APPENDIX 9.5 ADVICE FROM DAVID COMPTON-MOEN TO INFORM INDUSTRIAL CHAPTER

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Sent: Tuesday, 24 September 2013 3:42 PM
To: Radburnd, Adele; DelaRue, Ceciel; Schroder, Josie; Wykes, Fiona
Cc: Preston, Dennis; Lewthwaite, Hannah
Subject: Industrial area checklist_ all

Hi all

Here are the notes from my site visit to the eight industrial areas. Table of outcomes etc to follow.

ACTIVITIES
In general, the B4 zone appeared to provide a buffer between B5 zones and living zones, although often there was not a noticeable different between the B4 and B5 activities. This was particularly noticeable in the B5 zone of Hornby South where the built form and landscaping were of a high quality, similar in character to the B4T zone. Of the areas visited, the B5 zone in Opawa (Area 6) seemed to have the most vacant buildings/facilities. This was balanced with the large amount of office development occurring along Opawa Road (B4 zone) – please note that I only assessed a portion of the B4/B5 zones in this area (as per the map provided).

The B3B zones appeared to be working well, with smaller scale light industrial activities present, and a high level of activity. There were some offices present and a small amount of retail but were predominantly industrial type activities.

The B4T was probably the most consistent in terms of building typology, form and carparking placement. Almost all of the buildings were surrounded by carparking with limited interaction with the street.

OFFICE SETBACKS / CARPARKING LOCATION
My initial thoughts are that, like the B1 and B2 zones, most carparking is located at the front of the development. This is probably reinforced by the need to have a minimum setback and trying to efficiently use a site. The outcome of limiting visitor parking to the front or a single row is not apparent. Offices were generally located in the front of the developments, but again were sited behind carparking. Most offices had a good level of glazing and were visible from the street (how to walk to the front door though was another issue – see below).

SIGNAGE
This varied greatly and was not a major concern. The main problem areas seemed to be along Colombo street where there are a lot of signs advertising specials etc, located within the planter strip. In the majority of cases, signage was restricted to on buildings or smaller free standing. Only one example was noted of a sign located above the parapet.

PEDESTRIAN MOVEMENT
Very few developments provided separate pedestrian access to offices/shops from the street. Where access was provided, the quality of the landscaping and the relationship of the building to the road was noticeably better. In some retail instances it was observed that carparks immediately abutted the shop front preventing pedestrian walking from one shop to the next.

LANDSCAPE

The quality of landscape treatment varied greatly across the zones and largely depended on the area and whether the development was new. Where tree planting was provided this made the greatest impact, but it was also noted that a number of trees had been removed from developments (when compared with aerial photos). Few landscape strips provided screening of any substance, and it is my feeling with the larger developments (major warehouses in the B5 zone, than landscape screening is an important mitigation measure. As the zones become more pedestrian friendly, i.e. retail and offices, the landscape treatment should become more consistent with residential/B1/B2 development.

Anyway, I will get back to the table.

Thanks
Dave

General Industrial Zone Correlates with B3, B3B, B4 and B8 zones in current plan
Primarily light industrial and servicing activities
Accessible for freight and servicing while also in proximity to more sensitive environments
Sometimes a buffer for heavy industrial areas
Sites generally 1000 – 5000m² although some sites may need to be larger
Anticipated uses:

Outcomes sought	**Existing provisions**	**Effectiveness of existing provisions**	**Alternative approach in proposed zones**	**Rationale for alterative approach**
Good relationship with the street. Office component /showroom/ shop etc entrance located to the front of the site. Increases safety and security	B3 & 3B – min setback from road – 3m B4 & 8 – min setback from road – 6m B8 extras – 10m & 20m If 2 road boundaries, one may be reduced to 1.5m (no negotiation on B8) Some B4 has increased set backs on particular sites Set back from road where opposite a living zone: B3 & B3B – 3m if road arterial or more than 2 lanes, 6m otherwise B4 – 6m or 10m (above provisions) except Riccarton Rd – 3m Offices and showrooms located on the front of buildings facing the street (some exceptions for B8 with options around open space etc)	It was generally observed that offices were located at the front of buildings, being visible from the street. In most cases the setback was greater than the minimum allowed with the front yard being used for carparking. From observations there was little consistency in building setbacks with the building position appearing to be determined by other factors, most likely carparking and manoeuvring.	Allowance of office component/showroom/shop/ visitor parking (maximum of 2) etc entrance to be located within the front setback. All carparking/manoeuvring spaces to be positioned a minimum of 1m behind the line of the front façade of the office/showroom component. Standardising of the front setback for all zones to 6m.	The rationale behind this alternative approach is to incentivise the development of office/showroom/receptions component at the front of the site, creating a strong relationship with the street frontage. Allowing visitor parking in this space is also considered acceptable, subject to it being visually submissive to the building entrance. By including a rule requiring all carparking to be positioned behind the line of the front façade of the office/showroom component, it will prevent carparking becoming the dominant feature from the street, and give visual prominence to the office/entrance. Standardising the minimum front setback requirement will provide consistency and simplify the current rules.
Visitor parking located to the side or in front, not forward of the office/equivalent component. Limited in amount and not more than one line of car parking if in front of building		The majority of developments have carparks forward of the office, including more than a single row of parking	See above	Positioning visitor parking at the front/side of the site improves visitor legibility while minimising conflicts with freight vehicles, forklifts etc. However, its position should not dominate the streetscene with buildings being more prominent.
Site parking to rear or side of site		This was observed on some sites but was not the norm. The most common location for parking appeared to be the front of the site	See above	See above. Also see note below regarding storage/service areas.
Servicing and loading to rear or side of site	Storage not in setbacks – except for sale of vehicles, machinery, boats and caravans which can be in front setbacks	In the majority of sites storage was positioned to the side of developments, but often still visible from the street. There were some examples where the front yard was used for storage of equipment or goods in the carpark but this was not often.	See above	By bringing the office component forward on the site it is hoped this will force storage areas further back on the site as the space will not be available. Many industrial activities make use of the open area to store equipment and materials which detracts from the overall streetscene.
Tree planting	Sites with road frontages of at least 10 metres shall be planted with a minimum of one tree, plus one additional tree for every 10 metres of road frontage (e.g. 10 metres frontage - 2 trees, 20 metres	In the majority of sites this was not observed. The numbers of trees in carparks or along frontages was quite low. It was noted in a few locations that existing trees had been removed	Retain this requirement.	Tree planting is a method for achieving a high level of amenity, with little input or cost.

	frontage - 3 trees, etc.). 1 tree per 5 carparks, either within the carpark or adjacent.	leaving an open frontage.		
Landscaping in front setback	B3B – 5% of site landscaped B3B exceptional area – 10% of site landscaped B4 & 8 – 10% of site landscaped Landscaping strips to be an average 1.5m wide with min width 0.6m Some exceptions for specific sites – generally greater requirements	The wording of **Development standard 5.2.7 Landscape Areas** (covers most of the landscaping requirements in the Business Zones) is extremely confusing and generates all sorts of problems regarding interpretation. Ref: (Volume 3: Part 3 Business Zones: 5.2 Development Standards – business 3, 3B, 4, 4P, 4T, 5, 6, 7 and 8 zones: 5.2.7 Landscape areas). The 0.6m average is not usually feasible or very effective in terms of amenity	Removal of percentage landscape requirements. Any area of the front setback not occupied by carparking, accessways or buildings must be landscaped. 1 tree per 10m frontage not occupied by buildings	Simplification of the landscape rules by removing site percentages
Buffering of sites from any sensitive neighbouring use – e.g. residential	B3B & B4 – setback from L zone boundaries – 3m B8 – setback from L/conservation /cultural – 5m Some exceptions for specific sites, larger setbacks around up to 40m, 20m etc. Recession planes	3m from zone boundaries is usually not adequate for effective landscaped screening. It is understood that the B8 zone is trying to achieve a less dense, more open industrial park but setbacks larger than 20m seem excessive.	Retention of setbacks from living/conservation /cultural zone boundaries and use of recession planes, with the exception of those which are larger than 20m. An alternative planning mechanism would be to zone these setbacks as either conservation or a zone which provides a buffer to a residential area. Removal of setbacks from other industrial zones. Expand to include storage of equipment being excluded from the buffer zone.	Having large setbacks is an inefficient use of land, which could be used for alternative activities which are more sympathetic to the adjoining landuse. An example of this in the current plan is the use of B4 as a buffer to B5 areas.
Incorporation of cycling and pedestrian movement networks		Very few developments provided separate pedestrian access to offices/shops from the street. Where access was provided, the quality of the landscaping and the relationship of the building to the road was noticeably better. In some retail instances it was observed that carparks immediately abutted the shop front preventing pedestrian walking from one shop to the next.	Inclusion of a differentiated pathway directly linking the office/reception to the street.	A colour/material differentiated pathway, from carparking and manoeuvring areas, leading directly to the building entrance reinforces access and safety for all modes. Improves all overall legibility for visitors.
Signage limited to a reasonable scale	Area and number – B3B, B4 and B8 – max total area 10% of the site frontage, maximum area free standing signs in road frontage 1, except more than 40m of road frontage 1 for every 20m, provided no	The proliferation of signs, both in number and size, did not appear to be a problem in these zones. There were a couple of minor areas where the sign appeared too large (Buchanans	Free standing signs adjoining or opposite a living zone should not exceed the maximum height of that zone	These zones often provide a buffer between heavy industrial areas and living zones. The scale of signage should reflect the character of the adjacent/opposite living zone.

	more than 2 area over 1m². Building ID signs, no individual graphic height greater than 1m. B3B and B4 – maximum height free standing 9m, attached to building not exceed façade height. Ni illumination by intermittent or flashing lights Additional rules for signs fixed to verandahs, projecting signs. Signs on walls not to obscure windows or architectural features	Road) where it is opposite a Living zone.		
Appropriate boundary treatments			See above under buffer	
Control of building height and bulk	B3 & B3B – Plot ratio 1.5 B3B, 4 & 8 – Plot ratio 1, Sunlight and outlook for neighbours – where they adjoin living zones, living zone recession planes apply Height – B4 – 15m max height (11m in Ferrymead), B8 – 15m and 20m	The plot ratio and height limits did not appear to be a restriction to development.	No change	The current plot ratio levels appear satisfactory at present.
Incorporation of low impact design	Not included in existing landscape provisions which should provide for integrated on site stormwater management in line with the Council's Surface Stormwater Strategy and the NRRP	Generally not included	Rules should be adopted to require on-site surface water treatment so as not to increase surface runoff from pre-development levels.	Adoption of low impact design solutions will reduce demand on existing infrastructure increasing carrying capacity, or reduce the scale of infrastructure required in new areas. Reducing the peak flowrates will improve the discharge water quality in the receiving environment.

Heavy Industrial Zone Correlates with B3, B5 and B6 zones in current plan
Primarily heavy industrial activities that require separation from other land use activities
Minimise effects by restricting the use of these areas
Sites generally 5000m² - 1ha
Anticipated uses:

Outcomes sought	**Existing provisions**	**Effectiveness of existing provisions**	**Alternative approach in proposed zones**	**Rationale for alterative approach**
Good relationship with the street. Office component /showroom/ shop etc entrance located to the front of the site. Increases safety and security	Street scene – B3 – minimum setback from road – 3m opposite living zones if road arterial or more than 2 lanes 3m, otherwise 6m B5 – 6m, opposite living zones if road requirements	It was generally observed that offices were located at the front of buildings, being visible from the street. However, in most cases the setback was greater than the minimum allowed with the front yard being used for carparking.	Allowance of office component/showroom/shop/ visitor parking(maximum of 3) etc entrance to be located within the front setback. All carparking/manoeuvring spaces to be positioned behind the line of the front façade of the office/showroom component.	The rationale behind this alternative approach is to incentivise the development of office/showroom/receptions component at the front of the site, creating a strong relationship with the street frontage. Allowing visitor parking in this space is also considered acceptable, subject to it being visually submissive to the building entrance. By including a rule requiring all carparking to be positioned behind the line of the front façade of the office/showroom component, it will prevent carparking becoming the dominant feature from the street, and give visual prominence to the office/entrance.
Increases safety and security	Lanes 7.5m, otherwise 15m B6 – 15m Visual amenity – offices and showrooms located on the front of building facing the street	See above	See above	See above
Visitor parking located to the side or in front, not forward of the office/equivalent component. Limited in amount and not more than one line of car parking if in front of building		The majority of developments have carparks forward of the office, including more than a single row of parking	See above	See above
Site parking to rear or side of site		See above	See above	See above
Servicing and loading to rear or side of site	Visual amenity – storage not in setbacks – except for sale of vehicles, machinery, boats and caravans which can be in front setbacks	In most examples, the servicing area was located to the side or rear of the building but visible from the street. In some cases the positioning of the building at the rear of the site promoted the use of carparking/hard stand areas for storage and industrial activities.	See above	See above
Tree planting	Sites with road frontages of at least 10 metres shall be planted with a minimum of one tree, plus one additional tree for every 10 metres of road frontage (e.g. 10 metres frontage - 2 trees, 20 metres frontage - 3 trees, etc.). 1 tree per 5 carparks, either within the carpark or adjacent.	The B5 zone areas were notable for their lack of trees along frontages or boundaries.	Retention of tree planting requirements for frontages	Tree planting is a method for providing amenity, reducing runoff and as a buffer with little input or cost. However, given the manoeuvring requirements in heavy industrial zones, it is realised much of the site maybe clear of any vegetation.

Landscaping	B5 – minimum of 7.5% of the site must be landscaped.	The wording of **Development standard 5.2.7 Landscape Areas** (covers most of the landscaping requirements in the Business Zones) is extremely confusing and generates all sorts of problems regarding interpretation. Ref: (Volume 3: Part 3 Business Zones: 5.2 Development Standards – business 3, 3B, 4, 4P, 4T, 5, 6, 7 and 8 zones: 5.2.7 Landscape areas). The 0.6m average is not usually feasible or very effective in terms of amenity	Removal of the percentages of the site requiring landscaping, replaced with Low Impact design solutions or where buffers are required.	Simplifying landscape requirements for heavy industrial zones where amenity are a lesser issue.
Buffering of sites from any sensitive neighbouring use – e.g. residential	Separation from neighbours – setback from L zone – B5 – 6m B6 – 10m	3m from zone boundaries is usually not adequate for effective landscaped screening. 50m is often unrealistically large.	Retain	Ideally heavy industrial zones will not border Living zones, with general industrial zones providing a physical buffer.
Incorporation of cycling and pedestrian movement networks		Very few developments provided separate pedestrian access to offices/shops from the street. Where access was provided, the quality of the landscaping and the relationship of the building to the road was noticeably better. In some retail instances it was observed that carparks immediately abutted the shop front preventing pedestrian walking from one shop to the next.	Inclusion of a differentiated pathway directly linking the office/reception to the street.	A colour/material differentiated pathway, from carparking and manoeuvring areas, leading directly to the building entrance reinforces access and safety for all modes.
Signage limited to a reasonable scale	Area and number – B3 and B5 – max total area 10% of the site frontage, maximum area free standing single advert 18m², maximum number of free standing signs in road frontage 1, except more than 40m of road frontage 1 for every 20m, provided no more than 2 are over 1m² (except ODP area for B5 – different rules) Building ID signs, no individual graphic height greater than 1m. B3 and B5 – maximum height free standing 9m, attached to building not exceed façade height. No illumination by intermittent or flashing lights Additional rules for signs fixed to verandahs, projecting signs. Signs on walls not to obscure windows or architectural features	In the heavy industrial areas, signage did not appear to be out of scale, especially when compared to adjoining buildings.	Retain existing	Not considered to be an issue.
Appropriate boundary treatments				
Control of building height and bulk	Site density - B3 & B5– Plot ratio 1.5 B3B, 4 & 8 – Plot ratio 1 Open space – B6 – 40% maximum covered by buildings Sunlight and outlook for neighbours – where adjoin	The current plot ratios did not appear to be restricting development adversely.	No change.	The current plot ratio levels appear satisfactory at present. If these were to be removed, as a way of simplifying rules, maximum height rules would be necessary.

	living zones, living zone recession planes apply			
Incorporation of low impact design	Not included in existing landscape provisions which should provide for integrated on site stormwater management in line with the Council's Surface Stormwater Strategy and the NRRP	Generally not included	Rules should be adopted to require on-site surface water treatment so as not to increase surface runoff from pre-development levels.	Adoption of low impact design solutions will reduce demand on existing infrastructure increasing carrying capacity, or reduce the scale of infrastructure required in new areas. Reducing the peak flowrates will improve the discharge water quality in the receiving environment.

Industrial Park Zone Correlates with B4, B4T and B7 zones in current plan
High amenity environment for industrial companies seeking a park like environment
Integrated with surrounding environment
Low rise building, landscaping and open space
Sites generally 1000 – 5000m²
Anticipated uses:

Outcomes sought	**Existing provisions**	**Effectiveness of existing provisions**	**Alternative approach in proposed zones**	**Rationale for alterative approach**
5.2.6 Visual Amenity Good relationship with the street. Office component /showroom/ shop etc entrance located to the front of the site. Increases safety and security	5.2.3 Street scene – Minimum setback from road – B4P – 12m, 6m internal roads, B4T – 15m, B7 – 15m, opposite living zones if road arterial or more than 2 lanes 7.5m, otherwise 15m B4T and B4P, opposite living zones – service station canopy – 3m Visual amenity – offices and showrooms located on the front of buildings facing the street 7.3.2 Street scene….Otherwise the setback has been specified to allow sufficient scope for parking and landscaping	It was generally observed that offices/entrances were located at the front of buildings, being visible from the street. The setbacks in the B4T in zone are particularly large, designed to create a street scene characterised by large setbacks. It has definitely achieved this, but it could be argued that the buildings have a poor relationship with the street due to the placement of carparking and landscape design In most cases the setback was greater than the minimum allowed with the front yard being used for carparking. Instead of providing a 15m setback (landscape+1 row of parking + accessway) it is increased to provide a double row of parking	Adoption of rules requiring pedestrian/cycle facilities to be incorporated into the design to ensure all modes are catered for. Possible modification of the rules away from providing a minimum setback only.	The rationale behind the changes are to provide for all transport modes. The B4T in particular has a heavy private motor vehicle focused and this dominates the character of the zone. This overrides the 'park-like' setting which is being sought. By providing pedestrian and cycle facilities linking entrances ways to the street this will improve the relationship between the two as well as improving legibility.
Visitor parking located to the side or in front , not forward of the office/equivalent component. Limited in amount and not more than one line of car parking if in front of building		The majority of developments have carparks forward of the office, including more than a single row of parking	See above	See above
Site parking to rear or side of site			See above	See above
Servicing and loading to rear or side of site	Visual amenity – storage not in setbacks – except for sale of vehicles, machinery, boats and caravans which can be in front setbacks	Generally this occurs, but many of the developments in the B4T zone have rear properties which results in the fronts/entrances of buildings facing onto the storage/loading areas of other buildings.	Adoption of subdivision patterns which promote all lots having a street frontage, and street layouts with a high level of connectivity.	Good subdivision design principles, often applied to residential developments, also apply to industrial developments.
Tree planting	Sites with road frontages of at least 10 metres shall be planted with a minimum of one tree, plus one additional tree for every 10 metres of road frontage (e.g. 10 metres frontage - 2 trees, 20 metres frontage - 3 trees, etc.). 1 tree per 5 carparks, either within the carpark or adjacent.	From reviewing aerial photos of the B4P and B4T zones, it does not appear that the provision of 1 tree per 5 car parks was assisting in reducing the perceived expanse of carparking.	Retention of these rules	Given the nature of these zones, particularly the B4T zone, the planting of trees is important to lessen the perceived expanse of carparking. Also, with the large setbacks from the street, trees provide a
Landscaping in front setback	Minimum % of site to be landscaped B7 – 10% (except hatched area – 7.5%)	The wording of **Development standard 5.2.7 Landscape Areas** (covers most of the landscaping	Removal of the rules requiring where landscaping is to go,	Simplification of the rules to provide a clearer requirement for landscaping, and consistency

	B4P and B4T – 20%; For B4P additional controls around where landscaping goes – e.g. road frontage, minimum depth of landscape strip etc.	requirements in the Business Zones) is extremely confusing and generates all sorts of problems regarding interpretation. Ref: (Volume 3: Part 3 Business Zones: 5.2 Development Standards – business 3, 3B, 4, 4P, 4T, 5, 6, 7 and 8 zones: 5.2.7 Landscape areas). In general, it was noted that the level of amenity in these areas was high, particularly the B4T development, although this zone scored particularly lowly for pedestrian connectivity.	minimum depths etc	across zones.
Buffering of sites from any sensitive neighbouring use – e.g. residential	Separation from neighbours – boundary with living zone – B4T – western boundary of the zone - 5m, others living boundaries– 13.5m B7 – 15m Residential recession planes apply	The B4T zones borders a number of residential properties. On the eastern side a drainage channel provides a buffer between the living zone for a large portion of the site. Generally, the office activities in this zone do not have a detrimental effect on the character of the adjoining residential areas as they are extensively landscaped.	Standardising of setback requirements across the zone from Living zones	As with landscaping, simplifying the separation from living zones across the city would provide a consistent approach.
Incorporation of cycling and pedestrian movement networks		Very few developments provided separate pedestrian access to offices/shops from the street. Where access was provided, the quality of the landscaping and the relationship of the building to the road was noticeably better. In the B4T there was a notable lack of pedestrian facilities. While the front entrance was visible from the street, often it was not clear how to safely approach the building.	Inclusion of a differentiated pathway directly linking the office/reception to the street.	A colour/material differentiated pathway, from carparking and manoeuvring areas, leading directly to the building entrance reinforces access and safety for all modes.
Signage limited to a reasonable scale	Area and number – B4P, B4T and B7 – max total area 10% of the site frontage, maximum area free standing single advert 18m², maximum number of free standing signs in road frontage 1, except more than 40m of road frontage 1 for every 20m, provided no more than 2 are over 1m². Building ID signs, no individual graphic height greater than 1m. B4P and B4T – maximum height free standing 9m, attached to building not exceed façade height. No illumination by intermittent or flashing lights Additional rules for signs fixed to verandahs, projecting signs. Signs on walls not to obscure windows or architectural features	The proliferation of signs, both in number and size, did not appear to be a problem in these zones. There was only one observation of a sign located above the building parapet, in the B4P zone.	Free standing signs adjoining or opposite a living zone should not exceed the maximum height of that zone	These zones often provide a buffer between heavy industrial areas and living zones. The scale of signage should reflect the character of the adjacent/opposite living zone.
Appropriate boundary treatments				
Control of building height and bulk	5.2.2 Open space – maximum percentage of the site covered by buildings; B4T - 25%,	Both B4T and BAP had a high level of space between buildings. Often this space was landscaped but often it was used as carparking or	These percentages should be reviewed, potentially removed.	The current percentages provided for a very inefficient use of land.

	B4P – 50%, B7 – 40% Setback from internal boundaries – B4P – 5m (one side only), B4T -5m, B7 – 6m Sunlight and outlook for neighbours – where adjoin living zones, living zone recession planes apply Height – B7 – 15m	hard seal. This is especially the case with B4T when viewed from an aerial. The new BNZ building is surrounded by a carparking as opposed to being in a landscaped park.		
Incorporation of low impact design	Not included in existing landscape provisions which should provide for integrated on site stormwater management in line with the Council's Surface Stormwater Strategy and the NRRP	Generally not included	Rules should be adopted to require on-site surface water treatment so as not to increase surface runoff from pre-development levels.	Adoption of low impact design solutions will reduce demand on existing infrastructure increasing carrying capacity, or reduce the scale of infrastructure required in new areas. Reducing the peak flowrates will improve the discharge water quality in the receiving environment.