County of Fairfax, Virginia



To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

zMOD Industrial Uses Follow-Up: Data Center, Goods Distribution Facility, Self-Storage, and Warehouse Uses November 28, 2018

During October 2018, Clarion Associates presented the zMOD Industrial Use classification to citizens, staff, industry, and County officials. During these presentations, Data Center, Goods Distribution Facility, Self-storage, and Warehouse uses were identified as needing additional research and discussion. Since this time, Clarion and staff have analyzed the potential land use impacts of these uses. The following summary includes staff's recommendations on the uses, their permissions, and associated standards. Changes to the table are highlighted in red text.

Use Table for Residential, Commercial, and Industrial Districts

 TABLE 4101.3: Use Table for Residential, Commercial, and Industrial Districts

 P = permitted; SE = special exception; SP = special permit

 A = allowed as accessory use only, may require approval of special exception or special permit as indicated in use standards

 T = permitted as a temporary use; blank cell = not allowed

		Residential Districts												Commercial Districts								Industrial Districts							
Use INDUSTRIAL USES	R-A	R-C	R-E	R-1	R-2	R-3	R-4	R-5	R-8	R-12	R-16	R-20	R-30	R-MHP	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	Ţ	I-2	I-3	1-4	-5	I-6	Use Standards
INDUSTRIAL USES																													
Freight Movement, Wa Goods are generally de															nvo	lvin	ng tl	he r	nov	/em	ent	, st	orag	ge,	and	l di	strik	outi	on of goods.
Data Center																	P SE	P SE	₽	₽	₽	₽		P SE	P SE	Ρ	Ρ	Ρ	4-102.2A/*
Freight Distribution Hub																										Ρ	Ρ	Ρ	*
Goods Distribution Hub																		Ρ	Ρ	Ρ	Ρ	Ρ							4-102.2B / *
Self-storage																						SE			Ρ	Ρ	Ρ	Ρ	4-102.2C/*
Warehouse																									SE	Р	Р	D	*

*The general standards in Sect. 4-102.1 also apply.



Use Table for Planned Development Districts

TABLE 4101.4: Use Table for Planned Development Districts

P = permitted on final development plan/development plan and PRC plan;

P/SE = permitted on final development plan/development plan and PRC plan, or as special exception if not on plan(s)

P/SP = permitted on development plan and PRC plan, or as special permit if not on plans

SE = special exception; **SP** = special permit

A = allowed as accessory use only, may require approval of special exception or special permit as indicated in use standards; T = permitted as a temporary use; blank cell = not allowed

	PE	рн			PRC			PI	DC	PR	Μ	РТС	
Use	Principal	Secondary	Residential Neighborhood		Village Center Town Center		Convention/ Conference Center	Principal	Secondary	Principal	Secondary		Use Standards
INDUSTRIAL USES													
Freight Movement, Wareho distribution of goods. Goods	-								0			ent, st	orage, and
Data Center						Р	Р	Р				Р	*
Freight Distribution Hub													*
Goods Distribution Hub									P/SE			P/SE	4-102.2B/*
Self-storage									P/SE			P/SE	/*
Warehouse													

*The general standards in Sect. 4-102.1 also apply.

Data Center:

The Zoning Administrator previously determined that a data center is considered a "telecommunications facility," which is an allowed use by right in the R-12 through R-30 Districts, all commercial districts, all industrial districts, and all planned districts when shown on an approved development plan. As part of the Industrial Use classification, Clarion added Data Center as a separate use. Staff received feedback based on concerns about the potential impacts on adjacent residential areas, specifically relating to noise from generators and cooling equipment, as well as size. There was also discussion about enabling data centers to repurpose existing vacant office buildings. A Data Center was never envisioned nor intended to be included in residential or select commercial districts. In addition, it is not an explicitly permitted use today, but rather the result of a determination of the Zoning Administrator in an effort to find the most similar existing use. Based on potential impacts, staff recommends the use be restricted from certain districts where it would be allowed under today's Ordinance. As a result of the comments received and subsequent research, staff recommends that Data Centers be allowed as shown in the table above and subject to the following use standards. All of these standards are new standards that have been added since the release of the Industrial Uses document.

A. Data Center

Standards when permitted by right or by special exception:

- (1) In all districts except the I-4, I-5, and I-6 Districts, all equipment necessary for cooling, ventilating, or otherwise operating the facility must be contained within the exterior walls of the in an enclosed building where the use is located.
- (2) The following standards apply to Data Centers located in the C-3 and C-4 Districts:
 - (a) Any emergency power generators and emergency power supply equipment must be located within an enclosed building.
 - (b) The maximum size of the structure containing this use is 40,000 square feet in gross floor area. However, this size limit may be exceeded if the use is located in a building existing as of the effective date of this Ordinance or in accordance with [reference to special exception procedures].
- (3) In the I-2 and I-3 Districts, the maximum size of the structure containing the use is 80,000 square feet in gross floor area. However, this size limit may be exceeded in accordance with [reference to special exception procedures].

Goods Distribution Facility:

During the October 9, 2018, Development Process Committee meeting, the question was raised about "last mile distribution" and how this use would be classified and accommodated. Last mile distribution involves the movement of goods from a transportation hub (such as a Freight Distribution Hub or Warehouse use) to its final destination (such as a residence or business). As a general trend, major distributers and retailers are choosing to locate small, local warehousing in more urban and densely populated areas rather than in larger, more remote traditional warehouses. This allows for the last leg of the delivery to be located nearby the end destination point, reducing both transportation impacts on the surrounding area and cost to the distributor. Examples include an array of startup companies, such as *Deliv* and *TForce Final Mile*.

The previous industrial use document included Freight Distribution Hub, which has a definition intended for heavier industrial-scale delivery and reshipment, including the parking and storage of semitrailers and tractor-trailers. Rather than include a series of use standards to permit a smaller, more retail-focused version of this use that would be compatible in commercial and planned districts, staff proposes a new use called "Goods Distribution Facility," which would be defined as follows:

Goods Distribution Hub:

A facility for the receipt, transfer, short-term storage, and dispatching of retail and other similar goods transported by truck.

To limit potential impacts, staff has included standards regulating the maximum size of the facilities, which align with the sizes proposed in the ongoing Small-Scale Production Zoning Ordinance amendment. Standards have also been included limiting the types of delivery vehicles used in the distribution of goods from the site. Through the addition of a smaller-scale distribution and warehouse use, businesses are able to locate in retail areas closer to consumers,

zMOD Industrial Uses Follow-Up November 28, 2018 Page 4

rather than be restricted to the traditional industrial warehouse approach. Staff recommends that this use be permitted in the C-4 through C-8 Districts, as well as in the PDC and PTC Districts. The use is not proposed in the I-I through I-3 Districts, as these districts are intended to serve lower-intensity office, research, and development type uses. In addition, the use is not proposed in the I-4 through I-6 Districts, as it would be permitted in those districts at a larger scale under the Freight Distribution Hub or Warehouse use. Staff recommends Goods Distribution Facility be permitted subject to the following standards:

B. Goods Distribution Hub

Standards when permitted by right:

- (1) The use, parking, or storage of semitrailers, including tractor or trailer units, is not permitted in conjunction with the distribution of goods.
- (2) In the C-4 and C-5 Districts, the maximum size is 6,000 square feet of gross floor area.
- (3) In the C-6 through C-8 Districts, PDC, and PTC Districts, the maximum size is 10,000 square feet of gross floor area.

Self-Storage:

As part of the October 2018, outreach meetings, Clarion requested feedback on whether a Selfstorage facility should be changed from a special exception use to by right in the C-8 (Highway Commercial) and I-3 (Light Intensity Industrial) Districts. Self-storage facilities (currently "mini-warehousing" in the Ordinance) typically have few employees and low trip generation; however, they are often located along busy roadways. The C-8 District provides for commercial and service uses along heavily traveled highways. It is often configured as a narrow strip along arterials with residential uses on adjacent properties to the rear. Because Self-storage is intended to provide for personal storage of seldom-used items, the use does not support the activation of the commercial area, and staff recommends maintaining the requirement for special exception approval in the C-8 District. In addition, it is recommended that a standard, borrowed from the PTC District, be added to not allow individual storage by doors, storage items, or lighted hallways to be visible from the outside of the storage structure.

As the I-3 District is an industrial district intended to provide for research and development, office, manufacturing, and other clean industries, staff recommends simplifying the ability to locate Self-storage in the I-3 District by changing it from a special exception use to by right, subject to use standards. The proposed standards are the same as the special exception standards, with the addition of several standards from the PDC and PTC District to require: a) loading and unloading areas to be located, screened, or enclosed to minimize adverse impacts on adjacent property; b) a minimum three-story structure that is office-like in appearance; and c) no individual storage bay doors, storage items, or lighted hallways along the lengths of the facades be visible from the outside. The proposed standards for the I-3 District are shown below:

C. Self-storage

Standards when permitted by right:

- (4) Incidental retail sale of storage-related items, including, but not limited to, boxes and packing tape, is permitted.
- (5) Storage units must be primarily for unused or seldom used items.
- (6) In the I-3 District, Self-storage is permitted by right if it complies with the following:
 - (a) Loading and unloading areas must be located, screened, or fully enclosed to minimize the potential for adverse impacts on adjacent property. All other activities associated with the use must be conducted completely indoors in a minimum three-story structure that is office-like in appearance.
 - (b) Loading docks are not permitted.
 - (c) No individual storage bay doors, storage items, or lighted hallways along the lengths of the building façades may be visible from the outside of the storage structure.
 - (d) Incidental parking or storage of trucks, trailers, or moving vans, except for purposes of loading and unloading, is not permitted.

Warehouse:

As part of the October 2018, outreach meetings, Clarion also requested feedback on whether Warehouse should be changed from not permitted to by right in the PTC and I-3 Districts. This question arises from the proposed removal of the Industrial/Flex use, which is permitted in the PTC District and is allowed with special exception approval in the I-3 District. Industrial/Flex allows warehousing if it is combined with at least one of the following uses: contractor's offices and shops; establishments for production, processing, assembly, manufacturing; wholesale trade establishments; or offices. To date, no special exception applications for Industrial/Flex have been approved in the I-3 District.

As warehousing is not consistent with the purpose and intent of the PTC District to create a high quality urban, mixed-use, transit, and pedestrian-oriented community, staff does not recommend adding the use to that district. As noted above, it is recommended that a Goods Distribution Facility be permitted in the PTC District. However, warehousing can be a compatible use in the I-3 District. It is noted that the County currently has 1,647 acres zoned in the I-3 District for office, research and development, and manufacturing uses. Staff recommends allowing warehousing with special exception approval in the I-3 District, subject to the general special exception standards.

Next Steps:

Staff is continuing to work with Clarion to prepare drafts of the other use classifications which will be posted for public review in winter/spring 2019. Following that, a consolidated draft of the use regulations for all of the classifications will be presented in May 2019. Revisions to the industrial uses will be incorporated into that consolidated draft.