# ADDISON, TEXAS





# UNIFIED DEVELOPMENT CODE PART 2: DEVELOPMENT STANDARDS

SEPTEMBER 2020 PUBLIC DRAFT



# **TABLE OF CONTENTS**

Article 1: General Provisions1				
Arti	cle 2:	Zoning Districts	1	
Arti	cle 3:	Use Regulations	1	
Arti	cle 4:	Development Standards	2	
4.1		DSE		
4.2		cability		
	4.2.1 4.2.2	Development Standards Applicability Table Minor Redevelopment: Tier 1		
	4.2.3	Major Redevelopment: Tier 2	3	
	4.2.4 4.2.5	Timing of Applicability Planned Development (PD)		
4.3		S		
	4.3.1	Generally		
	4.3.2	Flood Hazard Reduction		
4.4		ng and Drainage		
4.5		ss and Circulation		
	4.5.1 4.5.2	Purpose Applicability		
	4.5.3	Developer Responsibility for Access and Circulation Improvements	10	
	4.5.4	Streets, Alleys, and Vehicular Circulation		
	4.5.5 4.5.6	Driveways and Access Vision Clearance		
	4.5.7	Pedestrian Circulation	16	
	4.5.8	Bicycle Circulation		
4.6		ng and Loading		
	4.6.1 4.6.2	Purpose Applicability		
	4.6.3	Calculations		
	4.6.4	Minimum Off-Street Vehicle Parking Requirement		
	4.6.5 4.6.6	Maximum Off-Street Vehicle Parking Allowed Parking Alternatives		
	4.6.7	Vehicle Parking Layout and Design		
	4.6.8	Vehicle Loading Areas		
	4.6.9 4.6.10	Drive-Through Facilities Bicycle Parking		
	4.6.10	Use of Parking Areas		
	4.6.12	Maintenance		
4.7	Lands	scaping, Buffering, and Fences	39	
	4.7.1	Purpose		
	4.7.2 4.7.3	Applicability Landscape/Irrigation Plans		
			10	

	4.7.4	Minimum Landscaping Required	
	4.7.5	General Landscape Standards and Specifications	
	4.7.6	Tree Replacement and Protection	
	4.7.7	Trees and Plant Materials on Public Property	51
	4.7.8	Buffering	
	4.7.9	Screening	
	4.7.10	Fences	
	4.7.11	Installation and Maintenance	
4.8	Site a	nd Building Design	62
	4.8.1	Purpose	
	4.8.2	Applicability	
	4.8.3	Residential Site and Building Design	
	4.8.4	Mixed-Use and Nonresidential Site and Building Design	
	4.8.5	Parking Structure Design	
	4.8.6	Neighborhood Transition Standards	74
4.9	Exter	ior Lighting	75
	4.9.1	Purpose	
	4.9.2	Applicability	
	4.9.3	Administration	
	4.9.4	Prohibited Lighting Types	
	4.9.5	General Lighting Standards (option 1: simplest)	
	4.9.6	General Lighting Standards (option 2: more detailed)	
	4.9.7	Installation and Maintenance	
4.10	Signs		81
A rti		Subdivision Standards	07

Arti	icle 5:	Subdivision Standards	
5.1	Gene	eral Provisions	82
	5.1.1	Purpose	
	5,1,2	Applicability	
	5.1.3	Compliance and Enforcement	
	5.1.4	Withholding Improvements	
	5.1.5	Annexation	
	5.1.6	Platting Requirements	
5.2	Subd	livision Design Standards	85
	5.2.1	General	
	5.2.2	Lot Planning	
	5.2.3	Block Layout	
	5.2.4	Street Design and Construction	
	5.2.5	Private Street Regulations	
	5.2.6	Alternatives to Subdivision Standards	
5.3	Subd	livision Improvements	91
	5.3.1	General Standards	
	5.3.2	Storm Sewers	
	5.3.3	Sanitary Sewers	
	5.3.4	Water	
	5.3.5	Street Lighting	
	5.3.6	Sidewalks	
	5.3.7	Parkland Dedication	
	5.3.8	Park Development Fee	

Article 6: Administration and Procedures			99
Arti	icle 7:	Definitions	
7.1	Rule	s of Construction	
	7.1.1	Meanings and Intent	
	7.1.2	Headings, Illustrations, and Text	
	7.1.3	Lists and Examples	
	7.1.4	Computation of Time	
	7.1.5	Technical and Non-Technical Terms	
	7.1.6	Mandatory and Discretionary Terms	
	7.1.7	Conjunctions	
	7.1.8	Tenses, Plurals, and Gender	
	7.1.9	Titles and Headings	
7.2	Use-l	Related Definitions	
7.3	Othe	er Defined Terms	
		Flood Definitions	

Appendix A: Engineering and Landscaping Manual	.125
Engineering	125
Master Transportation Plan and Pavement Requirements	125
Landscaping	126

# **Article 1: General Provisions**

[To be drafted in Part 3]

# **Article 2: Zoning Districts**

[Submitted with Part 1]

# **Article 3: Use Regulations**

[Submitted with Part 1]

### 4.6 Parking and Loading

#### Commentary

This is a new section that consolidates off-street parking and loading standards from several sections of the *Code of Ordinances*. This draft includes a new table of minimum vehicle parking requirements that corresponds to the table of allowed uses presented in Part 1 (ensuring that each proposed land use type has an associated off-street parking requirement). Several other new and revised sections are included, including parking alternatives, vehicle parking layout and design, vehicle loading areas, drive-through facilities, and use of parking.

**Peer community comparison.** Outside of this draft, we have prepared a parking comparison table using the use breakdown of Section 4.6.4 to compare the minimum required off-street parking standards proposed for Addison to those of surrounding communities. Generally, the Addison standards are equivalent to or less restrictive than peer communities excluding Carrolton where there are several use types (e.g. office, restaurant, vehicle repair and sales) with even less restrictive standards than Addison.

The proposed maximum off-street vehicle parking allowance in Section 4.6.5 would also be somewhat unique in north Texas, but not in other parts of the country. Other local communities generally either do not set maximums or only require them for a small amount of specific uses. (The exception is Plano, where the maximum is set at 110% of the required minimum number of off-street spaces for all uses unless otherwise required.)

#### 4.6.1 Purpose<sup>27</sup>

This section is intended to regulate the amount and design of off-street parking and loading for different land uses and to help protect the public health, safety, and general welfare by:

- A. Avoiding and mitigating traffic congestion and adverse impacts on residential neighborhoods;
- B. Providing necessary access for service and emergency vehicles;
- **C.** Providing for safe and convenient interaction between vehicles, bicycles, pedestrians, and other modes of travel;
- D. Encouraging multi-modal transportation options and enhanced pedestrian safety;
- **E.** Providing flexibility to respond to the transportation, access, and loading impacts of various land uses in different areas of the town;
- **F.** Reducing stormwater runoff, reducing heat island effect from large expanses of pavement, improving water quality, and minimizing dust pollution; and
- **G.** Avoiding and mitigating the adverse visual impact and inefficient use land of large concentrations of exposed parking;
- H. Maximizing the use of on-street parking, except along arterial thoroughfares.

#### 4.6.2 Applicability

The standards of this section shall apply to all development that meets the applicability thresholds established in Section 4.2: *Applicability*.

#### 4.6.3 Calculations

#### A. Generally

1. All parking and loading requirements that are based on square footage shall be calculated on the basis of gross floor area of the subject use, unless otherwise specified.

<sup>&</sup>lt;sup>27</sup> Mostly new, some content taken from the Belt Line parking intent statement in current Article XIX.A(V)(A)(1).

- 2. When measurements of the minimum number of required parking spaces for vehicles or bicycles result in a fractional number, any fraction of shall be rounded up to the next higher whole number.
- 3. When measurements of the maximum number of required parking spaces for vehicles or bicycles result in a fractional number, any fraction of 0.5 or larger shall be rounded down to the next lowest whole number.
- 4. The following types of parking spaces shall not count towards the maximum parking requirement:
  - a. On-street parking spaces provided pursuant to paragraph 4.6.6D;
  - b. Designated accessible parking;
  - c. Parking spaces intended for storage of business vehicles, such as fleet vehicles, delivery vehicles, or vehicles on display associated with sales or rental; and
  - d. Structured parking, underground parking, and parking within, above, or beneath the building(s) it serves.
- 5. Lots containing more than one use shall provide parking and loading based on the shared parking calculations in paragraph 4.6.6A.

#### B. Unlisted Uses<sup>29</sup>

For uses not listed in Subsection 4.6.4: Minimum Off-Street Vehicle Parking Requirement or Subsection 4.6.5: Maximum Off-Street Vehicle Parking Allowed, the Director is authorized to establish minimum and maximum parking requirements pursuant to paragraph 4.6.4A: Director Determination.

#### 4.6.4 Minimum Off-Street Vehicle Parking Requirement

Each development or land use subject to this section pursuant to Subsection 4.6.2: *Applicability*, shall provide at least the minimum number of off-street vehicle parking spaces required below, unless otherwise provided in this UDC.

#### Commentary

DU - dwalling unit

This new table of minimum vehicle parking requirements corresponds to the table of allowed uses presented in Part 1 (ensuring that each proposed land use type has an associated off-street parking requirement). The current minimum parking requirement for each use is listed (if one exists) in the middle column for comparison against the new proposed requirement. Some existing parking requirements include a broad range of land use types (e.g. "service, general retail"). In these cases, we used our judgment to assign a current parking standard to the proposed land use type most closely related to it. Proposed changes are indicated with footnotes. The current standards column will be removed prior to adoption. This draft includes new minimum parking standards for the Town's consideration. This draft includes a new maximum parking standard of 125 percent of the parking required, except for residential uses that have a set maximum of 2 spaces per dwelling unit.

The current code does not specify parking standards for many uses, as can be seen in the table below. We have suggested new standards for all use types for discussion purposes, based generally on Texas and national research. We heard differing feedback as to whether current standards are too high or too low. We were not overly aggressive with the suggested new minimums in this draft (knowing that the Town is very auto-dependent). The applicability section can be more aggressive in setting exemptions for areas where parking ratios may not need to be as high (e.g., mixed-use areas).

<b>bo</b> – dweining unit <b>3q. it.</b> – square reet	GFA - gross hoor area	
Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Residential		
Household Living		
Cottage development (NEW)		1 space per DU
<sup>29</sup> New.		

4.6.4 Minimum Off-Street Vehicle Parking Requirement

<b>DU</b> = dwelling unit <b>sq. ft.</b> = square feet <b>0</b>	<b>GFA</b> = gross floor area	
Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Dwelling, duplex	UC-Res, UC-Com, Belt Line: 1 per bedroom (2 per unit max)	1 space per DU
Dwelling, fourplex	UC-Res, UC-Com, Belt Line: 1 per bedroom (2 per unit max)	1 space per DU
Dwelling, live/work	UC-Res, UC-Com, Belt Line: 1 per bedroom (2 per unit max)	1 space per DU
Dwelling, multifamily	MXR: 1 space per bedroom (2 per unit max)	Studio: 0.5 spaces per DU 1 Bedroom: 1 space per DU 2 Bedroom: 1.5 spaces per DU 3 Bedroom: 2 spaces per DU
Dwelling, single-family (attached)	R-1 and R-16: 2 spaces per DU	2 space per DU
Dwelling, single-family (detached)	R-1 and R-16: 2 spaces per DU	2 spaces per DU
Dwelling, triplex	UC-Res, UC-Com, Belt Line: 1 per bedroom (2 per unit max)	1 space per DU
Manufactured home development (HUD-Code)		1 space per DU
Group Living		
Assisted living facility		1 space per 6 patient beds
Continuing care retirement facility (NEW)		0.5 space per unit
Group care home, FHAA small	-	1 space per 4 persons design capacity
Group care home, FHAA large	-	1 space per 4 persons design capacity
Supportive housing, small (NEW)	-	1 space per 4 persons design capacity
Supportive housing, large (NEW)		1 space per 4 persons design capacity
Public, Institutional, and Civic Jses <sup>30</sup>		
Community and Cultural Facilities		
Cemetery or interment facility (NEW)		No requirement
Police, fire, or rescue facility		1 space per 1,000 sq. ft. GFA, plu 1 space per commercial vehicle
Club or lodge		1 space per 300 sq. ft. GFA
Conference or convention center		1 space per 1,000 sq. ft. GFA
Day care center, adult or child	UC-Res: 1 per 10 students, plus 1 per employee	1 space per 500 sq. ft. GFA
Day care home, adult or child		1 space per non-resident employee
Funeral facility		1 space per 250 sq. ft. GFA
Library		1 space per 1,000 sq. ft. GFA
Museum		1 space per 1,000 sq. ft. GFA
Park or open space, active		Director Determination

**DU** = dwelling unit **sq. ft.** = square feet **GFA** = gross floor area

<sup>&</sup>lt;sup>30</sup> The UC-Residential, UC-Commercial, and Belt Line districts currently defer minimum parking requirements for "civic" uses to a director determination based on a parking demand analysis.

4.6 Parking and Loading 4.6.4 Minimum Off-Street Vehicle Parking Requirement

Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Park or open space, passive (NEW)		Director Determination
Place of worship		1 space per 250 sq. ft. GFA
Educational Facilities		
School, college or university		1 space per 500 sq. ft. office, research, and library area; plus 1 space per 250 sq. ft. assembly areas and classrooms
School, public or private		Elementary or middle school: 1 space per 20 students design capacity High school: 1 space per 8 students design capacity
School, vocational or trade		1 space per 500 sq. ft. GFA
Healthcare Facilities		
Hospital		1 space per 3 patient beds design capacity
Medical clinic	1 space per 200 sq. ft. floor area	1 space per 250 sq. ft. GFA
Treatment facility (NEW)		1 space per 250 sq. ft. GFA
Rehabilitation facility (NEW)		1 space per 250 sq. ft. GFA
Commercial		
Agricultural and Animal Uses		
Kennel, commercial		1 space per 1,000 sq. ft. GFA
Plant nursery or greenhouse		1 space per 500 sq. ft. GFA
Urban agriculture, noncommercial		No requirement
Veterinary hospital or clinic		1 space per 500 sq. ft. GFA
Recreation and Entertainment		
Recreation facility, indoor	"Theaters auditoriums, gymnasiums and field houses, public or private" R-1, R-16: 1 per 3 seats "Motion picture theater" LR: 1 per 4 seats, maximum occupancy load "Health club or studio for dance, music, drama, health, and reducing" LR, C-1, C-2, I-1, I-2, I-3, UC-Com: 1 per 100 sq. ft. "Health club" UC-Res: 1 per 3 people, maximum occupancy capacity	Bowling or similar use: 1.5 spaces per lane Theaters, auditoriums, gymnasiums, fieldhouse, or similar use: 1 space per 4 seats Health club, fitness facility, or similar use: 1 space per 500 sq. ft GFA Other uses: Director Determination
Recreation facility, outdoor	"Soccer fields, baseball fields and stadiums" R-1, R-16: 1 per 4 seats "Theaters auditoriums, gymnasiums and field houses, public or private" R-1, R-16: 1 per 3 seats	Theaters, auditoriums, gymnasiums, stadiums, sports fields, or similar use: 1 space per seats Other uses: Director Determination

4.6 Parking and Loading 4.6.4 Minimum Off-Street Vehicle Parking Requirement

<b>DU</b> = dwelling unit <b>sq. ft.</b> = square feet	<b>GFA</b> = gross floor area	
Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Sexually oriented business		1 space per 350 sq. ft. GFA
Food and Beverage		
Beer and Wine sales, off-premise consumption		1 space per 350 sq. ft. GFA
Brewpub, distillery, or winery		Indoor tasting/seating area: 1 space per 300 sq. ft. GFA Outdoor tasting/seating area: 1 space per 500 sq. ft. GFA
Catering establishment		1 space per 1,000 sq. ft. GFA
iquor sales, off-premise consumption		1 space per 350 sq. ft. GFA
Microbrewery		Indoor tasting/seating area: 1 space per 300 sq. ft. GFA Outdoor tasting/seating area: 1 space per 500 sq. ft. GFA
Mobile food vending (NEW)		1 space per mobile food business
Restaurant	<ul> <li>"Restaurant (freestanding)" LR: 1 per 70 sq. ft. floor area or 1 per 100 sq. ft. gross floor area for restaurants in mixed-use development that are allowed to use entire on-site parking.</li> <li>"Restaurant (mixed-use/shopping center" LR: less than 30,000 sq. ft. floor area total and more than 40% restaurant use – 1 per 70 sq. ft. gross restaurant floor area LR Zone: unfinished center needs one per 70 sq. ft. for restaurant use</li> <li>"Restaurant" UC-Res: 1 per 70 sq. ft. gross floor area UC-Com, Belt Line: 1 per 100 sq. ft.</li> </ul>	1 space per 100 sq. ft. GFA
Lodging		
Bed and breakfast		1 space per guestroom
Hotel, Full Service	LR, UC-Res, UC-Com, Belt Line: 1 per room, plus 1 per 300 sq. ft. conference/banquet or meeting space	1 space per guestroom, plus 1 space per 300 sq. ft. of meeting space
Hotel, Limited Service		1 space per guestroom, plus 1 space per 300 sq. ft. of meeting space
Residence Hotel	-	1 space per guestroom, plus 1 space per 300 sq. ft. of meeting space
Office, Business, Professional, and ersonal Services		
Bank or financial institution	LR, C-1, C-2, l-1, l-2, l-3, UC-Com: 1 per 300 sq. ft. floor area	1 space per 500 sq. ft. GFA
Credit access business (NEW)		1 space per 500 sq. ft. GFA

4.6 Parking and Loading 4.6.4 Minimum Off-Street Vehicle Parking Requirement

<b>DU</b> = dwelling unit <b>sq. ft.</b> = square fee	<b>GFA</b> = gross floor area	
Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Laundromat, self-service		1 space per 300 sq. ft. GFA
Office	LR, UC-Res, UC-Com: 1 per 300 sq. ft. of floor area LR, C-1, C-2, I-1, I-2, I-3: Office complex with 50,000 sq. ft. or more: 1 per 300 sq. ft. net usable area Belt Line: 1 per 200 sq. ft.	1 space per 300 sq. ft. GFA
Personal services	C-1, UC-Com: 1 per 1,000 sq. ft. floor area	1 space per 500 sq. ft. GFA
Retail Sales		
Building supply store (NEW)		1 per 400 sq. ft. GFA
Pawn shop		1 per 400 sq. ft. GFA
Retail sales, less than 15,000 sq. ft. GFA	"Furniture store" LR, C-1, C-2, I-1, I-	1 per 400 sq. ft. GFA
Retail sales, 15,000 to 50,000 sq. ft. GFA	2, I-3, UC-Com: 1 per 1,000 sq. ft. floor area	1 per 400 sq. ft. GFA
Retail sales, more than 50,000 sq. ft. GFA	"General retail" LR, C-1, C-2, I-1, I-2, I-3: 1 per 200 sq. ft. floor area UC-Res: 1 per 250 sq. ft. UC-Com, Belt Line: 1 per 200 sq. ft. floor area	1 per 400 sq. ft. GFA
Transportation, Vehicles, and Equipment		
Airport, public-owned		Director Determination
Equipment sales or rental (NEW)		Indoor: 1 space per 500 sq. ft. GFA Outdoor: 1 space per 1,000 sq. ft.
Fleet services		1 space per 1,000 sq. ft. GFA, plus 1 space per commercial fleet vehicle
Parking facility, private		No Requirement
Parking facility, public		No Requirement
Transit terminal or station		No Requirement
Vehicle fuel station		1 space per 400 sq. ft. GFA
Vehicle repair, major (NEW)		1 space per 400 sq. ft. of indoor sales/leasing/office area, plus 1 space per service bay
Vehicle repair, minor		1 space per 400 sq. ft. of indoor sales/leasing/office area, plus 1 space per service bay
Vehicle sales or leasing		1 space per 400 sq. ft. of indoor sales/leasing/office area, plus 1 space per service bay
Vehicle wash	-	No Requirement

**DU** = dwelling unit **sq. ft.** = square feet **GFA** = gross floor area

4.6.4 Minimum Off-Street Vehicle Parking Requirement

Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Industrial <sup>31</sup>		
Manufacturing and Processing		
Commercial laundry facility		1 space per 1,000 sq. ft. GFA
Food production or processing		1 space per 1,000 sq. ft. production area; plus 1 space per 300 sq. ft. indoor seating/tasting area; plus 500 sq. ft. outdoor seating/tasting area
Manufacturing, artisan (NEW)		1 space per 500 sq. ft. GFA
Manufacturing, low-impact		1 space per 1,000 sq. ft. GFA
Resource or mineral extraction		Director Determination
Storage and Warehousing		
Contractor's office (NEW)		1 space per 500 sq. ft. office area
Storage, self-service		1 space per 500 sq. ft. office area plus 1 space per 30 storage units
Storage, outdoor		No Requirement
Warehouse or wholesale facility (NEW)		1 space per 1,000 sq. ft. GFA
Utilities and Communication		
Communication facility		No Requirement
Public utility, major		No Requirement
Public utility, minor		No Requirement
Satellite earth station		No Requirement
Solar energy system		No Requirement
Wind energy system, more than 100 kW		No Requirement
Wind energy system, less than 100 kW		No Requirement
Accessory Uses		
Alcohol sales, on-premise consumption		Based on primary use
Drive-through (NEW)		Based on primary use
Drop box, self-service (NEW)		No Requirement
Dwelling, accessory (ADU) (NEW)		1 space
Guest quarters		No Requirement
Home occupation	"Home office" UC-Res: 1 per 250 sq. ft.	1 space per non-resident employee
Valet parking service (NEW)		Based on primary use
Caretaker's quarters		1 space
Temporary Uses		

<sup>&</sup>lt;sup>31</sup> "Manufacturing, industrial and processing establishments, repair shops, warehouses, storage buildings, lumber and supply yards" -1, l-2, l-3: 1 per 5 employees on duty at a time. Where number of employees is indeterminate, 1 per 1,000 sq. ft. floor area

4.6.5 Maximum Off-Street Vehicle Parking Allowed

Use	Minimum Vehicle Parking Current	Minimum Vehicle Parking Proposed
Outdoor retail and display		Director Determination
Portable storage structure		No Requirement
Real estate sales or model home		Director Determination
Seasonal sales		Director Determination
Special event (NEW)		Director Determination

**DU** = dwelling unit **sq. ft.** = square feet **GFA** = gross floor area

#### A. Director Determination Based on Demand Study<sup>32</sup>

Uses in Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, that reference this paragraph have varied parking and loading demands, making it difficult to specify a single standard for off-street parking or loading requirements. With an application for a use that is subject to this paragraph, the Director shall apply the off-street parking and loading standards on the basis of a demand study prepared by the applicant. Such study shall estimate the parking and loading demand based on recommendations of the Institute of Traffic Engineers, Urban Land Institute, the International Council of Shopping Centers, the American Association of State Highway and Transportation Officials, the American Planning Association, or other acceptable source of parking demand data for uses and/or combinations of uses of comparable activities, scale, bulk, area, and location.

#### B. Unlisted Uses<sup>33</sup>

For uses not listed in Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, the Director is authorized to:

- 1. Apply the minimum off-street parking space requirement specified in Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, for the listed use that is deemed most similar to the proposed use; or
- 2. Establish the minimum off-street parking space requirement by reference to standards in parking resources published by the National Parking Association, American Planning Association, Institute of Traffic Engineers (ITE), or other acceptable sources of parking data; or
- 3. Establish the minimum off-street parking space requirement based on local or national best practices; or
- 4. Establish the minimum off-street parking space requirement based on a demand study prepared by the applicant. Such a study shall be prepared according to paragraph 4.6.4A.

#### C. Accessible Parking<sup>34</sup>

All areas of newly designed or newly constructed buildings and facilities required to be accessible under federal and state law shall comply with the standards set forth in the Texas Accessibility Standards of the Architectural Barriers Act, Tex. Rev. Civ. Stat. Art. Ann. §9102 (Vernon Supp 2000.), the International Building Code (IBC) as adopted in the Town of Addison Code of Ordinances, and the American with Disabilities Act (ADA), as amended.

#### 4.6.5 Maximum Off-Street Vehicle Parking Allowed

#### Commentary:

<sup>&</sup>lt;sup>32</sup> New.

<sup>&</sup>lt;sup>33</sup> New.

<sup>&</sup>lt;sup>34</sup> New.

We proposed maximum parking standards to reduce stormwater runoff and minimize negative impacts associated with large expanses of vacant parking areas. Rather than propose a maximum standard for each use type, we established a maximum percentage threshold above the minimum parking requirements (no more than 125 percent of the minimum parking required).

An alternative approached used in some codes is not to flat-out prohibit excess parking, but to say that any parking provided over a certain amount must be surfaced with permeable pavers, or feature additional landscaping, or provide some other benefit to minimize the environmental impacts of the extra pavement.

#### A. Residential Uses<sup>35</sup>

In no case shall any use listed under the residential use category in Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement,* provide more than two vehicle parking spaces per dwelling unit, unless otherwise allowed in this UDC. This maximum shall not apply to single-family attached or detached dwelling units in the R-1 and R-2 zoning districts.

#### **B.** Nonresidential Uses

In no case shall any nonresidential use provide more than 125 percent of the minimum number of offstreet parking spaces required by Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, unless otherwise provided in this UDC.

#### C. Mixed-Use Development

For mixed-use development (development including both residential and nonresidential uses), the maximum vehicle parking allowance shall be the sum of the maximum parking calculations pursuant to paragraphs (A) and (B) above.

#### 4.6.6 Parking Alternatives

The Director may approve parking alternatives that result in a cumulative adjustment not to exceed 25 percent of the minimum or maximum vehicle parking spaces required by Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement,* and Subsection 4.6.5: *Maximum Off-Street Vehicle Parking Allowed,* in accordance with the following standards.

#### A. Shared Parking Facilities<sup>37</sup>

- When reviewing a shared parking proposal, the Director shall consider any additional reductions in minimum parking requirements that might otherwise apply pursuant to paragraphs (B) through (E) below, but such additional reductions shall not apply to further reduce the shared parking requirements approved by the Development Services Department.
- 2. Where a minimum number of parking spaces is required by Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement,* the owners of two or more properties may join together to provide the required parking spaces for their respective uses. Upon request by the owners and after review of the request, the Director may authorize the shared use of parking facilities subject to the following:
  - a. Any property using shared parking facilities shall be located within 500 feet of such parking facility, using established sidewalks and crosswalks that meet current standards of the Master Transportation Plan.
  - b. The parking for the specific uses occurs at alternating time periods, as determined by a parking analysis.

<sup>&</sup>lt;sup>35</sup> Current maximum of two spaces per dwelling unit applies in the MXR, UC-Residential, UC-Commercial, and Belt Line zoning districts. This standard establishes a maximum for all residential uses throughout Addison. This draft carries forward the maximum parking exemption for single-family uses in the current R-1 and R-16 zoning districts (proposed R-1 and R-2).

<sup>&</sup>lt;sup>37</sup> New unless otherwise noted.

- c. Required parking shall be determined based on parking demand for the peak parking period, as determined by a parking analysis study approved by the Director.<sup>38</sup>
- 3. The property owner seeking leased spaces shall provide a recordable zoning document to the Director stating that in the case where leased spaces are no longer available, that an adequate parking alternative will be provided or the use will no longer be allowed.

#### **B.** Proximity to Transit

Except for single-family detached, single-family attached, duplex, triplex, and fourplex dwelling uses, the minimum vehicle parking required for development within one-quarter mile, measured radially in a straight line, of a fixed transit station shall be reduced from those required by Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, by 10 percent.

#### C. Workforce and Senior Housing<sup>40</sup>

The minimum vehicle parking requirement for multifamily residential structures established in Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement,* shall be reduced by 25 percent if:

- At least 25 percent of the dwelling units are income-restricted for a period of at least 25 years to households earning below 120 percent of the Median Family Income for the Dallas, Texas HUD Metro FMR Area; or
- 2. At least 75 percent of the dwelling units are restricted for purchase or occupancy by persons 65 years of age or older.

#### D. On-Street Parking<sup>41</sup>

Any on-street vehicle parking may be counted toward the minimum number of required vehicle parking spaces on a one-to-one basis, subject to the following:

- 1. On-street parking may not be used to meet the minimum vehicle parking requirements for residential uses;
- 2. On-street parking that is subject to time restrictions shall not be used to meet any minimum vehicle parking requirements for any use;
- 3. On-street parking along an arterial street as classified in the *Addison Master Transportation Plan* shall not be used to meet any minimum vehicle parking requirements for any use;<sup>42</sup>
- 4. Only those street parking spaces abutting any lot line of the subject property, and with over one-half the length of a parking space located between the imaginary extension of the side property lines into the street right-of-way, may be counted.
- 5. Each on-street parking space may only be counted once toward the parking requirements of the abutting lot, regardless of the number of individual buildings or tenants on the lot;
- 6. On-street parking spaces shall be available for general public use at all times. No signage or actions limiting general public use of on-street spaces shall be permitted; and
- 7. No development or use approved with an on-street parking credit shall be considered nonconforming if the on-street parking is later removed by Town action and the remaining on-site vehicle parking does not meet the minimum vehicle parking requirements of this section.

From current Article XIX(3)(H)(6) and Article XIX(5)(F)(3): UC parking standards; and Article XIX.A(V)(A)(2)(f): Belt Line parking standards. Did not carry forward the Belt Line district requirement that shared parking be identified with signs and markings – this may be difficult to manage overtime as business relocate.

<sup>&</sup>lt;sup>40</sup> New. Workforce housing and senior residential projects tend to have lower parking demands than other traditional developments. Proposed percentages are for discussion purposes.

<sup>&</sup>lt;sup>41</sup> New standards. This replaces the current UC-Residential and UC-Commercial subdistrict standards allowing on-street parking within 300 feet of a nonresidential use to be credited toward the minimum parking requirement.

<sup>&</sup>lt;sup>42</sup> New standard based on the Belt Line parking intent statement in current Article XIX.A(V)(A)(1)d. that limits on-street parking on major thoroughfares and supports the Addison Master Transportation's goals to improve traffic safety by eliminating potential vehicular and pedestrian conflict.

#### E. Parking Demand Study

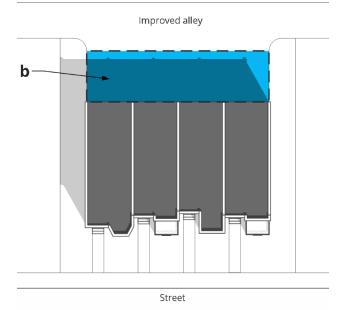
If an applicant submits a parking demand study pursuant to 4.6.4A, demonstrating that anticipated offstreet vehicle parking demand for the proposed development, use, or combination of uses will be less than that calculated from Subsection 4.6.4: *Minimum Off-Street Vehicle Parking Requirement*, or Subsection 4.6.5: *Maximum Off-Street Vehicle Parking Allowed*, and the Director determines that the information and assumptions used in the study are reasonable and that the study accurately reflects anticipated off-street vehicle parking demand for the proposed development, use, or combination of uses, the Director may authorize a reduction or increase in required off-street vehicle parking spaces based on that study.

#### 4.6.7 Vehicle Parking Layout and Design

#### A. At-Grade Parking Standards<sup>43</sup>

#### 1. Single-Family, Duplex, Triplex, Fourplex, and Manufactured Home Dwellings

- a. Vehicle parking for single-family detached, single-family attached, duplex, triplex, fourplex, and manufactured home dwelling uses shall only be allowed in a garage or on an approved surface. All other off-street vehicle parking within a required front setback area shall be prohibited.
- In cases where the side or rear setback area is accessible via an improved alley, no front yard drive or parking shall be permitted. The required parking area shall directly access the alley.
   Determinations of whether an alley allows for safe access shall be made by the Director.

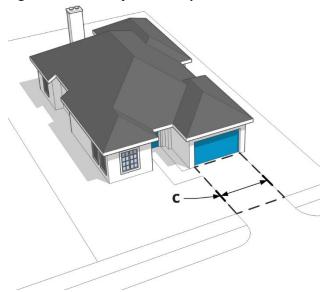


#### Figure 4.6: Parking Area Accessed by Improved Alley

c. Where vehicle parking is permitted within the front setback area, the width of the driveway between the front building façade and the street shall not exceed the width of the garage door of an attached garage or 22 feet where there is no attached garage.<sup>44</sup>

<sup>&</sup>lt;sup>43</sup> Did not carry forward standard in MXR allowing parking in a parking plaza to satisfy minimum parking requirements for townhousecondominium (multifamily) uses. Largely from current Sec. 78-179, relocated screening requirements to the screening and buffering section of the UDC. Language regulating vehicle parking/storage on an unimproved surface for existing residences prior to June 26, 1990 will be relocated and addressed in the "nonconformities" section of the UDC to be completed in Part 3 of the drafting effort.

<sup>44</sup> Replaces current requirement limiting driveway or improved parking surface coverage to 67 percent of the residential front yard. This new standard is clearer and achieves the same intent without assigning a seemingly arbitrary percentage maximum.



#### Figure 4.7: Driveway Width Requirement

#### 2. All Other Uses<sup>45</sup>

Vehicle parking areas located between the front building façade and the adjacent street frontage is prohibited, unless the subject property satisfies all of the following standards:

- a. It is not located within the M-1, M-2, M-3, M-4, and M-5 zoning districts;
- b. It adjoins either side of an arterial street, as defined in the Addison Master Transportation Plan;
- c. Development with 100 or fewer off-street vehicle parking spaces shall be limited to no more than two rows of vehicle parking or 60 feet, whichever is less, between the front building façade and the adjacent street frontage;
- d. Development with 100 or more off-street vehicle parking spaces shall be l imited to no more than four rows of parking or 120 feet, whichever is less, between the front building façade and the adjacent street frontage; and
- e. Vehicle parking areas shall be setback a minimum of 10 feet from the adjacent right-of-way and shall satisfy the landscape and screening requirements established in Subsection 4.7.4D, *Parking Area Landscaping*.

#### **B.** Below-Grade Parking Standards<sup>46</sup>

- 1. Below-grade vehicle parking shall be constructed in accordance with Section 4.3: *Floods*.
- 2. Below-grade vehicle parking is permitted to property lines; but shall be designed to satisfy the landscape requirements established in Section 4.7: *Landscaping, Buffering, and Fences*.
- 3. Below-grade vehicle parking shall not be visible from the public right-of-way.

<sup>&</sup>lt;sup>45</sup> This new standard carries forward several concepts from the current regulations for the Beltline, MXR, and UC-Residential zoning districts. The Beltline district currently requires all surface parking to be located behind buildings which face on a street or public open space and accessed by an alley or short driveway between buildings. Exceptions for some areas (not defined in code) along Belt Line Road and Arapaho Road, or by approval of a major waiver. The MXR zoning district currently requires that all surface parking areas for townhouse-condominium (multifamily) uses be located at the rear of the lot, except when fronting on a thoroughfare (i.e., arterial street). This draft prohibits surface parking between the front building façade and a street in all mixed-use districts. Properties not zoned in a mixed-use district that are located along arterial streets may have front parking areas, subject to qualifying standards. The MXR zoning district currently allows at-grade parking along thoroughfares between 30 and 60 feet from the right-of-way line. The Belt Line and UC-Residential zoning districts require a minimum 10-foot setback from the right-of-way line, subject to landscaping and screening standards. This draft applies those standards more broadly.

<sup>&</sup>lt;sup>46</sup> The current MXR, UC-Residential, UC-Commercial, and Belt Line zoning districts allow below-grade parking to the lot lines, so long as landscaping standards are satisfied. This draft broadens the applicability of this standard town-wide. Revised standard from the Belt Line zoning district requiring that below-grade parking not be visible from the public right-of-way rather than from a sidewalk.

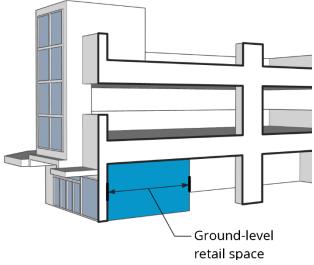
#### C. Structured Parking Standards

#### 1. Location<sup>47</sup>

- a. Parking structures shall be located an additional 10 feet beyond the minimum setbacks required in the district to allow for additional landscape screening.<sup>48</sup>
- b. Parking structures shall not be located between the front building façade and the adjacent street frontage.
- c. Parking structures are not required to meet minimum building height requirements, where applicable.<sup>49</sup>

#### 2. Ground-Level Retail Required<sup>50</sup>

The ground-level of parking structures in the M-1, M-2, M-3, M-4, and M-5 zoning districts shall include a minimum 20-foot space behind the parking structure façade to accommodate occupancy by a retail, office, civic, or other allowed nonresidential use. This space shall include standard retail floor to ceiling heights and structural bay spacing. The Director may waive the requirement based on a market study at the time of development.



#### Figure 4.8: Ground-Level Retail Space Below Structured Parking

#### 3. Exterior Design<sup>51</sup>

- a. Parking structures that have frontage on public streets shall comply with the building design standards established in Section ---.
- b. All parking garages shall be constructed with flat parking decks for ease in reuse of all or portions of the structure when parking demand wanes, unless otherwise approved by major waiver.<sup>52</sup>

<sup>&</sup>lt;sup>47</sup> Standards taken from current language regulating parking structures in the UC-Residential, UC-Commercial, MXR, and Belt Line zoning districts. The Belt Line district requires parking structures to be a minimum of 50 feet from the adjacent street and lined with buildings occupied by a non-parking use. The MXR district requires structured parking to be located at the rear of the lot and screened from the street by the building.

<sup>&</sup>lt;sup>48</sup> New.

<sup>&</sup>lt;sup>49</sup> New.

<sup>&</sup>lt;sup>50</sup> The current UC-Residential and UC-Commercial zoning districts require ground-level retail along Mildred Street and Category E/F streets (now referred to as Addison Circle). The Belt Line zoning district currently requires all parking structures fronting a street to include ground-level nonparking uses.

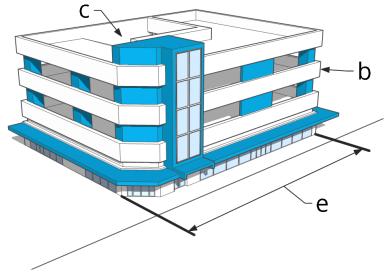
<sup>&</sup>lt;sup>51</sup> The current UC-Residential, UC-Commercial, and Belt Line districts require compliance with respective exterior materials requirements. Belt Line requires compliance for any parking structure fronting a public street, UC-Commercial requires compliance for structures fronting on Spectrum Drive and Addison Circle, UC-Residential requires compliance for structures fronting Addison Circle.

<sup>&</sup>lt;sup>52</sup> Currently only applicable in the Belt Line district.

#### Article 4: Development Standards 4.6 Parking and Loading 4.6.7 Vehicle Parking Layout and Design

- c. Ramps shall not be expressed on the facades of parking structures fronting, or visible from, public streets.<sup>53</sup>
- d. Steel parking garages and steel guard cables on garage facades are prohibited.<sup>54</sup>
- e. Maximum frontage of parking structures along any one block face shall be 200 feet.<sup>55</sup>

#### Figure 4.9: Structured Parking Design



#### D. Dimensions of Parking Spaces and Drive Aisles<sup>56</sup>

All on-site parking and maneuvering areas shall be constructed according to the following dimensional standards:

- 1. All parking aisles shall terminate with a bump-out for turnaround maneuverability.
- 2. Unobstructed, direct, and convenient access for vehicles to and from a public street shall be provided for all off-street parking spaces. Access from any parking area to a public street shall be designed to allow vehicles to enter and exit in forward drive.
- 3. Parking spaces and drive aisles shall comply with the following dimensional standards. The letters (A through D) in Figure 4.10 correspond with the dimensions (in feet) in the table below:

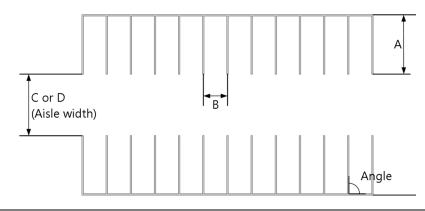
<sup>&</sup>lt;sup>53</sup> Currently applicable in the Belt Line, UC-Residential, and UC-Commercial districts.

<sup>&</sup>lt;sup>54</sup> Currently applicable in the Belt Line, UC-Residential, and UC-Commercial districts. The Belt Line allows modifications through approval of a major waiver process.

<sup>&</sup>lt;sup>55</sup> Currently only applicable along Spectrum Drive and Addison Circle within the UC-Commercial subdistrict.

<sup>&</sup>lt;sup>56</sup> New. These dimensional standards reflect current trends in allowing smaller parking conventional parking spaces to reduce pervious surface and to increase overall development efficiency.

4.6.7 Vehicle Parking Layout and Design



#### Figure 4.10: Parking Space and Drive Aisle Dimensions

Dimensions shown in feet

Angla	Parking	Space	One-Way Aisle	Two-Way Aisle
Angle	Α	В	C [2]	D
0° (parallel)	8.0	22.5 [1]	12.0	20.0
30°	16.0	8.5	12.0	20.0
45°	17.0	8.5	12.0	20.0
60°	17.5	8.5	16.0	20.0
90°	17.0	8.5	20.0	20.0

#### Notes:

[1] End spaces may be a minimum of 20 feet in length where no obstruction exists.[2] Fire lanes shall be a minimum of 24 feet in length.

 The final decision-making body may approve alternative standards based on a professionally recognized source of parking lot design, pursuant to the minor modification process outlined in Section --.

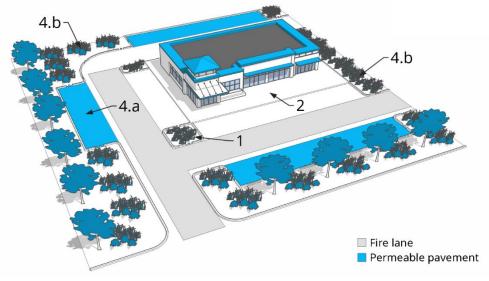
#### E. Stormwater Drainage<sup>57</sup>

- 1. Parking lots shall be constructed such that all surface water is directed into an approved landscape bumpout, island, or endcap. Stormwater run-off that cannot be directed into approved landscape bumpouts, islands, or endcaps shall be treated using one or more of the best management practices approved by the Town or directed into an approved stormwater drainage system.
- 2. Water draining from a parking lot shall not flow across a sidewalk.
- 3. Stormwater drainage plans for off-street vehicle parking areas shall be reviewed and approved by the Town.
- 4. For all new parking lots containing 10 or more spaces, the following best management practices shall be used to improve stormwater infiltration and water quality:
  - a. Permeable pavement materials shall be installed in non-fire lane areas covering at least 25 percent of the total parking lot area; or
  - b. Treatments such as culvert outfalls, bioretention basins, or vegetated swales designed to the specifications of the Public Works and Engineering Department shall be installed; or

<sup>&</sup>lt;sup>57</sup> New. These standards are intended to provide improve stormwater quality and to minimize impacts to public infrastructure.

#### Article 4: Development Standards 4.6 Parking and Loading

- 4.6.7 Vehicle Parking Layout and Design
- c. Other combinations of best management practices for stormwater infiltration and water quality subject to approval by the Development Services and Public Works and Engineering Departments.



#### Figure 4.11: Parking Area Stormwater Drainage Standards

#### F. Surface Material

- 1. Except as stated in paragraph (E) above, or an exception is provided elsewhere in this UDC, all areas used for vehicle parking shall be an improved surface of concrete, asphalt, brick pavers, or other approved material.
- 2. All new driveway aprons onto a street shall be surfaced with concrete. Enlargement or modification of an existing driveway shall require the driveway apron to be surfaced with concrete.
- 3. Areas using permeable parking pavers shall receive relief from impervious surface calculations in accordance with Public Works and Engineering Department standards.
- 4. Except for single-family attached, single-family detached, duplex, triplex, fourplex, manufactured home residential uses, and display areas for vehicle sales and rental uses, all off-street parking spaces shall be striped or otherwise designated to clearly mark each space.<sup>59</sup>
- 5. All driving lanes and parking aisles in vehicle parking lots shall be curbed, unless an alternative design allowing for adequate stormwater management is approved.

#### G. Electric Vehicle Charging<sup>60</sup>

Parking areas with 50 or more vehicle parking spaces shall provide a minimum of one vehicle parking space dedicated to electric vehicles for every 25 vehicle parking spaces provided on site. Electric vehicle parking spaces shall not count toward the maximum allowed number of vehicle parking spaces. The electric vehicle parking space shall be:

- 1. Located on the same lot as the principal use;
- 2. Signed in a clear and conspicuous manner, such as special pavement marking or signage, indicating exclusive availability to electric vehicles; and
- 3. Outfitted with a standard electric vehicle charging station.

#### H. Parking Area Landscaping

All development shall comply with Section 4.7: *Landscaping, Buffering, and Fences*.

<sup>&</sup>lt;sup>59</sup> Did not carry forward requirement in Belt Line district requiring public, customer, and visitor parking to be clearly signed. This is a private land managing concern and would be difficult to enforce and track.

<sup>60</sup> New.

#### I. Parking Area Lighting

All development shall comply with Section 4.9, Exterior Lighting.

#### J. Pedestrian and Bicycle Circulation

All development shall comply with Section 4.5: Access and Circulation.

#### 4.6.8 Vehicle Loading Areas

#### A. Number and Size of Loading Berths Required<sup>61</sup>

- 1. The Director may approve a variation from the required loading berth requirements if warranted by the building use.
- 2. The Director may approve a variation from the required loading space requirements if warranted by the building use.
- 3. The minimum turning radius for truck traffic areas shall be 40 feet.
- 4. The number and size of loading berths shall be provided pursuant to the table below:

lise Category	Number of Loading Berths	Loading Berth Dimensions (ft)				
Use Category	Number of Loduing Bertins	Length	Width	Height		
Office, Lodging, Personal Services, and Retail	1 per 50,000 sq ft of gross floor area, up to a maximum requirement of 3	25	10	14		
Other Nonresidential Uses	1 per 50,000 sq ft of gross floor area, up to a maximum requirement of 2	25	10	14		

#### B. Design and Use of Service and Loading Areas

#### 1. Location<sup>62</sup>

- a. Required off-street loading spaces shall not be permitted between the primary building façade and the street.
- b. Streets or rights-of-way shall not be used for loading and unloading purposes, unless otherwise authorized in this UDC.
- c. Alleys may be used for loading or unloading materials or merchandise for periods not to exceed 30 consecutive minutes so long as sufficient width of the roadway is available for free movement of vehicular traffic access to abutting property is maintained.
- d. Off-street loading spaces shall be located on the same lot or parcel as the structure or use for which it is provided or on the lot adjacent to a private alley or private service drive.
- e. Delivery vehicles parked in a loading area shall not encroach into required parking spaces or required building setbacks.
- f. Delivery vehicles loading or unloading materials shall not block required on-site access and circulation routes or fire lanes.

#### 2. Maneuvering

Loading areas shall be designed to provide for delivery vehicle backing and maneuvering on-site and not from or within a public right-of-way, unless otherwise authorized by this UDC.

<sup>&</sup>lt;sup>61</sup> Replaces current standards – LR and C-2 zoning districts require retail and service buildings to provide loading/unloading space (no specific number or size requirement). C-1 zoning district references location and screening standards, but no specific number or size requirement. I-1 zoning district requires all business uses to provide loading/unloading areas and requires minimum 10-foot by 25-foot stall for each 20,000 square feet of floor space or fraction thereof in excess of 3,000 square feet used for retail, storage, or service purposes. This draft proposes revised standards reducing the overall number of loading berths required. Many deliveries today occur multiple times during the day and by smaller vehicles.

<sup>&</sup>lt;sup>62</sup> Standards carried forward and reworded for clarity and consistency.

#### 3. Screening

Service and loading areas visible from a Residential zone district or a public right-of-way shall be screened pursuant to Section ---.

#### 4.6.9 Drive-Through Facilities<sup>63</sup>

#### A. Number of Stacking Spaces Required

- 1. The Director may approve a variation from the required stacking requirements if warranted by the building use.
- 2. All drive-through facilities shall provide at least the number of on-site stacking spaces required by the table below. The Director may require a stacking study for uses expected to generate higher than normal queuing.

Use	Number of Loading Berths
Bank or financial institution or Automated Teller Machine (ATM)	4 per teller window/ATM
Other uses with drive-through facilities	3 per service lane
Personal services	3 per service lane
Restaurant	4 per service lane
Retail sales	3 per service lane
Vehicle fuel station	1 per fuel pump
Vehicle wash	3 per washing bay

#### B. Location and Design of Drive-Through Facilities

- 1. Each stacking space shall be 20 feet in length unless otherwise approved by the Director. Required stacking distances shall be measured from the end of the queuing lane or property line to the first point of service.
- 2. Vehicle stacking spaces shall be integrated into the site layout and shall not interfere with site access points, access to parking or loading spaces or areas, or internal circulation routes.
- 3. Drive-through service windows shall be oriented away from pedestrian areas, residentially-zoned areas, and public streets to the maximum extent practicable.
- 4. Audible electronic devices such as loudspeakers, vehicle service order devices, and similar instruments shall not be audible beyond the property line within any Residential zoning district.

#### 4.6.10 Bicycle Parking<sup>64</sup>

#### A. Purpose<sup>65</sup>

Bicycle parking is required in order to encourage the use of bicycles by providing safe and convenient places to park bicycles.

#### B. Applicability<sup>66</sup>

The following standards shall apply to all principal uses except for single-family attached, single-family detached, duplex, triplex, fourplex, and manufactured home residential uses.

<sup>&</sup>lt;sup>63</sup> New.

<sup>&</sup>lt;sup>64</sup> New, unless otherwise noted.

<sup>&</sup>lt;sup>65</sup> Carried forward from current Belt Line zoning district standards, now applicable Town-wide.

<sup>&</sup>lt;sup>66</sup> Carried forward from current Belt Line zoning district standards, now applicable Town-wide.

#### C. Required Bicycle Parking<sup>67</sup>

#### 1. Generally

Development subject to this section shall provide a minimum of six bicycle parking spaces or the number of bicycle parking spaces required in the table below, whichever is more.

Use	All Other Zoning Districts	Mixed-Use Zoning Districts
Residential uses	10%	20%
Public, Institutional, and Civic Uses	5%	15%
Commercial Uses	5%	10%
Industrial Uses	2%	5%

#### Notes:

Percentages are based on the total number of vehicle parking spaces required on-site or in a permitted off-site location to serve the principal use(s).

#### 2. Mixed-Use Developments

Developments with both nonresidential and residential uses shall provide the cumulative required number of bicycle parking spaces as calculated for the respective nonresidential and residential requirements.

#### 3. Building Expansions or Changes of Use

Building expansions or changes of use that require additional vehicle parking spaces pursuant to Subsection 4.6.2, shall also require additional bicycle parking spaces based on the percentages in the table above, applied to the building expansion area or the additional parking required by the change of use.

#### 4. Existing Public Bicycle Parking Spaces

Permanent bicycle parking spaces available for public use, such as Town installed bicycle racks or bike corrals that exist at the time of development, expansion, or change of use, and are located within 100 feet of the primary entrance to the primary building may be used to satisfy up to two required bicycle parking spaces.

#### 5. Bicycle Parking Reduction

Subject to the approval of the Director, the number of bicycle parking spaces may be reduced if:

- a. Unique or unusual characteristics exist on a development site that would preclude safe travel of bicycles to and from the site; or
- b. Existing bicycle parking facilities are located within the public right-of-way and within 100 feet of the building's main entrance, provided that a minimum of four bicycle parking spaces are provided on-site.

#### D. Bicycle Parking Layout and Design<sup>68</sup>

1. Bicycle parking spaces shall not be located fully or partially within a public right-of-way without prior approval of the Town.

<sup>&</sup>lt;sup>67</sup> Currently a minimum of one bicycle parking space per 10 required vehicle parking spaces. This approach tailors bicycle parking requirements based on land use and development context and will likely result in more bicycle parking overall. New standard also requires that any use subject to bicycle parking requirements provide a minimum of six spaces (regardless of how many vehicle parking spaces are provided). All other proposed standards are new.

<sup>&</sup>lt;sup>68</sup> Current standard allows bicycle parking to be located in the right-of-way with a minor waiver. Did not carry forward standards requiring 50 percent of bicycle parking spaces to be covered if covered vehicle parking is provided on site. Did not carry forward standard requiring signage if bicycle parking is not visible from the street.

- Required bicycle parking spaces shall be designed to allow bicycles to be secured with a lock to a fixed object and shall comply with the rack types and standards established in the Engineering and Landscape Standards <Appendix A>.<sup>69</sup>
- 3. Bicycle parking shall be located within 50 feet of the main entrance of each principal building on site and shall not be located farther than the closest motor vehicle parking space, excluding accessible vehicle parking spaces.
- 4. Bicycle parking spaces must be at least six feet long, two feet wide, and provide a minimum of seven feet of overhead clearance.
- 5. A five-foot aisle for bicycle maneuvering shall be maintained beside or between each row of bicycle parking.
- 6. Areas designated for bicycle parking shall be clearly marked and reserved for bicycle parking only.

#### 4.6.11 Use of Parking Areas

#### A. Exclusive Use

- 1. Unless a shared parking agreement has been established in accordance with Section 4.6.6A, required vehicle and bicycle parking spaces shall be designed, maintained, and used exclusively for the tenants, occupants, and patrons of the buildings or uses on the site.
- 2. Excess or unused vehicle or bicycle parking spaces or loading areas may not be rented or leased to the general public or to those who are not tenants, occupants, or patrons of the buildings or uses where the parking is located unless:
  - a. Otherwise allowed under the shared parking standards pursuant to Section 4.6.6A; or
  - b. A parking facility is listed as a permitted or conditional use in the zoning district where the parking lot or parking garage is located pursuant to Subsection [insert hyperlink to use table].

#### **B.** Storage of Vehicles or Equipment

Vehicle parking spaces, including both required and excess parking spaces, shall not be used for storing vehicles that are not used in conjunction with the primary use of the lot.

#### C. Vehicles and Trailers

Except for uses where vehicle repair is authorized, the parking of vehicles or trailers of any type without current state registration or in an inoperable condition shall be prohibited for periods in excess of 30 days, unless such vehicle or trailer is completely enclosed within a building.

#### D. Storage, Occupancy, or Similar Uses

Vehicles, campers, or tractor/trailers of any type shall not be used for the purpose of storage, occupancy, or similar use.

#### E. Overnight Parking<sup>70</sup>

Overnight parking of any truck-tractor, road-tractor, semitrailer, bus, truck, or trailer with more than threequarter ton rated capacity between the hours of midnight and 6:00 a.m. shall be prohibited within the R-1, R-2, R-3, R-4, R-5, A, and PD-TH zoning districts.

<sup>&</sup>lt;sup>69</sup> We recommend the detailed street furniture and lighting specifications in the Belt Line District Engineering and Landscape Standards be relocated to an administrative or other design manual outside of the code and applied citywide.

<sup>&</sup>lt;sup>70</sup> Replaces current Sec. 78-175, reworded for clarity and simplicity. Did not include exemption for the "expeditious unloading and loading of passengers, freight, or merchandise."

#### 4.6.12 Maintenance

- **A.** All improved parking surfaces shall be maintained in good and safe condition and be free of holes, cracks or other failures that may affect the use, safety, appearance or drainage of the surface or of the adjoining property.
- **B.** Driveways and improved parking surfaces shall be maintained in good and safe condition and be free of holes, cracks, spalling, or other failures that may affect the use, drainage from the property, drainage on adjoining property or the longevity of the material.<sup>71</sup>

# 4.7 Landscaping, Buffering, and Fences

#### Commentary

This section is built on a consolidation of multiple landscaping sections from throughout the current ordinances, primarily Chapter 34 (Environment), Article VI: Landscaping Regulations; Chapter 18, Article X: Fences; and various landscaping-related provisions found in the current zoning district standards. Many specific edits are noted to introduce new flexibility, to clarify requirements, and to raise the bar for landscape design quality generally. Buffering and fencing standards are enhanced.

Generally, discussion is needed on the administration of this section. The current code places the authority for landscaping under the Director of Parks and Recreation. This draft continues that practice. However, it is common in many communities for the Development Services Director to have such authority.

Other outstanding discussion question: Should the airport be more explicitly exempted from any of these provisions?

#### 4.7.1 Purpose<sup>72</sup>

The intent of this section is, through the preservation, protection, maintenance, and planting of trees and other plant materials, to:

- A. Provide visual buffering and enhance the visual appeal of the Town;
- **B.** Realize the environmental benefits of landscaping such as: storm water retention; recharging groundwater; retaining soil moisture; preventing erosion; providing bird and wildlife habitat; and mitigating air quality, water pollution, dust, noise, heat, and glare;
- **C.** Conserve water resources by using sustainable design and maintenance techniques and native and/or adapted plant species that are low water-use and regionally appropriate;
- D. Provide screening to minimize the visual impacts of some types of facilities, structures, and equipment;
- E. Establish an attractive streetscape that contributes to the character and appearance of the Town; and
- **F.** Improve the appearance of development to protect and enhance public and private investments and property values.

To be reviewed with Part III of the Development Standards Phase.

<sup>&</sup>lt;sup>71</sup> From current Sec. 18-132.

<sup>&</sup>lt;sup>72</sup> Combination of current 34-3, 34-201, and new suggested language.

### 4.8 Site and Building Design

#### Commentary

This section includes several improvements from the current regulations, including a new organization. Rather than relocating separate standards based on discrete areas (e.g., UC and Belt Line zone districts), this draft organizes building and site design based on development type (residential, mixed-use, and nonresidential). This draft also establishes new town-wide standards for greater consistency across projects and to minimize the need to use the PD tool to require higher-quality building design. The content in this section builds on the Town's current standards and retains area-based design standards when appropriate – particularly with building material requirements.

As per staff's direction, this section is being drafted to include site and building design standards as if H.B. 2439 did not exist. This section (and others) will be re-evaluated and updated (if necessary) prior to adoption hearings to align with current Texas legislation.

#### 4.8.1 Purpose<sup>131</sup>

This Section 4.8 is intended to:

- **A.** Promote high-quality development and construction that directly contributes to the attractiveness, safety, and function of the street and public areas;
- B. Ensure compatibility between residential neighborhoods and adjacent commercial and mixed-use areas;
- C. Mitigate negative impacts created by the scale and bulk of large buildings;
- D. Provide variety and visual interest in the exterior design of buildings;
- E. Enhance the streetscape and diminish the prominence of garages and parking areas;
- **F.** Promote an environment that is friendly toward multiple modes of transportation and accommodates varying ages and abilities;
- **G.** Promote building designs and construction practices that are sustainable and adaptable to multiple uses for extended building lifecycles;
- **H.** Promote building designs and construction in a manner, and with materials, that are highly durable and will continue to endure and be attractive over a long time, especially adjacent to public and pedestrian areas.
- I. Minimize negative impacts of on-site activities to adjacent uses; and
- J. Balance the community's economic and aesthetic concerns.

#### 4.8.2 Applicability<sup>132</sup>

#### A. General Applicability

Except as otherwise provided in this section, the standards of this section shall apply to all development as follows:

#### 1. New Construction

- a. A new principal structure is constructed; or
- b. An existing principal structure is relocated on the lot.
- 2. Expansions and Enlargements
  - a. The entire site and buildings and/or dwelling units shall comply with this section when:
    - i. The number of multifamily dwelling units on a property is increased by more than 25 percent; or

\_\_\_\_\_

 <sup>&</sup>lt;sup>131</sup> Mostly new, however, some content taken from the intent statement from the Belt Line district.
 <sup>132</sup> New. The thresholds established in this draft are for discussion purposes; they are based on our work in other communities and intended to distinguish relatively large projects that require greater attention to development and design quality. Following review of this entire code, we may update these thresholds as necessary to align with the overall article applicability provisions.

- ii. The square footage of a nonresidential or mixed-use building is expanded or enlarged by more than 50 percent; or
- iii. The addition or expansion of one or more structures or uses that requires special use permit approval.
- b. The portion of the building and/or site being expanded and/or improved shall comply with this section when:
  - i. The number of dwelling units on a property is increased by between 10 and 25 percent or 10 dwelling units, whichever is less; or
  - ii. The square footage of a nonresidential or mixed-use building is expanded or enlarged by between 10 and 50 percent.

#### **B.** Exemptions

Expansions and enlargements of a multifamily, mixed-use, or nonresidential use less than the greater of 1,000 square feet or 10 percent of the building's square footage.

#### C. Conflicting Standards

Where the site and building design standards in this section conflict with the design standards applicable to an overlay district or Planned Development, the standards in the overlay district or Planned Development shall govern.

#### **D.** Alternative Compliance

Alternatives to these standards may be approved by the Director if the applicant demonstrates that the proposed alternative:

- 1. Achieves the intent of the subject standard to the same or better degree than the subject standard;
- 2. Advances the goals and policies of the Comprehensive Plan and this UDC to the same or better degree than the subject standard;
- 3. Results in benefits to the community that are equivalent to or exceed benefits associated with the subject standard; and
- 4. Imposes no greater impacts on adjacent properties than would occur through compliance with the specific requirements of this UDC.

#### 4.8.3 Residential Site and Building Design

#### A. Single-Family, Duplex, Triplex, and Fourplex Dwellings<sup>133</sup>

#### 1. Building Variety<sup>134</sup>

For new subdivisions, the following building variety standards shall apply:

a. All New Subdivisions

No two buildings with the same front elevation shall be constructed side by side, directly across the street from one another, or to either side of the building across the street.

- b. **Three Dwelling Units or Fewer** Each building shall have a distinct front elevation.
- c. **Three to 10 Dwelling Units** Three different buildings with distinct front elevations shall be required.

<sup>&</sup>lt;sup>133</sup> From the current MXR and R-1 standards. Carries forward 80 percent masonry requirement. Updated to clarify that these standards apply to household living use types. Replaced reference to "masonry construction" with table listing materials that are acceptable as masonry, as provided in the current definition of "masonry construction." Added "cultured stone" to list to provide additional flexibility and variety.

<sup>&</sup>lt;sup>134</sup> New standards to ensure new development includes a variety of front elevations.

#### d. More than 10 Dwelling Units

Five different buildings with distinct front elevations are required, and no more than 30 percent of the units constructed shall have the same front elevation.

#### 2. Building Mass<sup>135</sup>

Exterior walls shall be broken by recessed entryways, bay windows, use of more than one exterior finish material, use of architectural details, or such other technique or combinations of techniques to prevent the appearance of featureless walls.

#### Figure 4.20: Residential Building Mass



#### 3. Exterior Finish Materials

 $\checkmark$  = allowed

blank cell = prohibited

- a. The exterior cladding of all single-family, duplex, triplex, and fourplex dwellings (including garages and accessory buildings) shall be composed of not more than two materials, excluding glass and roofing materials. Glass shall be clear or tinted, not reflective.
- b. Exterior cladding materials shall be applied across the façade using a consistent visual design, and not an inconsistent or fragmented application of materials.
- c. At least 80 percent of the exterior cladding of all buildings (including garages and accessory buildings) shall be the following allowed materials:

	Zoning District					
Material	R-1	R-2	R-3	R-4	R-5	Α
Brick	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Brick veneer	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Stone	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Stone veneer	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$

<sup>135</sup> New.

**Article 4: Development Standards** 

**4.8 Site and Building Design** 4.8.3 Residential Site and Building Design

Cultured stone	✓	✓	✓	√	√	√
Concrete masonry units		$\checkmark$				
Stucco		$\checkmark$				
Class PB Exterior Insulating and Finishing Systems (EIFS)		$\checkmark$				
Aluminum siding						
Vinyl siding						

#### 4. Colors

There are no restrictions on colors, except that fluorescent colors are prohibited.

#### **B.** Multifamily Dwellings

#### 1. Building Placement and Orientation<sup>137</sup>

- a. The siting of a building shall reflect the natural topography and preserve existing trees and landscaping material pursuant to Section 4.7: *Landscaping, Buffering, and Fences*.
- b. The minimum percentage of building façades shall be built parallel to the street frontage at buildto-ranges as established in Article 2: *Zoning Districts.* Where a build-to-range is not established, a minimum of 60 percent of the primary building façade shall be parallel to the primary street frontage. A façade containing a primary building entrance may be curved or angled toward an intersection at street intersections.

#### 2. Multi-Building Developments<sup>138</sup>

For multifamily developments with three or more buildings, the buildings shall be arranged using one or more of the following techniques:

- a. Organize units around a central courtyard that maintains a consistent side yard setback between units along the street frontage;
- b. Locate the buildings on the corner of an adjacent street intersection or entry point to the development to frame the corner;
- c. Provide common gathering spaces between buildings; and/or
- d. Other site improvements as approved by the Director.

#### 3. Building Entrances 139

- a. The primary building entrance shall face a public or private street. For buildings on corners, there shall either be an additional entrance on the side street frontage, or the primary entrance shall be on the corner.
- b. Primary building entrances shall be defined and articulated with architectural elements such as pediments, columns, porticos, porches, overhangs, or other elements approved by the Director.
- c. For buildings with multiple tenant entries, each entrance shall be defined and articulated with architectural elements.
- d. All ground-floor pedestrian entrances shall be covered or inset.

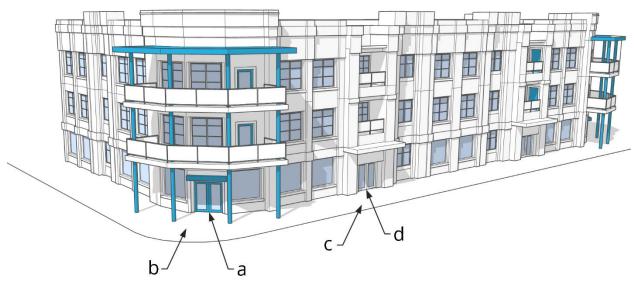
<sup>&</sup>lt;sup>137</sup> New.

<sup>&</sup>lt;sup>138</sup> New.

<sup>&</sup>lt;sup>139</sup> New.

#### **Article 4: Development Standards**

**4.8 Site and Building Design** 4.8.3 Residential Site and Building Design



#### Figure 4.21: Building Entrance Requirements

#### 4. Building Mass<sup>140</sup>

Buildings shall not extend more than 50 continuous feet without incorporating at least two of the following elements for each 50-foot segment:

- a. Projections, recessions, or reveals such as columns, pilasters, cornices, and bays, and having a change of wall plane that is a minimum depth of two feet and has the effect of casting shadows;
- b. Changes in materials, colors, patterns, or textures;
- c. Changes in roof form pursuant to paragraph 4.8.3B.5;
- d. Windows, doors, and openings pursuant to minimum transparency requirements in paragraph 1.1.1A.1; and/or
- e. Alcoves, porticoes, awnings, and other architectural features to provide visual interest and relief.

#### 5. Roof Form<sup>141</sup>

Building shall be designed to avoid any continuous roofline longer than 60 feet. Rooflines longer than 60 feet shall include at least one vertical elevation change of at least two feet in height. Sloped rooflines shall provide variation in overhangs and architectural elements to provide visual relief.

<sup>&</sup>lt;sup>140</sup> New.

<sup>&</sup>lt;sup>141</sup> New.

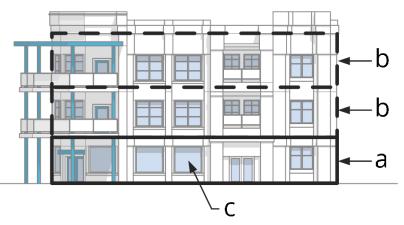


#### Figure 4.22: Roofline Variation

#### 6. Transparency (Windows, Doors, and Openings)<sup>142</sup>

- a. At least 25 percent of the ground-floor wall area, as measured from floor plate to floor plate, of any façade facing a public street or other public area such as a plaza, park, or open space shall contain windows, other transparent materials, or doorways. Such windows, transparent materials, or doorways shall be unobstructed and allow views into working areas or lobbies, pedestrian entrances, and display areas.
- b. At least 20 percent of each upper-floor wall area, as measured from floor plate to floor plate, of all building façades shall contain windows or other transparent materials.
- c. Requirements for ground-floor transparency shall allow views into common areas such as foyers, hallways, and entryways, but may be translucent or opaque for individual dwelling units.
- d. Windows and other materials intended to meet the minimum transparency requirements shall not be reflective.
- e. Reductions to these minimum standards may be approved by the Director if required to comply with local energy codes.

<sup>&</sup>lt;sup>142</sup> New.



#### Figure 4.23: Transparency Requirements

#### 7. Exterior Finish Materials<sup>143</sup>

- a. The exterior cladding of all multifamily dwellings (including garages and accessory buildings) shall be composed of not more than three materials, excluding glass and roofing materials. Glass shall be clear or tinted, not reflective.
- b. Exterior cladding materials shall be applied across the façade using a consistent visual design, and not an inconsistent or fragmented application of materials.
- c. At least 80 percent of the exterior cladding of all multifamily buildings (including garages and accessory buildings) shall be one or more the following allowed materials:

✓ = Façades not visible from public street ◊ =	Façades	visible	from pu	blic str	eet bla	ank cell	= prohi	bited
	Zoning District							
Material	R-4	R-5	Α	M-1	M-2	M-3	M-4	M-5
Aluminum siding								
Architecturally finished concrete block	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Brick	◊ ✓	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓
Brick veneer	◊ ✓	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓	◊ ✓	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓
Class PB Exterior Insulating and Finishing Systems (EIFS)					✓	✓	√	
Comparable materials as approved by the Director	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓
Concrete masonry units				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Cultured stone	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\checkmark$	◊ ✓
Exterior cement plaster								
Galvanized steel or other bright metal								
Glass block					$\checkmark$	$\checkmark$	$\checkmark$	
Glass tile					$\checkmark$	$\checkmark$	$\checkmark$	

<sup>&</sup>lt;sup>143</sup> These standards carry forward the various building material lists from districts where multifamily units are allowed. We have revised the list to reflect typical multifamily cladding materials and removed those that would be more typical of nonresidential construction (plate glass). The limit of three materials is carried forward from the Urban Center (Addison Circle) standards. This table includes a new option for approval of comparable materials as approved by the Director for added flexibility and also specifies which materials are appropriate for facades facing public streets and those that are not.

♦ = Facades visible from public street blank cell = prohibited

· - l'açades not visible from public street	eet v – Paçades visible from public street blank cell – prombited						biteu	
			2	Coning	District			
Material	R-4	R-5	Α	M-1	M-2	M-3	M-4	M-5
Plate glass								
Stone	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓	$\checkmark$	◊ ✓	$\diamond \checkmark$	$\checkmark$	◊ ✓
Stone veneer	$\diamond \checkmark$	$\diamond \checkmark$	◊ ✓	$\checkmark$	◊ ✓	◊ ✓	$\checkmark$	◊ ✓
Stucco					$\checkmark$	$\checkmark$	$\checkmark$	
Unfinished concrete block								
Vinyl siding								
Wood or plastic siding								
Wood roof shingles								

# 8. Colors

There are no restrictions on colors, except that fluorescent colors are prohibited.

#### 4.8.4 Mixed-Use and Nonresidential Site and Building Design<sup>145</sup>

#### A. Building Placement and Orientation<sup>146</sup>

 $\checkmark$  = Facades not visible from nublic street

The minimum percentage of building façades shall be built parallel to the street frontage at build-to-ranges as established in Article 2: *Zoning Districts*. A façade containing a primary building entrance may be curved or angled toward an intersection at street intersections.

#### B. Large and/or Multi-Building Developments<sup>147</sup>

Developments with more than 100,000 square feet shall be organized to create pedestrian-friendly spaces and streetscapes. This shall be accomplished by using the buildings to frame and enclose at least one of the following:

- 1. The corners of street intersections or entries into the development site;
- 2. A "main street" pedestrian or vehicle access corridor within the development site; and/or
- 3. A plaza, pocket park, square, or other outdoor gathering space for pedestrians; and/or
- 4. Other site improvements as approved by the Director.

#### C. Building Entrances<sup>148</sup>

- Each building and separate lease space at grade along the street edge shall have a functioning primary entry from the sidewalk. Corner entries may count as a primary entry for both intersecting street frontages.<sup>149</sup>
- 2. Primary building entrances shall be defined and articulated with architectural elements such as pediments, columns, porticos, porches, overhangs, or other elements approved by the Director.
- 3. For buildings with multiple tenant entries, each entrance shall be defined and articulated with architectural elements.
- 4. All ground-floor pedestrian entrances shall be covered or inset.

<sup>&</sup>lt;sup>145</sup> From current UC-Residential and UC-Commercial subdistrict standards. Did not carry forward statement from UC-Commercial subdistrict indicating that standards apply to all buildings and parking structures within 150 feet of the UC-Residential subdistrict or the special events/retail street. These standards would now generally apply.

<sup>&</sup>lt;sup>146</sup> From current Belt Line standards.

<sup>&</sup>lt;sup>147</sup> New.

<sup>&</sup>lt;sup>148</sup> New unless otherwise noted.

<sup>&</sup>lt;sup>149</sup> Did not carry forward entrance inset requirements or entrance spacing standards.

#### D. Building Mass<sup>150</sup>

- 1. All buildings shall be designed and constructed in tri-partite architecture so that they have a distinct base, middle, and top; and all windows shall have a vertical proportion.
- 2. Except where adjacent to arterials, buildings greater than three stories in height shall be set back at the fourth floor and above at least eight feet behind the front building face of the first three floors along street frontages.<sup>151</sup>
- 3. Buildings that are located on axis with a terminating street or at the intersection of streets shall be considered a landmark building. Such buildings shall be designed with landmark features which take advantage of that location, such as an accentuated entry and a unique building articulation that is offset from the front wall planes and goes above the main building eave or parapet line.
- 4. Buildings shall not extend more than 50 continuous feet without incorporating at least two of the following elements for each 50-foot segment:
  - a. Projections, recessions, or reveals such as columns, pilasters, cornices, and bays, and having a change of wall plane that is a minimum depth of two feet and has the effect of casting shadows;
  - b. Changes in materials, colors, patterns, or textures;
  - c. Changes in roof form pursuant to paragraph 4.8.4E;
  - d. Windows, doors, and openings pursuant to minimum transparency requirements in paragraph 4.8.4H; and/or
  - e. Alcoves, porticoes, awnings, and other architectural features to provide visual interest and relief.

#### E. Roof Form<sup>152</sup>

Building shall be designed to avoid any continuous roofline longer than 60 feet. Rooflines longer than 60 feet shall include at least one vertical elevation change of at least two feet in height. Sloped rooflines shall provide variation in overhangs and architectural elements to provide visual relief.

#### F. Architectural Features

#### 1. Residential at Grade<sup>153</sup>

- a. All buildings that have residential unit floor plates within six feet of finished grade shall include a primary front door entrance into the unit accessible from the sidewalk.
- b. The entry shall be located a minimum of two feet above the sidewalk elevation and include a minimum 24 square foot stoop.
- c. Units must also include windows that provide residents a view of the street and sidewalk area.
- d. Lobbies to upper stories may be located at grade level.
- e. Balcony and patio railings and fences shall be constructed of wrought iron or metal. Wood fences and railings and chain-link fencing are prohibited. Masonry columns may be used on patios provided that they are used as accents.

#### 2. Nonresidential at Grade

- a. The ground floor entry must be located at the approximate elevation of the adjacent sidewalk.
- b. Retail uses adjacent to the sidewalk at grade shall:
  - i. Be constructed to meet fire code separation from any other uses constructed above;
  - ii. Have a minimum clear height of 16 feet between finished floor and the bottom of the structure above. Mezzanines within the retail space shall be allowed per building code; and
  - iii. Have an awning or canopy that extends at least six feet over the sidewalk for at least 75 percent of the frontage on any portion of a building. Such awning or canopy shall maintain a minimum seven and one-half foot clearance over the sidewalk.

<sup>&</sup>lt;sup>150</sup> Paragraphs (1) and (2) are from current Belt Line standards. Other standards are new.

Replaced "Belt Line and Arapahoe" with "arterials." Did not carry forward allowance for major waiver for changes to this standard.
 New.

<sup>&</sup>lt;sup>153</sup> From current Belt Line standards. Did not carry forward allowance for changes to standards (a), (b), and (c) with approval of a major waiver.

#### **Article 4: Development Standards**

4.8 Site and Building Design 4.8.4 Mixed-Use and Nonresidential Site and Building Design144F

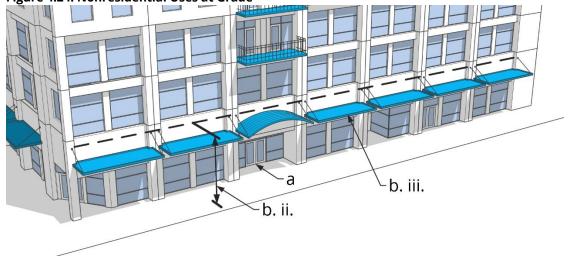


Figure 4.24: Nonresidential Uses at Grade

#### G. Exterior Finish Materials<sup>154</sup>

- 1. The exterior cladding of all mixed-use and nonresidential buildings (including garages and accessory buildings) shall be composed of not more than three materials, excluding glass and roofing materials. Glass shall be clear or tinted, not reflective.
- 2. Exterior cladding materials shall be applied across the façade using a consistent visual design, and not an inconsistent or fragmented application of materials.
- 3. Unpainted metal, or metal subject to ordinary rusting shall not be used as a building material. Factory finished metal elements as well as metals that develop an attractive oxidized finish, such as copper, galvanized metal, or weathering steel, may be used as architectural accents.<sup>155</sup>
- 4. Walls attached to buildings shall be developed as architectural extensions of the building, constructed of the same material and in the same style.
- 5. At least 80 percent of the exterior cladding of all mixed-use and nonresidential buildings (including garages and accessory buildings) shall be one or more the following allowed materials:<sup>156</sup>

✓ = Façades not visible from public street prohibited									
			Zoi	ning Di	strict				
Material <sup>157</sup>	Residentia l Districts	M-1	M-2	M-3	M-4	M-5	CL, CG	LI <sup>158</sup> , CF, PO	<b>AA</b> <sup>159</sup>
Aluminum siding									

<sup>&</sup>lt;sup>154</sup> These standards carry forward the various building material lists from districts. The limit of three materials is carried forward from the Urban Center (Addison Circle) standards. This table includes a new option for approval of comparable materials as approved by the Director for added flexibility.

<sup>&</sup>lt;sup>155</sup> From current Belt Line standards, did not carry forward requirement for minor waiver to use accents.

<sup>&</sup>lt;sup>156</sup> Urban Center (Addison Circle) currently requires 90 percent brick construction for exterior walls visible from public streets. We recommend this be reduced to 80 percent for consistency with other districts and to allow additional flexibility.

<sup>&</sup>lt;sup>157</sup> Did not carry forward limitation of composition shingles in the Urban Center (Addison Circle) district to areas not visible from a public street. Did not carry forward 90 percent brick requirement in UC-Commercial for minimum height of 50 feet.

<sup>&</sup>lt;sup>158</sup> Did not carry forward requirement to have side walls extending back 20 feet to be constructed of brick or stone.

<sup>&</sup>lt;sup>159</sup> New standards for the airport district, currently there are no architectural requirements.

4.8.4 Mixed-Use and Nonresidential Site and Building Design

 $\checkmark$  = Façades not visible from public street  $\diamond$  = Façades visible from public street blank cell = prohibited

						Zoning District					
Material <sup>157</sup>	Residentia l Districts	M-1	M-2	M-3	M-4	M-5	CL, CG	LI <sup>158</sup> , CF, PO	<b>AA</b> <sup>159</sup>		
Architecturally finished concrete block	$\diamond \checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\diamond \checkmark$		
Brick	$\diamond \checkmark$	$\diamond \checkmark$	$\land \checkmark$	$\checkmark$	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$		
Brick veneer	$\diamond \checkmark$	$\land \checkmark$	$\land \checkmark$	$\checkmark$	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$		
Class PB Exterior Insulating and Finishing Systems (EIFS)			✓	✓	✓		✓	✓	◊ ✓		
Comparable materials as approved by the Director	◊ ✓	◊ ✓	◊ ✓	◊ ✓	◊ ✓	◊ ✓	◊ ✓	◊ ✓	◊ ✓		
Concrete masonry units	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Concrete tilt-wall							$\checkmark$	$\checkmark$	$\checkmark$		
Corrugated metal											
Cultured stone	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\diamond \checkmark$	◊ ✓	$\diamond \checkmark$		
Exterior cement plaster	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Architectural metals (e.g., stainless steel, galvanized steel)			<b>◊ ✓</b> [1]								
Glass block		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\diamond \checkmark$		
Glass tile		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\diamond \checkmark$		
Plate glass		$\checkmark$					$\checkmark$	$\checkmark$	$\diamond \checkmark$		
Prefabricated metal								$\checkmark$	$\checkmark$		
Stone	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$		
Stone veneer	$\diamond \checkmark$	$\checkmark$	$\diamond \checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\diamond \checkmark$	$\diamond \checkmark$	$\diamond \checkmark$		
Stucco			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		
Unfinished concrete block									$\checkmark$		
Vinyl siding											
Wood or plastic siding											
Wood roof shingles											
Note:		ad 160									

[1] Only allowed for properties fronting on Inwood Road. <sup>160</sup>

#### H. Transparency (Windows, Doors, and Openings)<sup>161</sup>

- 1. For live/work dwellings and residential uses, requirements for ground-floor transparency shall allow views into common areas such as foyers, hallways, and entryways, but may be translucent or opaque for individual dwelling units.
- 2. Windows, except for retail at grade, shall be vertical in proportion and have at least a four-inch reveal.
- 3. No glass curtain wall shall be permitted, except as approved by the Director.<sup>162</sup>

<sup>&</sup>lt;sup>160</sup> Replaced reference to "epicurean district" with "properties fronting on Inwood Road."

<sup>&</sup>lt;sup>161</sup> New, unless otherwise footnoted.

<sup>&</sup>lt;sup>162</sup> Replaced reference to "minor waiver" with approval by the Director.

- 4. Windows and other materials intended to meet the minimum transparency requirements shall not be reflective.
- 5. At least 50 percent and no more than 80 percent of the ground-floor wall area between three and eight feet above grade of any building façade facing a public street or other public area such as a plaza, park, or open space shall contain windows, other transparent materials, or doorways. Such windows, transparent materials, or doorways shall be unobstructed and allow views into working areas or lobbies, pedestrian entrances, and display areas.<sup>163</sup>
- 6. At least 20 percent of each upper-floor wall area, as measured from floor plate to floor plate, of all building façades shall contain windows or other transparent materials. In the M-1 and M-4 zoning districts, windows or other transparent materials of upper-floor wall areas shall be limited to no more than 60 percent.<sup>164</sup>
- 7. Modifications to these standards may be approved by the Director if required to comply with local energy codes.

#### I. Colors

1. There are no restrictions on colors, except that fluorescent colors are prohibited.

#### 4.8.5 Parking Structure Design<sup>166</sup>

The following standards shall apply to all above-ground parking garages or structures, whether freestanding or incorporated into a building:

- **A.** Each façade or a parking garage adjacent to a public street or public space shall have an external skin designed to conceal the view of all parked cars. Examples include heavy gauge metal screen, precast concrete panels, live green or landscaped walls, laminated or safety glass, or decorative photovoltaic panels.
- **B.** In mixed-use zoning districts, all parking garages or structures shall be designed to meet the building design standards applicable in the zoning district in which it is located. Alternative designs may be approved pursuant to Section ---.<sup>167</sup>
- **C.** No horizontal length of the parking garage façade shall extend longer than 50 feet without the inclusion of architectural elements such as decorative grillwork, louvers, translucent screens, alternating building materials, and other external features to avoid visual monotony. Facade elements shall align with parking levels.
- **D.** Internal circulation shall allow parking surfaces to be level (without any slope) along each parking garage façade adjacent to a public street or public space. All ramps between levels shall be located along building façades that are not adjacent to a public street or public space or shall be located internally so they are not visible from adjacent public streets or public spaces.
- **E.** The location of elevators and stairs shall be highlighted through the use of architectural features or changes in façade colors, textures, or materials so that visitors can easily identify these entry points.
- **F.** Interior garage lighting shall not produce glaring sources toward adjacent properties while providing safe and adequate lighting levels. The use of sensor dimmable LEDs and white stained ceilings are recommended to control light levels on-site while improving energy efficiency.

<sup>&</sup>lt;sup>163</sup> Current standards vary based on zoning district – between 60 and 80 percent in Belt Line, 70 percent in UC (Addison Circle).

<sup>&</sup>lt;sup>164</sup> Currently 50 percent in M-1 (UC-Residential) and 60 percent in M-4 (UC-Commercial).

<sup>&</sup>lt;sup>166</sup> Current standards require all parking structures to comply with building design standards. These new standards ensure screening of vehicles and enhanced parking structure design generally, but do not require parking structures outside of mixed-use zoning districts to comply with the building design standards.

<sup>&</sup>lt;sup>167</sup> Current standards allow for approval of alternate building materials for parking structures, subject to Town approval. This will be included in Part 3 when the minor modification standards are drafted.

- **G.** Vent and fan locations shall not be located on parking garage façades facing public streets or public spaces, or adjacent to residential uses, to the greatest extent practicable.
- **H.** Any parking garage with more than 100 parking spaces shall be designed with at least two access points unless a traffic study is submitted.

#### 4.8.6 Neighborhood Transition Standards

#### **Commentary:**

These new standards enhance neighborhood transitions between more intense development and residential zoning districts. Increased building setback and building stepback provisions are intended to ensure that development immediately adjacent to residential zoning districts respect the scale of adjacent buildings and ensure an adequate buffer between uses.

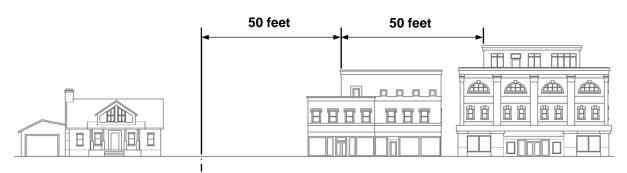
#### A. Setbacks

Buildings abutting a property in the R-1, R-2, R-3, R-4, or R-5 zoning district, or Planned Development districts with abutting residential uses shall comply with the minimum building setback of the adjacent residential zoning district along the common property line or the minimum building setback of the zoning district where the building is located, whichever is greater.

#### **B.** Building Height

- Any portion of a building within 50 feet of a property in the R-1, R-2, R-3, R-4, or R-5 zoning district, or Planned Development districts with abutting residential uses shall not exceed the maximum building height allowed in the abutting residential district or the maximum building height of the zoning district where the building is located, whichever is lower. Where a lot abuts two or more residential districts, the residential district with the lowest maximum building height shall govern.
- 2. Any portion of a building between 50 feet and 100 feet of a property in the R-1, R-2, R-3, R-4, or R-5 zoning district shall not exceed the maximum building height allowed in the abutting residential district, plus one story (not to exceed 15 feet); or the maximum building height of the zoning district where the building is located, whichever is lower. Where a lot abuts two or more residential districts, the residential district with the lowest maximum building height shall govern.
- 3. Any portion of a building beyond 100 feet from a property in the R-1, R-2, R-3, R-4, or R-5 zoning district shall not exceed the allowed building height of the zoning district where the building is located.
- 4. Building features referenced in [*reference Subsection 2.9.5.C*], shall be designed to minimize visibility from adjacent residential districts and fit within the allowed building height of the zoning district where the building is located, to the maximum extent practicable.

#### Figure 4.25: Neighborhood Transition Standards



### 4.9 Exterior Lighting

#### Commentary

The current Addison code has minimal exterior lighting standards, mostly which apply to only specific districts (Belt Line, LR, C-2). Although we have not discussed exterior lighting standards in detail with staff, they are recommended in the Assessment Report as an additional tool that can help Addison raise the overall bar on development quality.

This draft proposes some relatively simple standards to apply more broadly throughout the Town, but they are more complex than what the Town is administering today. Comprehensive lighting standards require additional up-front submittal requirements to demonstrate compliance and can require additional code enforcement measurement devices.

**Peer community comparison.** Farmers Branch, Plano, and Carrollton do not maintain a separate Exterior Lighting chapter in their respective development codes and keep lighting (glare) as a performance standard with minimal requirements. Frisco is the only other community in the area with a dedicated lighting chapter that sets forth standards based on lighting types and includes more detailed requirements for lighting plans. The first option provided in Section 4.9.5 follows the more simplistic approach with basic glare standards (i.e. shielding and lighting trespass requirements) and Section 4.9.6 includes a more thorough set of standards.

#### 4.9.1 Purpose

The purpose of this section is to provide for exterior lighting that enhances safety, preserves the Town's nighttime character, and improves the ability to view the nighttime sky from within the Town. This section is intended to:

- A. Decrease light pollution;
- B. Increase energy efficiency;
- C. Promote high-quality lighting design as it relates to the built environment;
- **D.** Ensure that parking areas, public gathering places, and other public places have adequate outdoor illumination;
- E. Ensure that light levels are uniform to enhance night vision and security;
- F. Minimize adverse impacts on public safety and neighborhood enjoyment due to excessive glare; and
- **G.** Minimize spillover of light onto adjacent or nearby properties.

#### 4.9.2 Applicability

#### A. New Lighting

New lighting shall meet the requirements of this UDC with regard to shielding and lamp type. The total outdoor light output after the new lighting is installed shall not exceed that on the site before the new lighting was installed, or that is permitted by this UDC, whichever is larger.

#### **B.** Additions or Modifications

- 1. If the total cumulative increase in floor area is greater than 50 percent for single-family residential or greater than 25 percent for all other uses, or if the total cumulative cost of any exterior modification, alteration, or repair is greater than 25 percent of the valuation of the building as determined by the Director, then all exterior lighting fixtures shall comply with this UDC.
- 2. Cumulative modification or replacement of outdoor lighting constituting 25 percent or more of the permitted lumens for the parcel, no matter the actual amount of lighting already on the site, shall require all exterior lighting fixtures to comply with this UDC.

#### C. Exemptions

#### 1. Emergency Lighting

Lighting used only under emergency conditions shall not be subject to this Section 0.

#### 2. Seasonal Lighting

Temporary seasonal lighting between Thanksgiving and January 15 shall not be subject to this Section 0, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties. This exemption shall not apply to permanent exposed string lighting typically used for patio ambiance lighting.

#### 3. Lighting Required by FAA or FCC

Lighting required by the Federal Aviation Administration or the Federal Communications Commission shall not be subject to this Section 0.

#### 4. Special Events

Special events that have been issued a temporary use permit pursuant to Section --- shall be allowed temporary lighting for the duration of the event, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties.

#### 5. Street Lighting

With the exception of shielding requirements, this UDC does not apply to street lighting within Town and state rights-of-way.

#### 6. Underwater Lighting

Underwater lighting used for the illumination of swimming pools and decorative water fountains shall not be subject to this Section 0, though they must conform to all other provisions of this UDC.

#### 7. Lighting Required by Building Code

Any lighting that is required by the building code for life safety purposes such as stairway lighting, walkways, and building entrances, shall not be prohibited by this Section 0 but shall be subject to the lighting standards.

#### 4.9.3 Administration

#### Commentary

Many (but not all) communities that regulate exterior lighting tailor standards to recognize that different parts of the community, and/or different use types, have different lighting needs. This can be done through the designation of "lighting classes." Lighting classes may become complex and have many tiers in larger cities.

For Addison, further discussion is necessary about whether lighting classes are necessary and worthwhile. They would provide a tool to be more fine-grained in regulating lighting differently in various areas – but they may not be worth the additional administrative complexity in a community the size of Addison. The proposed text below introduces a relatively simple system of three classes of lighting based on the type of use. If this approach is embraced, then we could further fine-tune the subsequent standards based on the lighting classes.

#### A. Lighting Districts Established [optional]<sup>168</sup>

#### 1. Lighting District 1

The standards for this lighting district shall apply to the M-3, M-4, M-5, CL, CG, LI, and AA zoning districts.

<sup>&</sup>lt;sup>168</sup> An example of an alternative classification system recently adopted in Sedona, Arizona:

<sup>1.</sup> Class 1 Lighting: Lighting used for outdoor sales or eating areas, assembly or repair areas, signage, recreational facilities, and other similar applications where color rendition is important to preserve the effectiveness of the activity.

<sup>2.</sup> Class 2 Lighting: Lighting used for illumination of walkways, roadways, equipment yards, parking lots, and outdoor security where general illumination for safety or security of the grounds is the primary purpose.

<sup>3.</sup> Class 3 Lighting: Lighting used for decorative effects such as architectural illumination, flag and monument lighting, and illumination of landscaping elements.

<sup>4.</sup> Multi-Class Lighting: Lighting used for more than one purpose such that the use falls within more than one class as defined for Class 1, 2, or 3 lighting. Multi-class lighting must conform to the standards that apply to the most restrictive included class.

#### 2. Lighting District 2

The standards for this lighting district shall apply to the R-4, R-5, M-1, M-2, and CF zoning districts.

#### 3. Lighting District 3

The standards for this lighting district shall apply to the R-1, R-2, R-3, and PO zoning districts.

#### **B.** Evaluation of Compliance

#### 1. Lighting Plan Submittal Required<sup>169</sup>

- a. All new multifamily, mixed-use, or nonresidential developments shall provide a lighting plan with the applicable site plan application and/or building permit.
- b. *Option 1:* The lighting plan shall include sufficient information to enable the Director to determine whether proposed lighting complies with this UDC.
- c. *Option 2:* Lighting plans shall show the following:
  - i. The location and height above grade of light fixtures;
  - ii. The type of light source (such as incandescent, fluorescent, high pressure sodium, metal halide, LED), rated lumens, and wattage of each light source;
  - iii. The type of fixture (such as full-cutoff, cut-off, lantern, wall pack);
  - iv. The Backlight, Uplight, Glare (BUG) rating for each fixture;
  - v. Calculations for site illumination resulting from the lighting, measured in foot-candles (see Exhibit 1 for examples) including minimum, maximum and average foot-candles and uniformity ratios;
  - vi. If building walls are to be illuminated, or if façade-mounted fixtures are to be used, drawings of all relevant building elevations showing the fixtures and the portions of the walls to be illuminated calculated point-by-point and light levels; and
  - vii. Other information deemed necessary to document compliance with the provisions of this section.

#### 2. Plan Approval

If the Director determines that any proposed lighting does not comply with this UDC, the associated permit shall not be issued or the application approved unless an alternative is approved pursuant to paragraph 3, below.

#### 3. Discretionary Approval of Lighting Alternatives

The Director may approve alternative lighting designs, materials, or methods of installation or operation not specifically prescribed by this UDC provided the proposed alternative:

- a. Results in approximate equivalence to the applicable specific requirement of this UDC; and
- b. Complies with the intent of this UDC.

#### 4.9.4 Prohibited Lighting Types

The following types of exterior lighting are prohibited unless allowed elsewhere in this UDC:

- **A.** Unshielded lights, lamps, or floodlights that produce glare and light trespass in excess of that allowed in paragraph 4.9.6B.1: *Maximum Lighting Trespass Levels*;
- **B.** Lights affixed to the top of a roof, except where required by building code;
- **C.** Lights that flash, move, revolve, blink, flicker, vary in intensity, change color, or use intermittent electrical pulsation, except for holiday lighting pursuant to paragraph 4.9.2C.2: *Seasonal Lighting*;
- D. Mercury vapor and low-pressure sodium lighting;
- **E.** Linear lighting; and

<sup>&</sup>lt;sup>169</sup> Policy Discussion: We have included two options for lighting plan submittal requirements. The first includes no detail and assumes that technical requirements would be outside the code in an administrative manual; this would allow maximum flexibility. The second option listed is more specific as to what is required in a lighting plan.

**F.** Upward-directed lighting that allows spillage into the sky.

#### 4.9.5 General Lighting Standards (option 1: simplest)

#### Commentary

In this section and the next, we offer two optional approaches for general lighting standards. The first is a very simple approach that simply lists some of the most common and fundamental concerns with lighting. This essentially would take some of the simple lighting standards in the Belt Line district and apply them town-wide.

The second option that follows is a more sophisticated and involved set of standards. It reflects the types of standards being adopted in many communities nationwide that are focusing on dark-sky protection (though Texas communities have been relatively slower to embrace this type of regulation).

A hybrid approach mixing elements of both sections is also possible.

- **A.** Lighting along public rights-of-way and landscaped areas within a specific development shall be designed uniformly.
- **B.** Lighting shall be the minimum recommended practice necessary for safety and security per Illuminating Engineering Society of North America (IESNA) recommended practices, as amended.
- **C.** Glare from exterior lighting shall not spillover onto adjacent properties except onto walkways, driveways, and streets and shall be directed downward.
- **D.** Except for decorative lighting, building-mounted lights shall be installed so that all light is directed downward.
- **E.** Interior or exterior flickering, pulsating, flashing lights, neon tubing or lights, high- and low-pressure sodium lights, and any other lights that could distract or confuse a motorist are prohibited.

#### 4.9.6 General Lighting Standards (option 2: more detailed)

#### A. On-Site Lighting Level

Maximum on-site illumination, including spillage from doorways, signs, and windows, shall not exceed 10 foot-candles, unless otherwise allowed in this UDC.

#### **B.** Light Trespass

#### 1. Maximum Lighting Trespass Levels<sup>170</sup>

The maximum measured light levels (footcandles) shall not exceed those provided in the following table:

Lighting District	Point A (property line)	Point B (10 feet onto adjacent property)
District 1	5.0	3.0
District 2	0.5	0.2
District 3	0.3	0.1

<sup>&</sup>lt;sup>170</sup> This type of table could also be more fine-grained and set different maximum light outputs for different types of uses or areas. As a general note, the methodology for regulating maximum light levels is a fast-changing and evolving field. While many communities focus on regulating maximum light trespass at property boundaries, as is shown in this draft text, we today see some communities moving toward regulating overall maximum light output per parcel (e.g., the new Sedona code sets a maximum light output per parcel of 100,000 lumens per acre).

#### 2. Measurement

#### a. Methodology

- Light trespass shall be measured at grade level unless otherwise noted. Two measurements shall be taken: one at any point along the property line (point A), and one taken 10 feet (measured perpendicular to property line) onto the property being trespassed (point B). Where grade changes or obstructions prohibit measurements at the same grade level, measurements shall be taken on the same horizontal plane.
- ii. Lighting measurements shall be taken under normal conditions. Measurements to determine compliance shall not be taken when conditions are present that will influence the outcome of measurements including snow, snowpack, rain, fog, or other influences.

#### b. Cumulative Light Readings

Light sources from a property shall be measured as cumulative of all sources on the subject property, except for internally illuminated signs.

#### 3. Transitions between Lighting Districts

The maximum light level for light trespass in any lighting district that borders a different lighting district shall be the lower of the two, along that border only. Where separated by a public street or right-of-way, the levels shall apply at the center line of the street adjacent to the light source.

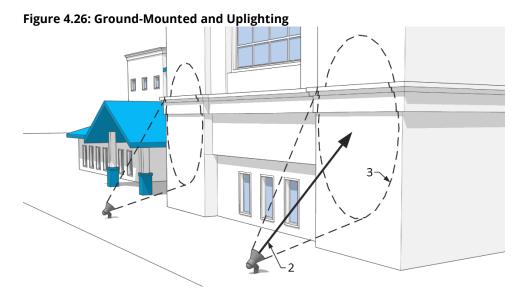
#### C. Shielding and Light Trespass

- 1. All light fixtures are required to be fully shielded, unless approved by the Director pursuant to paragraph 4.9.3B.3: *Discretionary Approval of Lighting Alternatives*.
- 2. All light fixtures shall be aimed and shielded so that the direct illumination shall be confined to the property boundaries of the source. Lighting shall not be aimed onto adjacent properties, except in cases of shared parking, shared pedestrian pathways, or for coordinated development sites spanning multiple parcels.
- 3. Light trespass onto adjacent public rights-of-way may be allowed subject to approval of the Director pursuant to paragraph 4.9.3B.3.

#### **D.** Uplighting

- Subject to the approval of the Director, uplighting or ground-mounted lighting may be allowed to accent unique features of a building and/or surrounding landscaping such as exceptional architectural features, specimen trees with dense year-round foliage, or large native shrub masses). Uplighting or ground-mounted lighting shall be designed and installed to minimize glare with special consideration to vehicular and pedestrian traffic.
- 2. All lighting that is directed upward shall be located so that the angle of the lamp does not exceed 45 degrees measured from a horizontal plane to a line projected through the center of the lamp, and fixtures shall be fully shielded to contain and direct the light onto the featured to be illuminated.
- 3. All uplighting shall be selected, designed, installed, and aimed so that there is a minimum amount of spill beyond the area intended to be lighted.

4.9 Exterior Lighting 4.9.6 General Lighting Standards (option 2: more detailed)



#### E. Surface Parking Area Lighting

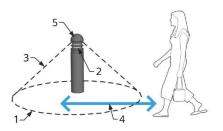
- 1. All lighting for surface parking lots and upper uncovered decks of parking structures shall use full cutoff fixtures.
- Parking lot lighting poles shall not exceed 35 feet in height in District 1 and 20 feet in height in District
   In District 3, parking area lighting shall be prohibited except for public or quasi-public facilities requiring exterior parking lot illumination; such facilities shall comply with the parking area lighting standards for District 2.<sup>171</sup>

#### F. Pedestrian-Scale Lighting

Low-level pedestrian lighting may be used along walkways pursuant to the following:

- 1. Shall direct light downward;
- 2. Shall use shatterproof lamp coverings;
- 3. Shall not cause the site to exceed the maximum trespass pursuant to paragraph 4.9.6B.1: *Maximum Lighting Trespass Levels*;
- 4. Shall not be located to present hazards for pedestrians or vehicles; and
- 5. Post or bollard-type lights shall be painted dark colors such as black, dark gray, dark brown, or dark earth tone.

#### Figure 4.27: Pedestrian-Scale Lighting



<sup>&</sup>lt;sup>171</sup> Some communities also set minimum foot candle measurements for parking lots for security reasons.

#### G. Security Lighting

#### 1. Applicability

Security lighting shall be allowed in all lighting districts. The need for security lighting shall be demonstrated as part of any development permit application package.

#### 2. Standards

- a. Examples of Appropriate Security Lighting Techniques
  - i. Recessed lights under a canopy.
  - ii. Full cut-off fixtures on parking lot poles.
  - iii. Fully shielded wall packs or other fixtures.
  - iv. Floodlights that are down-directed, fully shielded, and are controlled by motion sensors.

#### b. Fixtures

- i. Security lighting fixtures shall be fully shielded and directed only to the designated area.
- ii. Security lighting shall not be directed above a horizontal plane through the top of the lighting fixture.
- iii. Security lighting fixtures shall include shields that prevent the light source from being visible from adjacent properties and roadways to the maximum extent practicable.

#### c. Light Levels

- i. Security lighting may illuminate ingresses and egresses of buildings up to a level eight feet above grade or the bottom of doorways, windows, or entries, whichever is greater.
- ii. Security lighting on a parcel in District 1 that shares a common lot line with a parcel located in Districts 2 or 3 shall comply with specifications for light levels and maximum mounting heights as noted in District 2.
- iii. Security lighting for entrances, stairways, and loading docks shall not exceed five foot-candles at the designated area illuminated. Parking lot lighting used for after-hours security shall not exceed three foot-candles at the designated area illuminated.

#### H. Service Station Canopies

- 1. Canopies shall be illuminated so that the minimum horizontal illuminance at grade level is at least five foot-candles. The maximum horizontal illuminance under canopies shall be 25 foot-candles.
- 2. Light fixtures mounted on canopies shall be installed so that the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy or the fixture.
- 3. Lights shall not be mounted on the top or sides of the canopy. The sides (fascias) of the canopy shall not be illuminated for any purpose, with the exception of internally illuminated signage which shall comply with the sign regulations of this UDC.

#### 4.9.7 Installation and Maintenance

#### A. Compliance with Building Code and other Applicable Codes

Exterior lighting fixtures shall comply with the building code and other applicable codes as adopted by the .

#### **B.** Maintenance

Exterior lighting shall be maintained in good structural condition at all times.

#### C. Electrical Service Underground

New electrical service required for exterior lighting shall be located underground unless the fixtures are directly mounted on utility poles.

### 4.10 Signs

[To be drafted in Part 3]