 210 light vehicles, or 90 Heavy Commercial Vehicles and 120 light vehicles.
- Specific limits are provided for heavy and light vehicle movements for each gate. No equivalent car unit (ECU) conversion is necessary.
- The calculation of daily trip generation includes movements between different parts of the site which use public roads (i.e. Where there is no internal route).

Figure 1: Te Awamutu Dairy Factory gate locations

T7.2.4 An Integrated Transport Assessment in accordance with Rule 16.4.2.25 shall be required if the operation of a gate changes fundamentally from the description set out in Table 1. Examples of a fundamental change include a gate changing from entry only to exit only, or from one-way to two-way operation.

T7.3 Permitted Network Thresholds

T7.3.1 An Integrated Transport Assessment in accordance with Rule 16.4.2.25 shall be required if the number of Heavy Commercial Vehicle movements per day, measured as a seven day average, exceeds the total volume set out in Table 2.

Table 2: Maximum permitted heavy commercial vehicle (HCVs) movements per day

Road	Total Heavy Commercial Vehicle Volumes (HCV movements /day) limit
Alexandra Street (west of the site)	15
Alexandra Street (east of the site)	300
Mutu Street	10
Sloane Street	240
Arawata Street	55
Daily trip generation shall be measured as a seven day average trip generation. Note: These seven day averages represent maximum numbers when in operation and should not be averaged across longer periods.	

T7.4 Site Specific Assessment Criteria additional to 21.1.16.5

(a) Sight distance and access spacing deficiencies at individual gates identified in Table 3, in relation to the scale of activity and number of car parks accessed from these gates; and

(b) For redevelopment of the site including the learning centre, the extent to which consolidation of light vehicle access and parking at Gate 8, Gate 9 and Gate 10 is considered; and

(c) The extent to which redevelopment of the site considers closing Gate 6; and

(d) The extent to which redevelopment of the site considers closing Gate 15 for light vehicle access.

Table 3: Sight Distance and Access Spacing Deficiencies

Gate No.	WIDTH AT BOUNDARY (m)		SIGHT DISTANCE (m)			SPACING FROM INTERSECTION (m)			SPACING FROM ADJACENT CROSSING (m)		
	Required	Actual	Required	To left	To right	Required	Left	Right	Required	Left	Right
1B	5 to 7.5	9.0	-	-	-	-	-	-	-	-	-
3	5 to 7.5	4.5	-	-	-	-	-	-	-	-	-
5A	5 to 7.5	9.9	-	-	-	-	-	-	-	-	-
6	5 to 7.5	14.0	-	-	-	-	-	-	-	-	-
7	5 to 7.5	7.8	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	<4 or >11	-	6
9	-	-	55	24 - 35	-	20	16	-	-	-	-
11	5 to 7.5	13.5	-	-	-	-	-	-	-	-	-
12	5 to 7.5	11.0	-	-	-	-	-	-	-	-	-
13	5 to 7.5	4.8	-	-	-	-	-	-	-	-	-
14	5 to 7.5	20.6	-	-	-	30	16	-	-	-	-
15	5 to 7.5	26.2	-	-	-	30	-	16	-	-	-
16	5 to 7.5	12.3	140	-	-	-	-	-	<4 or >11	9	-
Required sight distances are based on RTS6: Guidelines for visibility at driveways. Spacing of crossings from intersections and other vehicle crossings is based on Rule 16.4.2.5.											