

## *FLEX SPACE for PDR and Commercial Uses*

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Kira Gerwing, MScP  
City of Vancouver Planning Department

### ***Problem***

The interaction between commercial and residential uses are already well understood in Vancouver zoning policies. Less understood is the opportunity to mix other PDR types of uses with residential uses, although mixing these uses presents a great opportunity for the City to meet objectives under existing policies. Also, industrial land use in the 2007 Vancouver Building By-law do not differentiate between light and heavy impact uses. The result of this is that light impact industrial uses compete for space in industrial areas where large-scale, heavy industrial activity also takes place.

Vancouver currently limits light impact Production, Distribution, and Repair (PDR) type businesses to industrial zones. PDR uses are a growing sector in the Metro Core. In general, these types of businesses require between 2000 and 5000 square feet in close proximity to their primary customer base, generally Downtown Vancouver.

However, these businesses are adversely impacted by the general trends affecting Vancouver's industrial land supply, including:

- Decreasing supply of available industrial land in the city's core (and throughout Metro Vancouver);
- Increasing overall land values; and
- Increasing pressure to convert industrial land to residential, commercial, and other uses.

Increased employment in the Downtown and a potential loss of industrial land in Mount Pleasant and Burrard Slopes will increase the demand for PDR space in industrial areas. However, ever-increasing land values and extremely low vacancy rates pose a serious challenge to PDR businesses who need to lease space in close proximity to their customer base. Industrial units suitable for PDR uses are difficult to find in the current industrial real estate market. Often, these business are out-competed by large-scale and heavy impact industrial operations for the available sites.

### ***Vision: Permeability over Space and Flexibility over Time***

The vision underlying this document is that the ground floor use in the DEOD/M-1 area would create a permeable boundary between the M-2 industrial uses to the north and the RT-3 residential uses to the south that is designed to be flexible enough to change uses over time.

### ***Existing City Policy***

#### DTES Economic Revitalisation Plan

- Geography of change - Hastings, Carrall, and Oppenheimer
- Economic Sectors linked with mixes of land uses, as per the DTES Housing Plan
- DTES Arts and Culture Strategic Investment Framework
- Heritage Revitalisation
- Public realm improvements

- Business Development and Marketing (Retail Capacity Study, Economic Capacity Study, Industrial Land Strategy, Strathcona BIA Goods and Services study)

#### Metro Core Jobs and Economy Study

Although the DEOD has socio-economic challenges, the Metro Core Jobs and Economy Study has confirmed that this area provides a significant number of jobs in the manufacturing, retail, and institutional sectors. Council-approved policies call for area revitalization to build on existing commercial and industrial activity to provide additional jobs for area residents.

The key opportunities and challenges identified in the study include:

- a significant amount of office space in older, character buildings with relatively low lease rates, noting that this building stock can make the area attractive for small and start-up firms that are looking for diverse, lower-cost space;
- safety and security issues remain a concern for the community and local Business Improvement Associations, but area revitalization strategies are beginning to attract additional investment;
- proximity to the Port can provide additional job space for Port-related businesses that are growing with increasing international trade; and,
- residential use will be a major component of future development, with the priority to retain and replace low income housing and to compliment this with affordable market housing.

#### Powell Street/Port Lands and Powell Street/Clark Drive Industrial Areas Study

This study examined the economic roles of the Powell Street/Port lands and Clark Drive industrial areas given the local context and general trends affecting industrial lands. Based on that, the study put forward strategic directions to enhance those roles and to encourage economic revitalisation. A key finding of the study was that the PDR sector will show the strongest growth in Vancouver, and that these light impact uses can co-exist with other land use types. The recommendation was to incorporate and promote these types of uses through policy, programs, and regulatory measures.

#### Sustainability

One of the key sustainability issues related to new building construction is adaptability to change over time. Adapting buildings to change is often difficult and can lead to premature redundancy and subsequent demolition and the productivity of a building is greatly reduced. To become more sustainable, it is important that buildings are designed to accommodate changing requirements. In doing so, buildings will last longer and greater value will be extracted from the resources (materials) invested in them.

The Vancouver Green Building Strategy (GBS) was developed to advance sustainable design practices in the marketplace in order to minimize the impacts that buildings have on the local environment and their contribution to global climate change. One of the 15 components that this strategy focuses on is building durability, which relates to waste management and promotes quality construction practices and waste minimization throughout the phases of a building's life, including the building's operation. Zoning that permits a more flexible suite of residential-compatible uses can yield significant environmental benefits in terms of reducing building related greenhouse gases, energy consumption, harmful indoor water quality, and material waste in Vancouver.

## ***Defining flex space for PDR and commercial uses***

Flex space refers to commercial spaces that can be a combination of office, manufacturing, repair, and/or showroom and retail uses. Flex space for PDR would include the following kinds of uses:

- Food and beverage wholesale and distribution
- Fashion/garment design and manufacture
- Delivery services (messengers, airport shuttle vans, taxis, limousines)
- Event production and catering
- Construction contractors and building material suppliers
- Wholesale and retail of furniture, equipment, appliances, and furniture manufacture
- Printers, designers, photographers, film producers, graphic designers, and sound-recording firms
- Repair shops for cars, trucks, equipment, appliances and whole.

There are also "new economy" sectors that have grown out of new technologies, such as multimedia. Some of these industries share many of the features of PDR, and their inclusion this classification requires further consideration. Most of these firms occupy an intermediate place between PDR and office use. The need for special features (such as high ceilings) and incompatibility with housing give them a resemblance to PDR uses. The attraction to an urban location, relatively high employment densities, a concentration of high-end jobs, and a greater ability to pay link them to office uses. Some industries, like multimedia, quickly evolve to a point where they resemble office uses more than PDR, but many of these industries are characterized by a need for flexible space that cannot be provided by office buildings. Some, such as biotech, include a continuum of activities that range from firms closely resembling office uses to manufacturing facilities and many combinations in between.

## ***Zoning and Building Code***

In current zoning policies and building by-laws, no differentiation is made between light impact and heavy impact industrial uses (one exception being provision for live/work in the 2007 Vancouver Building By-law and the Live/Work Use Guidelines). However, there is an opportunity to create a new section and classification in the Vancouver Building By-law that treats light-impact industrial uses in a similar way to office uses. Those uses would be defined both in the Building By-law and in associated zoning policies.

In the Vancouver Building By-law, the starting point would be the 'Artist Live/Work Class A and Class B' uses (see Appendix A for the complete definition). However, the list of compatible PDR uses would expand from this definition because flex space uses would be separated from residential uses by a 4" concrete slab (see Table 1 for a list of potential uses that are compatible with residential uses).

Some of the key issues that need to be considered in concert with an amendment to the Vancouver Building By-law include:

- Unit size (smaller units from 2000 to 5000 square feet are easier to accommodate in terms of building code and limit the competitive uptake from larger industrial users);
- Accessibility; and,
- Range of use - defining a comprehensive list of uses that are compatible with residential.

Table 1: a list of PDR uses, including potential issues in the 2007 Vancouver Building By-law in terms of compatibility with residential use:

Use	Preliminary issues in 2007 VBBL
<b>PRODUCTION</b>	
Printing & Publishing	
Other Printing & Binding	
Photography Services	
Graphic Design, Interior Design & Signs	
Radio, T.V. Stations & Comm Svcs	
Garment Manufacturing	
Other Apparel	
Utilities	
Commercial Laundry	
Sound Recording/Film Prod	
Catering & Food Processing	
Bottling, brewery, dairy products plant, malt manufacturing or processing	
Building Construction & Maintenance	
Concrete Works	
Furniture Mfg & Repair Woodwork	
Landscaping/Horticulture & Animal Svcs	
Chemicals/Plastics/Leather Goods Mfg	There would likely be an issue related to use of toxic chemicals
<b>DISTRIBUTION</b>	Storage type functions will require limits with respect to area. Suites must be between 200 and 300 m <sup>2</sup> .
Wholesale Printing & Publishing	
Wholesale Apparel	
Transportation & Delivery Svcs	
Taxi/Limo/Shuttle	
Trucking, Freight, & Packing	
Parcel Shipping & Courier Svcs	
Public Warehousing & Storage	
Wholesale Flowers	
Food & Beverage Wholesale & Distribution	
Wholesale Construction & Distribution	
Furniture Wholesale & Showrooms	
Interior, Household & Appliance Wholesale	
Large & Heavy Equipment Wholesale	
Wholesale Auto Parts	
Export/Import Trading Companies	

Jewelry Wholesale Mfg	There may be issues related to use of toxic chemicals
Waste Management	
<b>REPAIR</b>	
Auto Wrecking & Scrap Storage Yards	There will be an issue related to gasoline fuel.
Furniture Mfg & Wood Work Repair	This would require some mitigating features in the design to address increased fire safety issues
Appliance Repair	
Auto & Boat Repair, Parking & Renting	There will be an issue related to gasoline fuel.

### *Design*

The concept of flex space in the DEOD/M-1 area is intended to find alternative approaches to activating the ground plane that work in harmony with residential uses above. Building flex space enables a choice of use that place holds the possibility that the ground floor use could be taken up for uses other than just retail or residential.

Design considerations that activate ground plane include creating pedestrian interest and providing eyes and activity on the street. In general, developments with ground floor flex spaces have the following features:

- Double-height ground floor;
- Stack locations so that floor-to-floor can accommodate mechanical and structural requirements;
- Fire separation to meet building code standards;
- Core in the middle of the ground floor to accommodate residential uses above; and,
- Opportunity for mezzanines that cover 10% of the floor plate if they are open and 40% of the floor plate if they are closed.

Some of the design considerations that require further exploration include parking and loading, and setbacks from the street.

Perhaps the most important characteristic of the buildings in which most PDR industries are located is their flexibility. Many of these building types can and do accommodate a variety of very different users, either simultaneously or at different points in time. They often serve an incubator role, providing space for small firms and even new industries that may have undefined or rapidly changing needs. Many PDR buildings offer features such as high ceilings, large loading docks, and ground floor access that are not available in office and most commercial buildings. These buildings are also well-suited for companies whose needs change over time, such as those with shifting requirements for manufacturing, warehouse, R&D, and office space. The large floor plates of many PDR buildings are important for allowing flexibility and dynamism by allowing spaces to be divided up in many different ways. This stands in marked contrast to office or residential buildings, which are far less flexible and which are built to serve a narrower range of users.



generally sells these spaces for around \$300 to \$315/square foot. The average rents for light industrial spaces in Vancouver are currently between \$10 and \$12 a square foot.

## Appendix A

From Section 2 of the Zoning and Development By-law:

**Cultural and Recreational Uses** means and includes all of the following uses, and any one of them, but no other:

...

**Artist Studio**, which means where used without a qualifier both an **Artist Studio - Class A** and an **Artist Studio - Class B**;

**Artist Studio - Class A**, which means the use of premises for the production of dance, live music, creative writing, painting, drawings, pottery or sculpture, video, moving or still photography, none of which involves amplified sound or one or more of the materials or processes specified under Artist Studio - Class B;

**Artist Studio - Class B**, which means the use of premises for the production of:

- (a) dance or live music involving electronically amplified sound,
- (b) moving or still photography (excluding video) involving on-site film processing,
- (c) paintings, drawings, pottery or sculpture involving the use of fibreglass, epoxy and other toxic or hazardous materials or one or more of the following processes: welding, woodworking, spray painting, silk screening or fired ceramics;

...