Arlington Industrial Zoning District

HARRIMAN Site Analysis and Recommendations April 2020







Goals

- Understand the current uses and real estate assets in Arlington's industrial districts
- Establish a realistic picture of Arlington's market for all types of real estate uses in order to frame choices between jobs, diverse uses, and value
- Test the capacity of current zoning to attract development
- Propose zoning changes that can better attract desired development, serve the community, create jobs, and improve Arlington's public realm



Site Analysis and Test Fits

Zoning - Industrial

Setbacks -Front: 10 feet Side - 10 feet Rear - 10 feet

Height - 52 feet special permit 39 feet by-right

Reduced Height Buffer Area: When two different maximum height limits are specified for the same zoning district in any Table of Dimensional and Density Regulations in this Section 5, the lower limit shall apply to any lot or part of a lot located in a height buffer area unless it is determined as a specific finding of a special permit that the properties in the adjacent R0, R1, R2, or OS district would not be adversely affected due to existing use or topographic condition. Floor Area Ratio - 1.5

Building Coverage - N/A

Parking Requirement: Office: 1 per 500 s.f. Manufacturing: 1 per 600 s.f.

Bicycle Parking -Office: 0.30 spaces per 1,000 s.f. Manufacturing: 0.80 spaces per 1,000 s.f.

Loading -Office: 5,000 - 50,000 = 150,001 - 100,000 = 2100,001 - 150,000 = 3

Manufacturing: 5,000 - 20,000 = 1 20,001 - 40,000 = 2 40,001 - 120,000 = 3120,001 - 200,000 = 4

Community Benefits

Benefits for the community required to achieve a maximum height of 52 feet within the Reduced Height Buffer Area (Section 5.3.19). These benefits are described in the **Exceptions to Maximum Height Regulations in the Industrial District (Bonus Provisions)** beginning on page 54.

Forest Test Fit Parcels - Reduced Height Buffer Applies



USE	LOT SIZE (SF)	LOT SIZE (ACRES)	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
MANUFACTURING				31,000	1	26	26	31,000	39FT	52		2			
OFFICE				18,300	1	13	13	18,300		37		1			
TOTAL	94,878	2.18	142,317		2		39	49,300		89	101	3	35,350	31,000	28,528

Potential Annual Revenue Impact \$99,000	+	Potential Annual Cost Impact (\$10,000)	=	Potential Annual Fiscal \$89,000
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Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

al Impact



Forest Test Fit Parcels - Special Permit



USE	LOT SIZE (SF)	LOT SIZE	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
MANUFACTURING				28,790	1	26	26	28,790		48		2			
OFFICE				18,000	2	13	26	36,000		72		1			
TOTAL	94,878	2.18	142,317		3		52	64,790		120	128	3	41,994	28,790	24,094

Potential Annual Revenue Impact	Potential Annual Cost Impact	Potential Annual Fiscal
\$136,000	(\$14,000)	\$122,000

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

al Impact





WINTER SUNRISE 39 FT HEIGHT





WINTER SUNRISE 52 FT HEIGHT



WINTER 4:00 P.M. 52 FT HEIGHT

SHADOW STUDY

Forest Test Fit Parcels - Residential Option



Setbacks : Front: 10 feet Side - 10 feet Rear - 10 feet

Height: 35 feet

Floor Area Ratio:

Max. Lot Coverage:

Min. Usable Open Space:

Parking Require-1 sp. per efficiency dwelling unit;

1.15 space per 1-bedroom dwelling unit,

1.5 spaces per 2-bedroom dwelling unit,

2 spaces per 3 or more bedroom dwelling unit,

1 space per 5 units of public housing for the elderly.

Bicycle Parking:

1.5 per dweling unit (long term)

0.10 perdweling unit (short term)

	PARKING AREA	TOTAL BLDG.	OPEN GREEN AREA					
	REQUIRED (SF)	COVER. (SF)	(SF)					
٩	40,000	19,700	35,178					

Park Test Fit Parcels - Reduced Height Buffer Applies



USE	LOT SIZE (SF)	LOT SIZE (ACRES)	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
MANUFACTURING				64,000	1	26	26	64,000	39FT	107		3			
OFFICE				60,000	1	13	13	60,000		120		2			
TOTAL	209,071	4.80	313,606		2	39	39	135,000		227	230	5	79,450	64,000	65,621

Potential Annual Revenue Impact	Potential Annual	Cost Impact	Potential Annual Fisca
\$265,000	(\$28,00	00)	\$237,000

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

al Impact



HARRIMAN Site Analysis and Recommendations

SHADOW STUDY



Park Test Fit Parcels - Special Permit



USE	LOT SIZE (SF)	LOT SIZE (ACRES)	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
MANUFACTURING				52,000	1	26	26	52,000		87					
OFFICE				48,000	2	13	26	96,000		192					
TOTAL	209,071	4.80	313,606		3		52	148,000	52	279	280	5	98,000	52,000	59,071

Potential Annual Revenue Impact	Potential Annual Cost Impact	Potential Annual Fisc
\$316,000	(\$33,000)	\$283,000

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cal Impact



HARRIMAN Site Analysis and Recommendations

SHADOW STUDY





WINTER SUNRISE 39 FT HEIGHT



WINTER 4:00 P.M. 39 FT HEIGHT



WINTER SUNRISE 52 FT HEIGHT



WINTER 4:00 P.M. 52 FT HEIGHT

SHADOW STUDY

HARRIMAN Site Analysis and Recommendations

Park Test Fit Parcels



Wetland Regulated Buffer (Wetland Regulated Riverfro Master Plan - Town Bound Master Plan Base Map - Sc Parcels - For Gray Backgrc Impervious Surface - For B Street Sidewalk Street Island Roads - For Large Scale (fr Roads - For Small Scale (fo Major Road Local Road Master Plan Base Map - M Master Plan Base Map - W Master Plan Base Map - W

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April 2020

Dudley Test Fit Parcels (office + manufacturing)



USE	LOT SIZE (SF)	LOT SIZE (ACRES)	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
MANUFACTURING				19,500	1	26	26	19,500		33		1			
OFFICE				17,000	2	13	26	34,000		68		1			
TOTAL	69,786	1.60	104,679		3		52	53,500	52	101	104	2	35,175	19,500	15,111
			Potenti	al Annual Re \$114,0	evenue Ir 00	npact	Potentia	al Annual Cos (\$12,000)	st Impact	Pc	otential Ann \$1(ual Fiscal In)2,000	npact		

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

Dudley Test Fit Parcels (office)-Reduced Height Buffer Applies



		-	-	_				_	_		-	_			
USE	LOT SIZE (SF)	LOT SIZE (ACRES)	MAX. FAR 1.5	AREA PER FLOOR (SF)	NO. FLOORS	HT PER FLOOR (FT)	TOTAL HEIGHT (FT)	GROSS AREA (SF)	MAX. BLDG. HT. (FT)	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED (SF)	TOTAL BLDG. COVER. (SF)	OPEN GREEN AREA / LOADING (SF)
OFFICE				17,500	2	13	26	35,000		78		1			
OFFICE				15,188	1	13	13	15,188		34		1			
TOTAL	69,786	1.60	104,679		3		39	50,188	52	100	104	2	35,131	17,500	17,155
			Poter	ntial Annual \$114	Revenue .,000	e Impact	Potential Annual Cost Impact (\$12,000)				Potential A چ	nnual Fiscal 5102,000	Impact		

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.



200 ft wetland buffer







HARRIMAN Site Analysis and Recommendations

SHADOW STUDY



April 2020

Dudley Test Fit Parcels - Residential Option



Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

Setbacks : Front: 10 feet Side - 10 feet Rear - 10 feet

Height: 35 feet

Floor Area Ratio:

Max. Lot Coverage

Min. Usable Open Space:

Parking Require-1 sp. per efficiency dwelling unit;

1.15 space per 1-bedroom dwelling unit,

1.5 spaces per 2-bedroom dwelling unit,

2 spaces per 3 or more bedroom dwelling unit,

1 space per 5 units of public housing for the elderly.

Bicycle Parking:

1.5 per dweling unit (long term)

0.10 perdweling unit (short term)

	PARKING AREA	TOTAL BLDG.	OPEN GREEN AREA			
	REQUIRED (SF)	COVER. (SF)	(SF)			
١	28,000	16,000	25,786			

Dudley Test Fit Parcels



Wetland Regulated Buffer (Wetland Regulated Riverfro Master Plan - Town Bound Master Plan Base Map - Sc Parcels - For Gray Backgrc Impervious Surface - For B Street Sidewalk Roads - For Large Scale (fr Roads - For Small Scale (fo Major Road Local Road Master Plan Base Map - M Master Plan Base Map - W Master Plan Base Map - W Town Boundary - Gray Bac

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April 2020

Mystic Test Fit Parcels



1105							TOTAL	00000								TOTAL
USE	LUT SIZE SF	ACRES	MAX. FAR 1.5	FLOOR	FLOORS	FLOOR	HEIGHT	AREA	MAX. BLDG. HT.	REQ.	PARKING	SPOTS	REQUIRED	COVER.	AREA / LOADING	LAND AREA
MANUFACTURING				4,500	1	26	26	4,500		7						
OFFICE				3,775	1	13	13	3,775		8						
TOTAL	19,425	0.45	29,137				39	8,275	52FT	15	19	1	5,268	4,500	9,658	19,425

Potential Annual Revenue Impact	Potential Annual Cost Impact	Potential Annual Fisc
\$17,000	(\$2,000)	\$15,000

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

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HARRIMAN Site Analysis and Recommendations



April 2020

Mystic Test Fit Parcels - Residential Option





Keep lots separate and develop allowed residential density. (Three-family dwelling and two-family dwelling)

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USE	LOT SIZE SF	LOT SIZE ACRES	MAX. FAR 1.0	AREA PER FLOOR	NO. FLOORS	HT PER FLOOR	TOTAL HEIGHT	TOTAL UNITS	MAX. BLDG. HT.	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED	TOTAL BLDG. COVER.	OPEN GREEN AREA	TOTAL LAND AREA
RESIDENTIAL	12,700		12,700	4,230	3	10	30	3		6	6	N/A	-	4,230	3,810	12,700
RESIDENTIAL 2	6,725		6,725	2,240	3	10	30	1		2	2	N/A	-	2,240	2,018	6,725
TOTAL	19,425	0.45	-				30	4	35FT	8	8	N/A	-	-	9,658	19,425

If	Potential Annual Revenue Impact	Potential Annual Cost Impact	Potential Annual Fisca
4 Total Units	\$39,000	(\$12,000)	\$28,000

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

<u>Setbacks</u> : Front: 10 feet Side - 10 feet Rear - 10 feet

Height: 35 feet

Floor Area Ratio: 1.0

Max. Lot Coverage N/A

Min. Usable Open Space: 30%

Parking Require-

1 sp. per efficien-

cv dwelling unit:

ment:

1.15 space per 1-bedroom dwelling unit,

1.5 spaces per 2-bedroom dwelling unit,

2 spaces per 3 or more bedroom dwelling unit,

1 space per 5 units of public housing for the elderly.

Bicycle Parking :

N/A

al Impact

Mystic Test Fit Parcels - Residential Option





Keep lots separate and develop allowed residential density. (Three-family dwelling and two-family dwelling)

the process of the second process of the sec)								
USE	LOT SIZE SF	LOT SIZE ACRES	MAX. FAR 1.0	AREA PER FLOOR	NO. FLOORS	HT PER FLOOR	TOTAL HEIGHT	TOTAL UNITS	MAX. BLDG. HT.	NO. PARK. REQ.	PROVIDED PARKING	LOADING SPOTS	PARKING AREA REQUIRED	TOTAL BLDG. COVER.	OPEN GREEN AREA	TOTAL LAND AREA
RESIDENTIAL	12,700		12,700	4,230	3	10	30	3		6	6	N/A	-	4,230	3,810	12,700
RESIDENTIAL 2	6,725		6,725	2,240	3	10	30	1		2	2	N/A	-	2,240	2,018	6,725
TOTAL	19,425	0.45	-				30	4	35FT	8	8	N/A	-	-	9,658	19,425

If	Potential Annual Revenue Impact	Potential Annual Cost Impact	Potential Annual Fisca
12 Total Units	\$118,000	(\$35,000)	\$84,000

Disclaimer: The development capacities of these parcels are based on GIS data and are for illustrative purposes only. Actual building dimensions will vary as per land survey plans and final building and zoning code requirements.

<u>Setbacks</u> : Front: 10 feet Side - 10 feet Rear - 10 feet

Height: 35 feet

Floor Area Ratio: 1.0

Max. Lot Coverage N/A

Min. Usable Open Space: 30%

Parking Require-

1 sp. per efficien-

cv dwelling unit:

ment:

1.15 space per 1-bedroom dwelling unit,

1.5 spaces per 2-bedroom dwelling unit,

2 spaces per 3 or more bedroom dwelling unit,

1 space per 5 units of public housing for the elderly.

Bicycle Parking :

N/A

al Impact

Recommendations

Zoning **Recommendations Objectives**

- Support an increase in the size and variety of spaces for light manufacturing and office.
- Establish parking requirements that support these uses but also minimize the environmental impact of parking surfaces.
- Leverage the Minuteman Bikeway as an alternative mobility mode.
- Require sustainable and resilient urban design practices to protect the environment and mitigate the impact of new construction.
- Support economic development while maintaining the cultural and architectural character of Arlington.

Zoning **Recommendations**

Strategies

- Revise zoning regulations to require improved building placement on the site to enhance the public built environment and protect water quality through enhanced stormwater management.
- Evaluate special permit requirements for building heights and setbacks.
- Provide general recommendations for the entire Industrial District to address the public realm in order to improve opportunities for walkability and the sense of place.
- Provide design recommendations that protect the town of Arlington's environmental assets and reduce the impact of the built environment.

Zoning Recommendations

Applicability

- New development
- Addition or expansion of an existing building greater

than 50% of its existing footprint.

Proposed Use Regulations

Industrial: Provided the following:

- Manufacturing process residue (vapor, dust, fumes, etc) is treated and/or disposed of within the facility, to reduce negative environmental impact on the town or Arlington.
- Proper spill prevention, control, and clean up policies.
- Outdoor process and storage is properly concealed and screened from the public way.
- Proper waste handling and disposal.



https://azbigmedia.com/real-estate/big-deals/industrial/analysis-light-industrial-sites-take-

Office: Including but not limited to professional, business, medical or dental office, research and development.



https://www.levyarchitects.com/2021

Proposed Use Regulations

Breweries, distilleries, and wineries: Provided that the tap room hours of operation open to the public do not represent disturbance to adjacent residential uses and that they follow the State of Massachusetts requirements for licensing and operations.



https://growlermag.com/now-open-or-damn-close-able-seedhouse-brewery/

Proposed Use Regulations

Food production facilities: Including food and beverage manufacturing plants that transform raw agricultural materials into products for intermediate or final consumption by applying labor, machinery, energy, and scientific knowledge. Provided that the facilities:

- Properly store equipment and remove litter and waste within the immediate vicinity of the plant buildings or structures as to avoid becoming a breeding place, or harborage forpests.
- Constantly check for pests and pest infestation
- Locate and operate fans and other air-blowing equipment in a manner that minimizes the potential for contaminating the building and its surroundings to avoid health hazards of the town of Arlington residents.

to avoid exposure to the public.



https://www.meatpoultry.com/articles/19949-john-soules-foods-to-

• Vents shall be forbidden to be placed on the façade adjacent to sidewalks or the Minuteman Bikeway

Proposed Use Regulations

Flex Spaces: A combination of commercial uses, such as office, manufacturing, distribution, r&d, and/or retail uses where they meet the following criteria:

(1)All of the uses within the building are required to be allowed as principal uses within the Arlington Industrial Zone.

(2)Changes in products, services, and square footage of uses will not require further approval for use, if the Building Inspector determines the uses and property are otherwise in conformance with the Bylaws.

(3) The floor area of each use is unrestricted except for uses where a limitation on size or density is present. In this case, the floor area of



https://leechanggroup.com/inland-empire/ontario-ca-light-

such use shall be at or below the given limitation.

Proposed Use Regulations

Maker Space: A building or portion thereof used for the on-site production of parts or finished products by individual or shared use of handtools, mechanical tools, and electronictools. Maker Spaces may include space for design and prototyping of new materials, fabrication methodologies, and products, as well as space for packaging, incidental storage, sales, and distribution of such projects. Typical uses include but are not limited to: electronic goods; printmaking; leather products; jewelry and clothing/apparel; metal work; furniture; woodworking and cabinet shops; glass or ceramic production; and paper manufacturing. Maker Spaces may host classes or networking events which are open either to the public or to current and prospective members.



https://www.facebook.com/pg/nebraskainnovationstudio/events/

Proposed Use Regulations

Work Only Artist Studio: A space used by an artist for the creation of any visual art or craft, including but not limited to, painting, drawing, photography, sculpture, and pottery; of written works of fiction or nonfiction; or any performing art, whether for live or recorded performance, including music, dance, and theater. Retail sales of art produced on-site and arts instruction by the artist are allowable accessory uses. An artist studio shall not be used by more than one artist, except for occasional and time-limited collaborations with other artists.



https://art.gmu.edu/facilities/

Proposed Use Regulations

Coworking Space: A building or portion thereof consisting of a shared office environment, which contains desks or other workspaces and facilities, including but not limited to, dedicated workstations, office suites, meeting rooms, event space, resource libraries, and business or administrative support services, and is used by a recognized membership who share the site to interact and collaborate with each other as part of a community. Rules for membership and participation in the coworking space are explicit, transparent, and available to the public. Coworking spaces may host classes or networking events which are open either to the public or to current and prospective members.



https://coworkinginsights.com/coworking-space-audience-and-culture-types/

Proposed Use Regulations

Vertical Farming: A building used for the practice of producing food on vertically inclined surfaces in vertically stacked layers. This use shall be approved by **special permit** to make sure operations such as lighting, gases, humidity, and temperature don't affect the surrounding microclimate and the well-being of adjacent uses.



https://www.wyomingpublicmedia.org/post/vertical-harvest-

Mixed Use in Industrial District: A combination of industrial and office uses in a single multi-story structure less than 10,000 sq. ft. gross floor area to maximize space usage and promote a vibrant, pedestrian-oriented environment.

Mixed Use in the industrial district shall not include residential uses.

For structures more than 10,000 sq. ft. gross floor a Special Permit will be required.



www.stevelaursen.com/2-mixed-use-industrial-buildings-get-the-green-light-on-

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts Existing

Class of Use	
Eating & Drinking Establishments	
Restaurant	v
< 2,000 sq. ft. gross floor area.	
=> 2,000 sq. ft., and any restaurant that	
is principal use on lot of 10,000 sq. ft. or	

SP

Proposed

Y

April 2020

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts

Existing	Proposed	
Class of Use	•	
Agricultural		
Farm, non-exempt, or market garden provided that all goods or produce sold are grown on the premises.	Y	Y
Vertical Farming.	-	SP

April 2020

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts Existing

Office Uses		I	
Including but not limited to professional, business, or medical or dental offices.			
 Less than 3,000 sq. ft. gross floor area per building. 	Υ	Y	Less than area per b
• 3,000 sq. ft. or more gross floor area per building.	SP	SP	5,000 sq. t per buildin
•Office, display or sales space providing not more than 25% of floor space is used for assembling, packaging and storing commodities.	Y	Y	Percentag assemblin commodi

5,000 sq. ft. gross floor uilding.

Proposed

ft. or more gross floor area ng.

ge of space used for office, ng, packaging and storing ities is **flexible.**

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts **Existing**

Wholesale Business & Storage	
Wholesale business in enclosed facility.	Υ
Office, display or sales space of a wholesale, jobbing, or distributing establishment provided that no more than 25% of floor space is used for assembling, packaging and storing of commodities.	Y

Υ

V

flexible.

Percentage of space used for office, assembling, packaging and storing commodities is

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts Existing

Existing			sed
Research, Laboratory, Related Uses			
Offices with data processing facilities or laboratories and testing facilities, which may include minor assembly or fabrication activities limited to 25% of the floor area.	SP	SP	Offices with facilities or facilities, w assembly o
			without lin the floor a

with data processing or laboratories and testing s, which may include minor oly or fabrication activities t limited percentage of or area.

5.6.3 Use Regulations for MU, PUD, I, T, and OS Districts

Existing			Proposed	
Other Principal Uses	I	I		
Mixed-use * Mixed-use in Industrial Zones shall not include residential uses	SP*	Y	Less than floor area	
Shan not include residential uses.		SP	10,000 so floor area	
			* Mixed-u the Use I section a include r	
	1			

n 10,000 sq. ft. gross a per building*.

q. ft. or more gross a per building*.

use as stipulated in Regulation Definitions and where it shall not residential uses.

Dimensional Standards

5.6.2. Dimensional Standards

Existing ** Reduced Height Buffer Area 5.3.19 the lower limit shall	Front Yard	Side Yard	Rear Yard	Landscape Open Space Min.	Max. Lot Coverage	Max. Ht.	Max. Stor.	Max. FAR
apply unless it is determined as a special permit"	10 ft	10 ft	10 ft	-	_	52 ft** 39 ft	4** 3	1.50
Proposed * Maximum building height is 52 feet or 4 stories, subject to	Front Yard	Side Yard	Rear Yard	Landscape Open Space Min.	Max. Lot Coverage	Max. Ht.	Max. Stor.	Max. FAR
the Density Bonus requirements.	6ft-10 ft minmax.	10 ft	10 ft	-	-	52 ft*	4	1.50

Dimensional Standards

5.6.2. Dimensional Standards

Existing

LAND IN R0, R1, R2, OS IS LOCATED	LOWER HEIGHT SHALL APPLY
BETWEEN NORTHWEST AND NORTH- EAST	WITHIN 200 FEET
EASTERLY, BETWEEN NORTHEAST AND SOUTHEAST, OR WESTERLY BE- TWEEN NORTHWEST AND SOUTH- WEST	WITHIN 150 FEET
SOUTHERLY, BETWEEN SOUTHEAST AND SOUTHWEST	WITHIN 100 FEET

5.3.19 Reduced Height Buffer Area:

A height buffer area is defined as a lot or part of a lot which is located at a lesser distance from any land, not within a public way.

Proposed

a. Height Limit

Reevaluating the existing 52 foot height restriction in the Industrial Zoning District will increase the efficiency of land usage and minimize the building footprints providing more opportunity to add green infrastructure which will manage stormwater and reduce the heat island effect.

i.Maximum building height is 52 feet or 4 stories, subject to the amenity requirements under the proposed Development Standards.

Dimensional **Standards**

5.3.7 Screening and Buffers

Existing

5.3.7 Screening and

Buffers: Industrial and

Business Districts and Parking Lots

A solid wall or solid wooden fence, five to six feet high, complemented by suitable plantings, may be substituted for one-half the required width of such landscaped buffer strip.

Proposed

b. Setbacks

Reducing the setbacks on the front yard helps to push buildings towards the sidewalk, accommodating parking to the side and rear of the lot, and to create a sense of building edge to improve the pedestrian experience. i. Front: Minimum: 6 feet

Maximum: 10 feet

Side - 10 feet Rear - 10 feet Abutting Residential District:

ii.Setbacks shall be measured from lot line to face of building façade.

iii. The use of rain gardens, bioswales, and wetlands restoration to control runoff and manage stormwater on-site within setbacks.

iv. Fences within the abutting setback to the Minuteman Bikeway shall be prohibited.

25 feet / 12.5 feet with fence and screening as defined in section 5.3.7

Parking Requirements

6.1.6. Table of Off-Street Loading and Unloading Regulations

6.1.4. Parking Requirements	6.1.6. Loading Requirements	6.1.12. Bicycle Parking Requirem		
a. Manufacturing parking requirements are 1 per 600 GFA	a. Manufacturing: 5,000 SF - 20,000 SF= 1 20,001 SF - 40,000 SF= 2	a. Manufacturing bicycle parking are 0.8 per 1,000 GFA long term GFA short term		
b. Office parking requirements are 1 per 500 GFA	b. Office: 5,000 SF - 50,000 SF= 1 50,001 SF -100,000 SF=2	b. Office bicycle parking requirem per 1,000 GFA long term / 0.5 pe short term		
Parking Requirements	Loading Requirements	Bicycle Parking Requirements		
a. Manufacturing parking requirements will be 1 per 1,000 GFA	a. Manufacturing: 5,000 SF - 20,000 SF= 1 20,001 SF - 40,000 SF= 2	a. Manufacturing bicycle parking requ per 1,000 SF b. Office bicycle parking requirements		
 b. Office parking requirements will be 1 per 500 GFA 	b. Office: 5,000 SF - 50,000 SF= 1 50,001 SF - 100,000 SF=2	1,000 GFA		

nents

requirements / 0.6 per 1,000

ments are 0.3 er 1,000 GFA

irements will be 1

s will be 0.8 per

Parking Spaces Location and Standards

Existing

6.1.10 Location of Parking Spaces

Required off-street parking spaces shall be provided on the same lot as the principal use they are required to serve.

d. (1) The surfaced area shall be set back at least 10 feet from front lot lines and from all lot lines of abutting property used for residential purposes;

For side and rear lot lines the setback need only be five feet if the setback includes a solid wall or solid wooden fence, five to six feet in height complemented by suitable plantings.

Proposed

The parking area shallbe
 located to the rear or side of the
 primary building. Parking areas
 shall not occupy the front setback
 and shall not be located between
 the street and the principal façade.

 Parking areas shall have a minimum 6'foot landscaped buffer between the property line and the beginning of the parking surface. **3.** Any loading and/or delivery access shall be located at the rear of the building or in an alley. In the case of demonstrated hardship, an alternative may be approved by the Arlington Redevelopment Board.

4. Parking areas above the required amount shall be covered with pervious materials.

Parking Spaces Location and Standards

5. If more than 80 percent of the parking area is covered with pervious not covered with pervious surfaces, surfaces, the 10 foot setback from abutting residential property lines may be reduced to 5 feet. This buffer zone shall be planted with vegetation and screened with a solid fence five to six feet in height.

The use of rain gardens, 6. bioswales, and wetlands restoration to control runoff and manage stormwater on-site is strongly encouraged.

7.For the remaining parking areas pavement reflectance for lower surface temperature and heat absorption is recommended (high albedo). Greater reflectance can be achieved by:

a. Roller-compacted concrete b.Concrete over asphalt (white topping and ultra thin white topping) c.Use of light-colored aggregate in asphalt.

d. Asphalt, concrete and pavers with modified colors

8. Shading of parking surfaces is strongly encouraged by installing trees within the landscaped areas as defined by Section 6.1.11 D (6) in the town of Arlington bylaws.

9. Solar panels are encouraged as shading device for parkingsurfaces.

10. All parking surfaces shall comply with requirements of Section E on 3.4.4. Environmental Design **Review Standards.**

Parking Spaces Location and Standards

Examples of Standards for Parking Areas



Parking Lot Landscaping Ordinance-Village of Glenview



Parking Lot Landscaping Ordinance-Village of Glenview



Parking Lot Landscaping Ordinance-Village of Glenview



Parking Lot Landscaping Ordinance-Village of Glenview



https://www.lacrosseareawaters.org/protect-at-work/



https://waylandstudentpress.com/51402/articles/solarpanels-installed-in-whs-parking-lots/

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Proposed

A. Transparency

The following requirements apply to all new development or additions over 50% of the existing footprint:

1. Transparency: the required minimum transparency of the ground floor principal façade is 50% of the area measured between 2 and 8 feet in height from the level of the finished sidewalk.

2. The ARB may waive the requirement above for industrial uses which need to shield proprietary

blinds or integrated shutters or slats, vertical or horizontal.

3. Façades that are not required to meet the minimum transparency requirements shall be articulated every 50 to 80 feet.

4. Each building shall have a clearly defined two public streets.

processes. Windows may be shielded with interior

- primary entrance that faces the principal street. A corner door may be used for a building that faces

Proposed

B. Pedestrian Amenities

All new development or additions over 50% of the existing footprint must provide at least one (1) of the following. For lots that abut the Minuteman Bikeway, an additional amenity is required along the abutting facade or in the abutting setback:

1. Four (4) or more fixtures of downcast, (90-degree cutoff or fully shielded) pedestrian-scale lighting per each 30-50 feet of frontage, adequately spaced to create even light distribution.

2. Urban landscaping features: a.Two (2) street trees every 35 linear feet of streetscape; or streetscape.

public per development.

4. One (1) artful rainwater collection system. (Refer to Artful Rainwater Design https:// artfulrainwaterdesign.psu.edu/about).

5. Seating accessible to the public.

b.Irrigated planter boxes every 15 linear feet of

3. One (1) piece of interactive art accessible to the

Proposed

C. Exceptions to Maximum Height Regulations in the Industrial District (Bonus Provisions)

For new development or additions that would otherwise be subject to 5.3.19 Reduced Height Buffer Area, a maximum height of 52 feet or four stories is allowed following development subject to the standards:

1. Provide one (1) of the following **sustainable** roof infrastructure components:

i. Install a vegetated or green roof over 50% of the roof area.

ii. Use highly reflective materials on 75% of the roof area.

iii. Provide 100 % high albedo concrete topping.

iv.Install a blue roof over 50% of the roof area to provide initial temporary water storage and then gradual release of stored water.

2. Solar power infrastructure which provides a minimum of 25% of the total energy required

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for the operations of the development. The area required for the solar power installation shall count towards the areas required for vegetated, highly reflective materials, or high albedo concrete located at the roof of the building.

3. 100% clean heating and cooling sources

using one (1) of the following:

- i. air source heat pumps ii.ground source heat pump (where not in detriment to underground water resources)
- iii. modern wood heating
- iv. solar hot water.

4.100% retention and treatment of stormwater on site.

5. Establish a waste reduction and recvcling **program**. for 85% of waste generated within the building.

to use **public transportation and bicycle** transportation to commute from/to work.

6.Implement an incentives program for employees

7.Implement a temporary <u>erosion and</u> <u>sedimentation control</u> plan for all new construction activities associated with the project.

8.Provide at least four (4) of the **Pedestrian Amenities** defined earlier.

9.For lots abutting the **Minuteman Bikeway**, at least one Pedestrian Amenity is required on the abutting facade or in the abutting setback.

HARRIMAN Site Analysis and Recommendations

Development Standards

Pedestrian Friendly Elements Examples

A. Transparency

Façades articulated every 50 to 80 feet..



https://www.boston.com/news/commentary/2015/07/06/inchestnut-hill-mall-is-a-four-letter-word

B. Pedestrian Amenities Pedestrian-scale lighting



https://www.wbdg.org/resources/effective-site-security-design

B. Pedestrian Amenities One (1) piece of interactive art



https://www.pinterest.ch/pin/140807925826545553/

B. Pedestrian Amenities

Urban landscaping feature



http://www.landscapearchitecture.com/datsheet/ tournesolsiteworks/tournesolsiteworks.html

B. Pedestrian Amenities

Urban landscaping feature



https://www.showcase.com/4957-allison-pky-vacavilleca-95688/18095269/

B. Pedestrian Amenities

Artful rainwater collection system



https://artfulrainwaterdesign.psu.edu/project/southwest-

B. Pedestrian Amenitie Seating accessible to the public.



http://cbbel.com/madison-street-streetscape/

Green Infrastructure Examples

C. Density Bonus

Roof area with vegetated landscape



https://www.youtube.com/watch?v=6XApzoTZS6k

C. Density Bonus

High albedo concrete topping



https://www.buildings.com/article-details/articleid/21182/ title/are-cool-pavements-all-they-re-cracked-up-to-be-

C. Density Bonus

Roof area with highly reflective materials



https://www.networx.com/article/reflective-roofcoatings-for-asphalt-roo

C. Density Bonus

Solar power infrastructure on roof



ballast-mounted-solar-right-for-your-flat-roof/

C. Density Bonus Blue roof.



https://www.networx.com/article/reflective-roofcoatings-for-asphalt-roo

C. Density Bonus

Solar hot water



https://www.everguardsolar.com/uncategorized/isballast-mounted-solar-right-for-your-flat-roof/

C. Density Bonus Ground source heat pump



https://www.networx.com/article/reflective-roofcoatings-for-asphalt-roo

C. Density Bonus

Modern wood heatsource

