

EXHIBIT B



THE COMMONS
AT HEATHERWILDE & PECAN

A PLANNED UNIT DEVELOPMENT
PFLUGERVILLE, TEXAS

DEVELOPMENT STANDARDS

JULY 12, 2016



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A. GENERAL REQUIREMENTS

1. Purpose and Intent

These Development Standards describe the Planned Unit Development zoning entitlements and development requirements (the “PUD”) for The Commons at Heatherwilde and Pecan (“The Commons”, the “Project”, or the “Development”). This re-zoning allows two separately owned but contiguous and undeveloped parcels in the City of Pflugerville (the “City”) to be transformed into a densely developed urban mixed-use community.

2. Development Plan

The Commons is an innovative community proposed for development on approximately 45.74 acres of land. See EXHIBIT 1 and EXHIBIT 2 for separate land surveys of the two parcels. It will consist of a mix of retail, office, and residential uses. The community is designed to meet the market demand for “walkable urbanism” where best practices for providing a variety of housing products, pedestrian and bicycle safety, proximity to employment and basic daily needs, and highly amenitized civic spaces available to the general public, cannot be met under the regulations of the City’s existing Unified Development Code (UDC). The development plan incorporates the following goals:

- a. Create a walkable, mixed-use, compact community offering a diversity of housing options, for rent and for sale, at various price points.
- b. Provide a range of living, working, shopping, and recreation choices in close proximity to each other.
- c. Accommodate a variety of transportation modes including potential future bus transit, as well as safe mobility for people on foot, people on bicycles, and people in cars.
- d. Create a distinctive, human-scaled destination place with interesting civic spaces and programming of festivals, farmers markets, and other community events for all residents of Pflugerville to enjoy.
- e. Apply best management practices for community programming and urban design through the establishment of a master property owner’s association and architectural control committee committed to these principles.
- f. Improve quality of life, sustain long-term property values, and enhance the positive effects of infrastructure investments made by the City of Pflugerville and the Pflugerville Independent School District in the west side of the city.

3. Consistency with Comprehensive Plan and Unified Development Code

The Commons is designed as a high quality, compact, walkable mixed-use community consistent with the goals and policies of the Comprehensive Plan and Unified Development Code (the “UDC”) of the City of Pflugerville. Development shall be approved in accordance with the City of Pflugerville Unified Development Code CL5 Zoning District regulations (unless otherwise referenced), the Engineering Design Manual, the Building and Fire Codes and all other applicable codes and ordinances unless otherwise stated within this ordinance. Where an unintentional conflict may occur, the applicable City codes and ordinances shall prevail.

As the development is implemented, adjustments may be needed to implement the vision of the development. The following shall serve as a guide to minor and major amendments:

- a. Minor changes, revisions, and modification to these development standards and exhibits that do not substantially increase the overall density of development may be approved administratively by the City Manager, if the City Manager determines in his/her sole and absolute discretion to be a minor change, revision, or modification. Examples of minor changes, revisions, or modifications may include but not limited to minor street/drive alignments, phasing, arrangement of uses and height, utility location and easements with exception of overhead electric, minor adjustments to open space placement provided the amount of open space and character is not decreased, architectural



standards establishing an enhanced architectural appearance not otherwise achievable under the specified code references (City Manager may defer to the Planning and Zoning Commission to consider the proposed architecture).

- b. A major change and revision is any item the City Manager determines to be a major change or revision, and must be approved in accordance with the City's procedures for amendments to the PUD process. Examples of major changes may include reconfiguration of the proposed layout, change in density, change in use, etc.

4. Subdivision and Phasing

The Project shall be developed in no more than ten (10) phases that will each include one or more blocks and associated amenities and infrastructure, including parking and civic space. Prior to the recordation of a final plat for any lot within the Project, all existing billboard signs shall be disassembled and physically removed from the property.

5. Building Entitlements Summary

Entitlement	Total
Total Acreage	45.74 acres
Minimum Civic Space Dedicated	10.77acres
Maximum Impervious Cover*	85%
% Hotel Use	0-10%
% Retail Use	8-25%
% Office Use*	10-45%
% Residential Use	50-85%
Maximum Residential Units	1,280

* For purposes of these calculations, maximum impervious cover may be considered for the entire development vs. on a per lot condition, provided that the entire Development never exceeds 85% impervious cover. Water cover throughout the Development shall be considered pervious cover for purposes of this calculation. Live/Work Units may be classified as Office Use for this purpose.

6. Additional Residential Requirements

- a. Maximum number of apartment style (internal single-story) units (for sale or rent) allowed is 1,200. Live/Work Units shall not be classified as apartment style units for this purpose. Live/Work Units shall have a ground floor component, shall face a sidewalk or paseo that is publically accessible, and shall be allowed only on building frontages designated for allowed commercial use on the Land Use Plan (Section E herein). Live/Work Units may have two separate front entrances to facilitate internal separation of live and work functions.
- b. No more than 500 residential units of any type shall be built until at least 50,000 square feet of commercial space is built. Commercial space is defined as "usable building square footage"

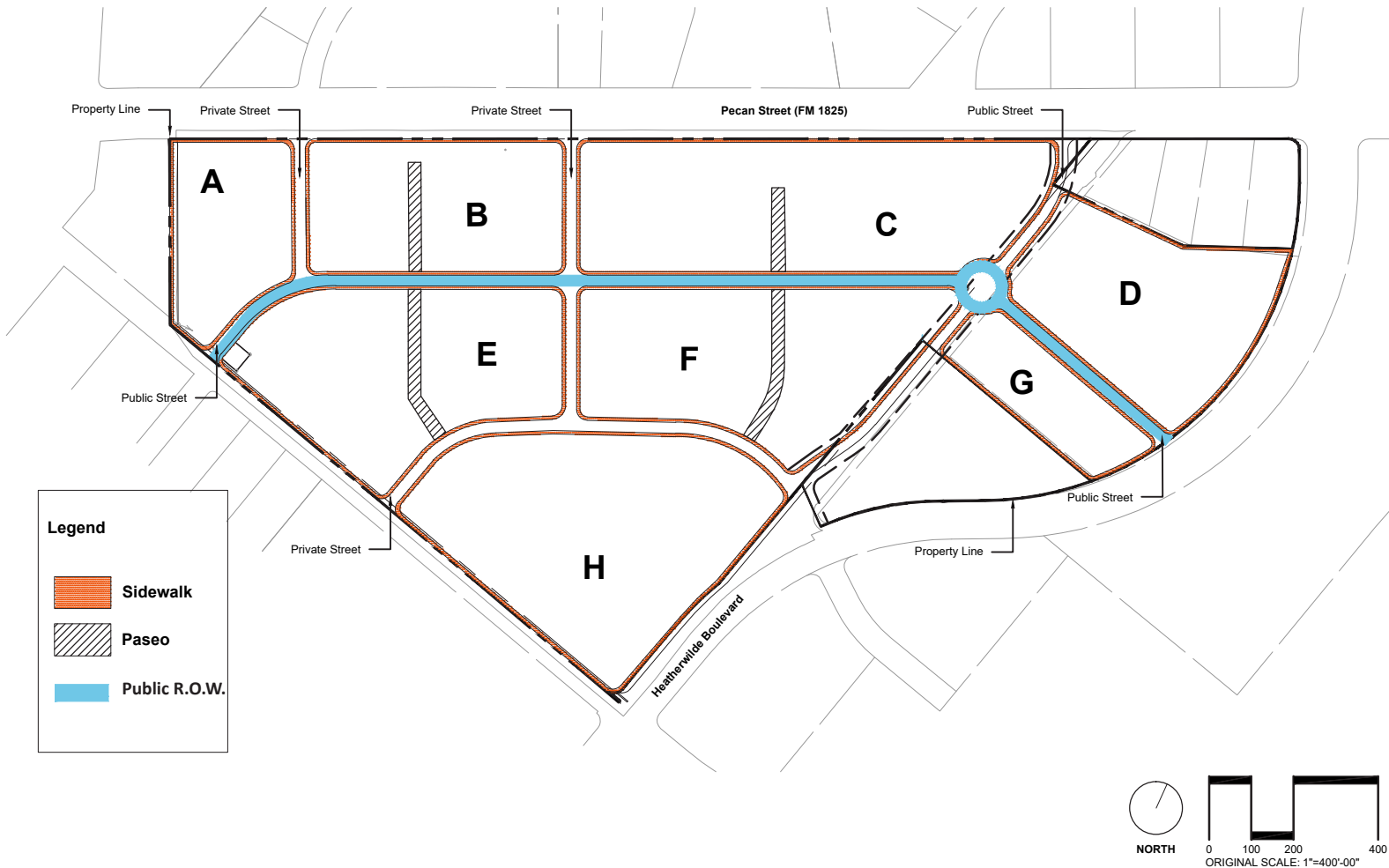


associated with a hotel, office, retail, or similar use, and does not include parkland, open space, parking, or other ancillary components of a non-residential use; Live/Work Units shall not be classified as commercial space for this purpose.

- i. After 500 units are developed, land use will be allocated and reserved for commercial use at a ratio of 3:1, where 3 units of residential delivered shall require a minimum of 1,000 square feet of commercial use, as defined above, to be constructed concurrently or within a justifiable amount of time from the delivery of the residential units. In order to obtain the intended urban environment and ensure a mix of commercial use is provided, the required amount of commercial use dictated by the aforementioned ratio shall be integrated and constructed into the development concurrently with each site plan proposed for residential, and integrated into multi-storied structures to establish the vertical mixed use, and pedestrian oriented environment envisioned for the development. Office, hotel, and similar non-residential uses, may be constructed as a standalone structure as long as it is cohesively integrated and meets the intent of the development plan as outlined in Section A(1) of the development as approved by the City Manager or their designee. Any standalone structure must be constructed concurrently with, or prior to, any residential structure in which the commercial use is being credited towards.
 - ii. If commercial use is developed in excess of the requirements outlined in (i) above, it will count as credit for future development.
 - iii. Every site plan within the PUD shall include a table that documents the cumulative residential unit square footage within the overall development, the total residential square footage included in the site plan, the cumulative of usable commercial footage within the overall development, the total commercial square footage included in the site plan, and the required ratio with the residential to commercial identified.
- c. Apartment style (internal single-story) residential units (for sale or rent) shall have no more than two bedrooms; however, all apartment style residential units may include one additional ancillary room that shall not exceed 100 SF and shall not have a built-in closet.



B. CIRCULATION PLAN



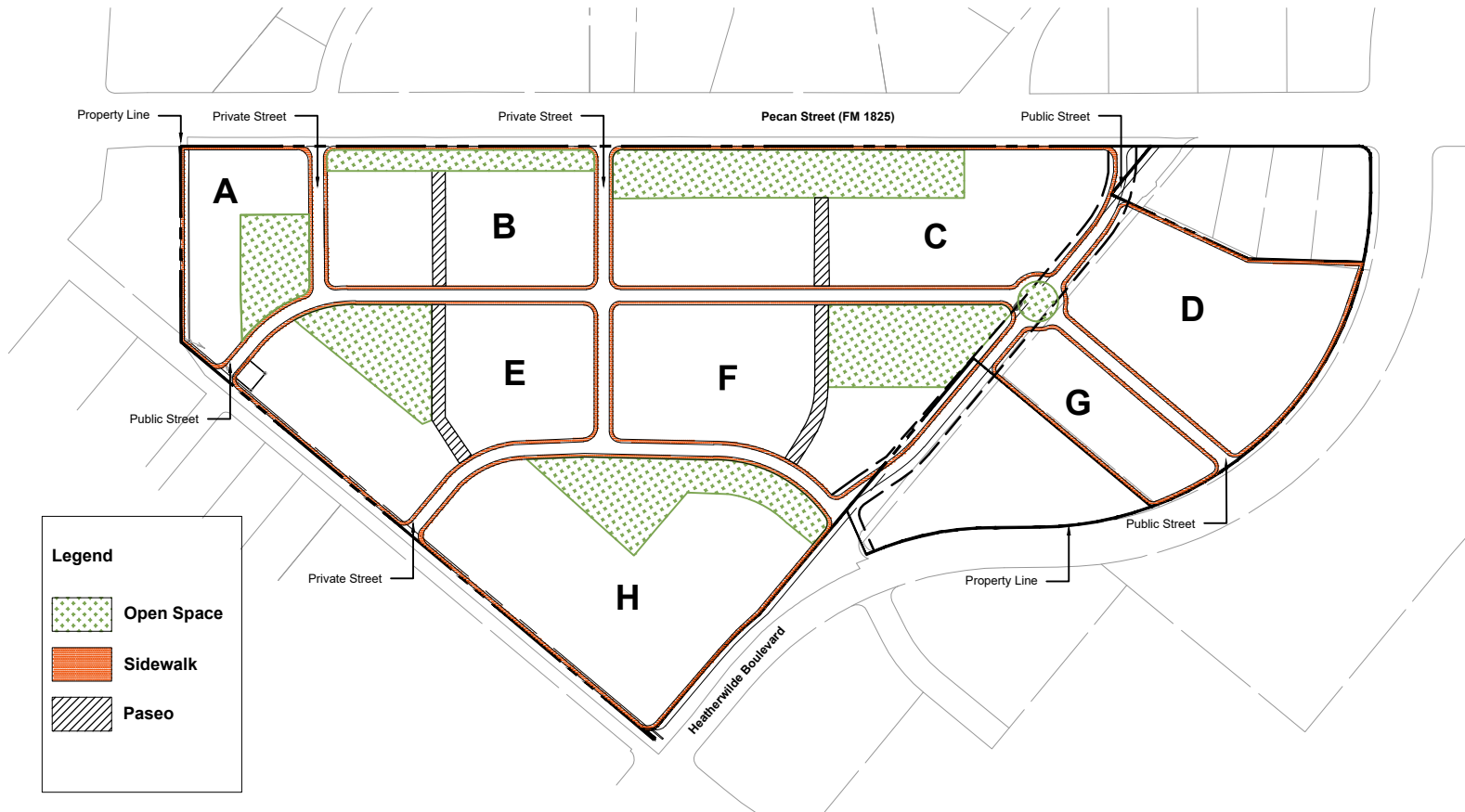
Access locations along FM-1825 are subject to TX-DOT approval. Streets and driveway locations are subject to compliance with the UDC, the Engineering Design Manual and the ITE Designing Walkable Thoroughfares: A Context Sensitive Approach.

AREA MAP





C. CIVIC SPACE PLAN



Civic Space and Improvements (acres)	
Open Space	7.00
Sidewalk	2.94
Paseo	0.83
Total PUD	10.77

Minimum Improvements Budget	
Total	\$937,148



Minimum Civic Space improvements may include:

- hardscape
- landscape
- trail amenities
- playground
- water feature
- irrigation
- exercise station
- amphitheater
- public art
- splash pad

On June 16, 2016, the Parks and Recreation Commission unanimously recommended to the Planning and Zoning Commission and City Council approval for the Commons at Heatherwilde and Pecan.

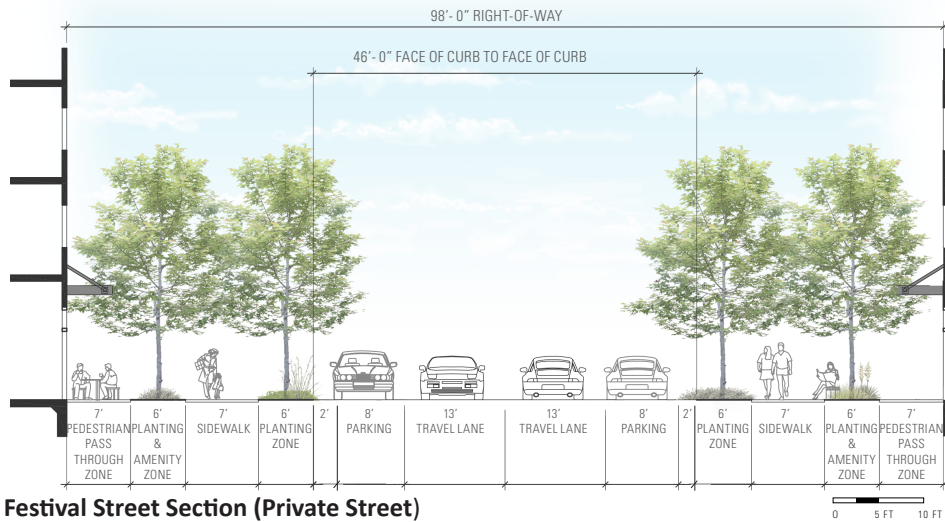
Open Space will be dedicated to the City of Pflugerville but maintained by a master property owners' association.

The \$937,148 development fee will be divided across the 10.77 acres of civic space at an estimate of \$2.00 per square foot. Parkland Development Fee credit toward civic space improvements shall be approved and at the discretion of the Parks and Recreation Director.

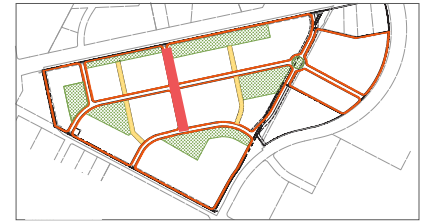
Civic Space will be delivered with the completion of each phase.



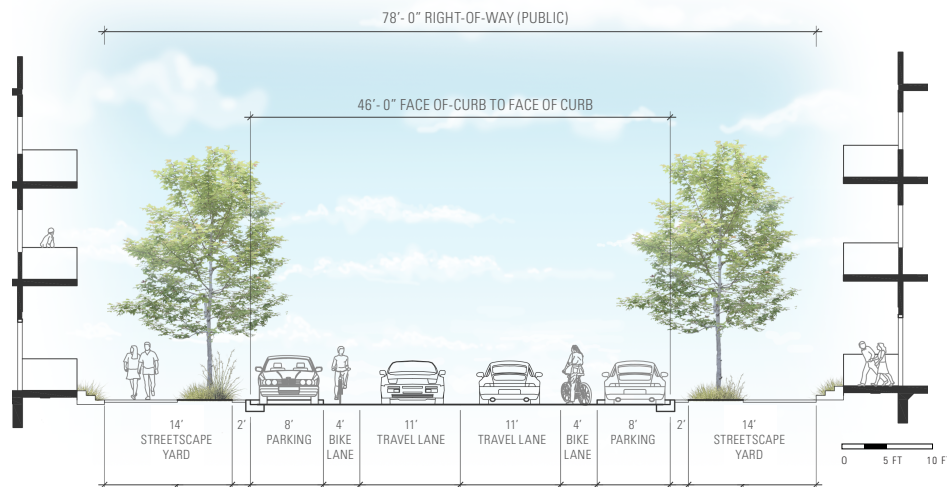
D. CROSS-SECTIONS



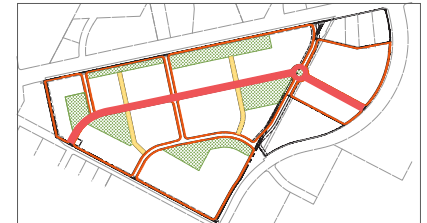
Festival Street Section (Private Street)



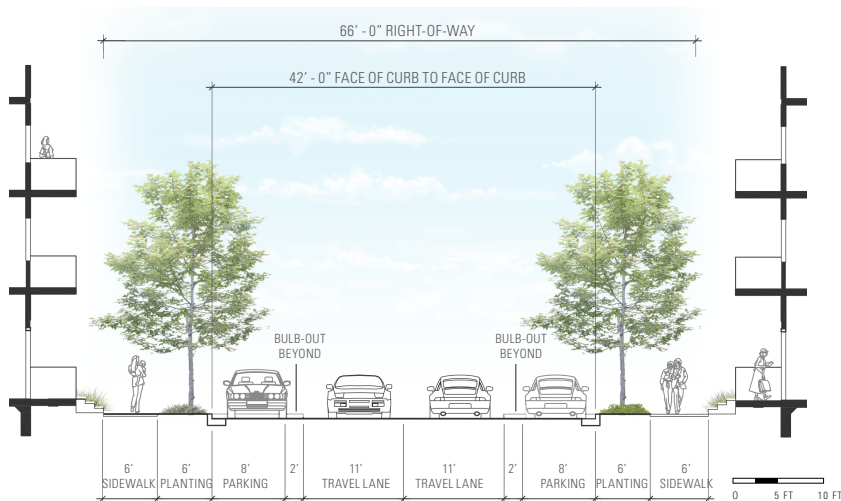
KEY PLAN



Green Connector Street Section (Public Street)



KEY PLAN



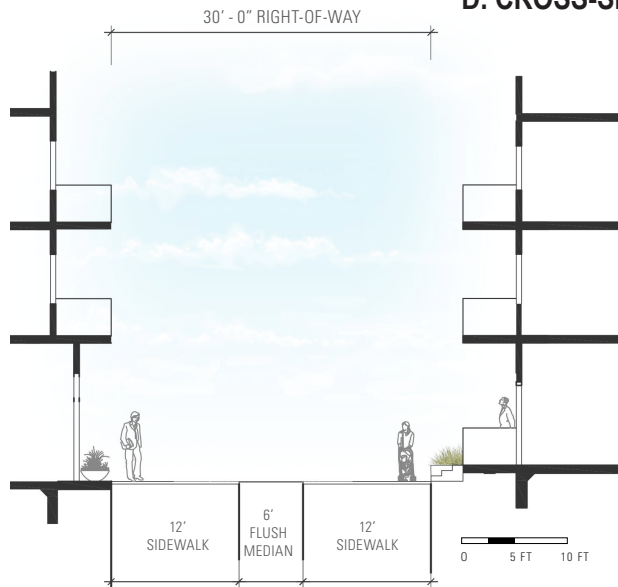
Residential Street Section (Private Street)



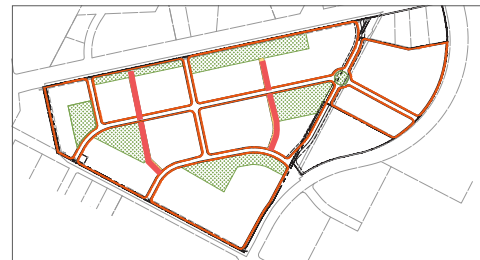
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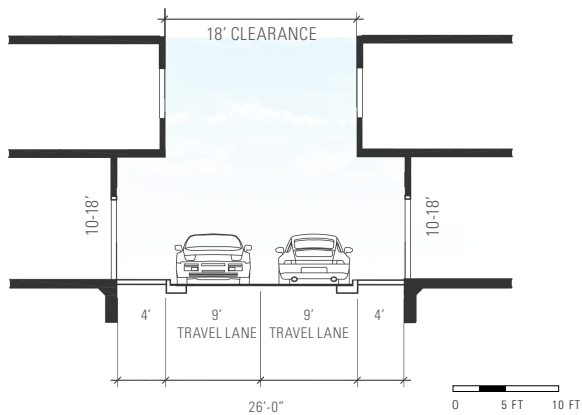
D. CROSS-SECTIONS, CONT.



Paseo Section (Private Street)



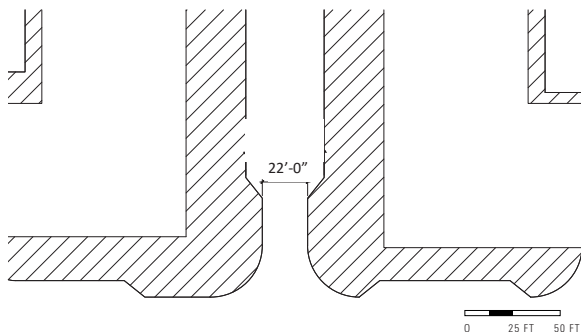
KEY PLAN



Alley Section (Private Street)

The location of alleys are as needed.

NOTE: Depicted overhang is subject to Fire Department approval. All buildings must comply with International Building Code.



Bulbouts (Private and Public Streets)

NOTE: When bulb-outs are proposed, curbs shall be mountable, roll-over curbs to provide appropriate fire access.



The site plan illustrates the layout of eight blocks (A-H) within a defined property line. The blocks are arranged in a grid-like fashion, with Block A at the top left and Block H at the bottom center. The plan includes several streets: Pecan Street (FM 1825) at the top, Heatherwide Boulevard at the bottom, and various Private and Public Streets. A shaded area in Block A is labeled 'Townhomes' and '120'-0"'. A note indicates 'Single-family or duplex units located facing Old Austin Pflugerville Road'. The legend defines the symbols used: Block (blue hatched), Open Space (green dotted), Paseo (brown hatched), and 2 Stories Max. (grey solid). A north arrow and a scale bar (0 to 400 feet) are provided for orientation and measurement.

Block	Stories (Height)
A	2-4
B	2-5
C	2-5
D	3-10*
E	2-3
F	2-7
G	3-10*
H	2-4

Live-work units shall be located on blocks E and/or F.



F. UNIFIED DEVELOPMENT CODE CALIBRATIONS

Development shall comply with the Corridor District CL5 zoning category described in the City of Pflugerville Unified Development Code (the “UDC”) as amended, or as otherwise referenced or described as follows:

Subchapter 4: Land Uses

1. Permitted Uses: Uses listed below have been modified from the CL5 District in order to ensure compatibility with the entire development. Uses noted with a “P” are permitted by right provided that all other requirements applicable to the use within each section are met.
2. Uses Permitted with Conditions: Uses noted with a “C” are permitted by right provided that specific conditions are met. Specific conditions applicable to these certain uses are listed after the table.
3. Uses Requiring a Specific Use Permit: Uses noted with an “S” require consideration of impacts associated with a particular location for the proposed use, in addition to the standards that otherwise apply to the use under Subchapter 4 of the Unified Development Code.

Residential Uses	CL5
Accessory Dwelling Unit	C
Condominium	C
Duplex	C
Live Work Unit	P
Multi-Family	P
Single Family Attached (3 or more) Townhome	C
Single Family, Detached	C
Non-Residential Uses	CL5
Automobile Parking Lot/Garage	P
Bar/Tavern	P
Brewpub/Wine Bar	P
Brewery/Distillery/Winery, Micro	P
Civic Center	P
Clinic	P
Commercial Recreation and Entertainment, Indoor	P
Commercial Recreation and Entertainment, Outdoor	S



Convention Center	P
Day Care Facility	P
Drive Thru Facilities	S/C
Dry Cleaning, Minor	P
Event Center	P
Financial Institution	P
Government Facilities	P
Health/Fitness Center	P
Hospital	S
Hotel/Hotel Residence	C
Liquor Store (Off-Premise Consumption)	P
Massage Therapy, Licensed	P
Mobile Food Park	C
Museum/Art Gallery	P
Office: Administrative, Medical, or Professional	P
Park or Playground	P
Personal Services	P
Print Shop, Minor	P
Research and Development Center	S
Restaurant	P
Retail Sales and Services	P
Retail Sales- Single tenant over 50,000 SF	P
Theatre, Neighborhood	P
Theatre, Regional	P
Transit Terminal (Park & Ride)	P
Utilities	C



Residential Use Conditions:

1. Accessory Dwelling Unit: Shall be limited to single family detached structures. Only one accessory dwelling unit, including a single unit above a detached garage, may be permitted if established in accordance with Section 4.6.3 of the UDC.
2. Condominium: All residential detached and attached structures shall comply with the applicable structure design standards outlined in Subchapter 9 of the UDC. Where multiple “for sale” units are provided in one structure, refer to Multi-Family and Mixed Use Structure requirements provided in Table 4.4.4. and Section 9.3 of the UDC.
3. Single Family Detached Structures:
 - a. Shall be permitted up to a maximum of 12 units within the Development.
 - b. Shall be subject to the General Regulations for Single Family Detached under the SF-MU zoning district per Subchapter 4 (Table 4.2.4 A), and the Residential Design Standards for Single Family Detached and Duplex/Two-Family Structures within the CL5 Corridor Zoning District per Section 9.1 of the UDC; as amended.
4. Duplex/Two-Family:
 - a. Shall be permitted up to a maximum of 12 units within the Development.
 - b. Minimum lot dimensions shall be 60 feet in width, 120 feet in depth, and minimum lot area shall be 7,200 square feet. Minimum Dwelling Unit area shall be 1,200 square feet, with a maximum of 2 units per structure.
 - c. Shall be subject to the Residential Design Standards for Single Family Detached and Duplex/Two-Family Structures within the CL5 Corridor Zoning District per Section 9.1 of the UDC; as amended.
5. Single-Family Attached (Townhomes) - 3 or more units per structure:
 - a. Shall be permitted up to a maximum of 267 units (for sale or for rent).
 - b. Shall be subject to the General Regulations for Single Family Attached under the SF-MU zoning district per Subchapter 4 (Table 4.2.4 A), and the Residential Design Standards for Single Family Attached (3 or more) Townhome and Condominium per Section 9.2 of the UDC; as amended.
6. Multi-family and Mixed Use Structures: Shall comply with the architectural requirements of the Unified Development Code, including Subchapter 9.3. Alternative designs may be considered through an architectural waiver as identified herein, and allowed in Subchapter 3.14 of the Unified Development Code.

Non-Residential Use Conditions:

1. Drive Thru Facilities: Shall require a Specific Use Permit in addition to the following Conditions:
 - a. Limited to one (1) drive thru facility within the Development
 - b. Restaurants shall be prohibited from having a drive thru facility
 - c. Permitted only within 100-ft of Heatherwilde Blvd or Pecan St.
2. Hotel, Hotel Residence:
 - a. External balconies must be set back at least 200 feet from any residential zoning district outside the limits of this development;
 - b. Must provide staff on-site 24 hours a day;
 - c. All guest rooms must be accessed through internal hallways, lobby, or courtyard; and
 - d. Must provide at least three amenities from the list below:
 - i. Indoor/Outdoor Pool
 - ii. Spa/Sauna
 - iii. Weight Room/Fitness Center



- iv. Playground
 - v. Sports Court
 - vi. Plaza/Atrium
 - vii. Game Room
 - viii. Jogging Trail
 - ix. Conference Room (1,000 square feet minimum)
 - x. Full service Restaurant (minimum seating capacity of 35)
3. Mobile Food Park: Shall comply with Section 4.10 of the Unified Development Code
 4. Research and Development Center: Shall require consideration through a Specific Use Permit.
 5. Utilities: All facilities shall be screened from view from residential areas and public right-of-ways with an opaque screen consisting of an 8' masonry fence or wall with dense vegetation capable of achieving a mature height of 8' or greater within two years.

Subchapter 4: Additional Use Regulations

1. Where a single family detached unit or duplex is established, adjacent land uses shall not exceed one additional story in height on that block.
2. All building setbacks on the Festival Street shall be between 0 and 15 feet from the edge of the private street right of way. Up to 50% of the rest of the property line on private streets shall have buildings between 0 and 15 feet. Building setbacks along the public Green Connector Street shall be between 0 and 15 feet from the edge of the public street right of way. Corner lots shall maintain a setback from the side street sufficient to maintain the Sight Triangle as defined in the Engineering Design Manual. Where a two car garage is provided per unit, the garage may abut the adjacent entry drive (not applicable to tandem spaces). If the garage is not located abutting the alley, a driveway depth of 20 feet shall be provided from the edge of the alley pavement to the face of the garage. Building entrances along public streets, private streets, paseos and civic space shall front the public street, private street, paseo or civic space (only secondary entrances allowed from internal parking areas).
3. Minimum and maximum required structure height per block shall be as depicted on the Land Use Plan (Section E herein). Height shall be measured as defined in the Unified Development Code.
4. The first story of a structure shall have a height ranging between 10-18 feet, each additional story will be between 10-14 feet.
5. Parking structures or buildings with ground floor tuck-in parking shall have ground floor residential or commercial uses for their entire length fronting public streets and civic spaces, except for vehicle access entrances.

Subchapter 9: Architectural, Site Design and Layout Provisions

1. Minimum garage size internal dimensions for multi-family shall be 12 feet wide by 20 feet deep. A minor encroachment may be considered within the garage space to allow for a stairwell encroachment, provided the internal garage dimensions are never reduced to less than 10 feet in width.
2. Garage parking shall not be required for multi-family units if at least 1 parking space per unit is included in a structured parking garage, or the multi-family structure is designed to accommodate at least 1 parking space for every 3 units under the footprint of the structure (tuck under parking).
3. With the exception of a defined entry, tuck under parking shall not be visible from a public street or a private main drive aisle functioning in a capacity equivalent to a public street.
4. Structured parking shall be defined as "an above-grade or below-grade, ramp access facility designed in whole, or in part, to accommodate vehicle parking." Otherwise it shall be designed in accordance with Subchapter 9.7 of the UDC, as amended.



Subchapter 10: Parking, Mobility and Circulation

1. Office: Administrative or Professional parking requirement shall be 1 parking space per 350 square feet.
2. An Alternative or Shared Parking Plan utilizing the Urban Land Institute (ULI) methodology shall be submitted by Developer for each phase of development in which parking deviations from the Unified Development Code are proposed. If Administrator determines parking deficiencies from previous development phases exist, additional excess parking may be required in subsequent phases.
3. At the discretion of the City Engineer and Planning Director, on-street parking shall qualify as Off-site parking for Alternative or Shared Parking Plans.
4. Subject to the findings of the required Transportation Impact Analysis during the preliminary plan process, and the recommendations of TxDOT, street geometries and designs parameters shall be intended to maximize pedestrian and bicycle safety by maintaining a design speed of 30 m.p.h. or less. The final design shall consider the Recommended Practices described in the Institute of Transportation Engineers (ITE) manual entitled "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach", specifically General Urban (C-4) Residential Street and Commercial Street categories described on Table 6.4 Design Parameters for Walkable Urban Thoroughfares, attached hereto as EXHIBIT 3. Public streets shall be designed in accordance with the Engineering Design Manual.

Subchapter 11: Landscaping and Screening Standards

1. 10.77 acres of dedicated Civic Space and \$937,148 of budgeted improvements thereon as described on the Civic Space Plan (Section C herein) shall satisfy the requirements for Percent of Lot Landscaped on Tables 11.3B and 11.3C if the block is developed with at least 50% being 3 or more stories, equivalent to not less than 30 feet in height. Height shall be measured as defined in the Unified Development Code. When this is not met, Tables 11.3B and 11.3C of Unified Development Code shall apply. If the minimum quantity cannot be met with street trees and parking lot trees, the remaining quantity can be applied toward Open Space within the block. When the minimum planting requirement still cannot be met, 11.16 applies, and/or the remaining quantity can be located in a City of Pflugerville public park at the discretion of the Parks and Recreation Director and Planning Director.
2. Required Street Tree plantings in sidewalk surrounding each block, including existing Development boundary streets, in accordance with the Streetscape Yard Standards spacing requirements in the UDC (Section 11.5) shall satisfy the requirement for Required Trees and Shrubs if the block is developed with at least 50% being 3 or more stories, equivalent to not less than 30 feet in height. Height shall be as defined in the UDC.
3. Building Foundation Landscaping along a public street or major drive aisle shall not be required if the block is developed with at least 50% being 3 or more stories, equivalent to not less than 30 feet in height, or unless buildings are within 4 feet of the sidewalk. Height shall be measured as defined in the Unified Development Code. For areas of the building located next to a surface parking lot, building foundation landscaping in accordance with Section 11.6 of the UDC shall be provided.
4. For all areas where surface parking will be located adjacent to civic space, public right of way, or major drive aisles, a vegetated screen capable of providing a solid screen of at least 36-inches in height within two (2) years, or a 3-ft tall native rock, stone, or brick wall may be permitted if used in combination with native ornamental grasses, shrubs, or flowering perennials. A visual offset of at least 3' every 60 linear feet shall be established to reduce monotony and may include connecting sidewalks or clumped trees. Screening vegetation may be used to meet overall landscaping requirements. For parking lots that are shielded from public streets by buildings and that have



fewer than 150 parking spaces, a parking row may have up to 15 contiguous parking spaces without a separation of a landscaped Interior Island or Peninsula, and may be located as far as 75 feet from a landscaped area.

5. Nothing provided herein shall exempt the minimum 6-ft wide sidewalk improvements with street trees as depicted on the Cross-Sections (Section D herein) from being constructed with each block along all existing boundary streets, including but not limited to West Pecan Street, Heatherwilde Boulevard, and Old Austin Pflugerville Road, except where such conditions already exist.

Subchapter 14: Parkland Standards

1. Designated Civic Space area, paseos and designated sidewalk area as described on the Civic Space Plan shall count toward parkland dedication acreage requirements.
2. Fee-in-lieu and park development fees shall be dedicated to improvements within the dedicated civic space and sidewalk areas on site. At no point shall park development fees be used for the construction of a detention facility.
3. Intended civic space improvements shall be constructed concurrently with construction of the first phase of each block.
4. Any civic space to be dedicated to the city, in whole or on a block by block basis, at the city's discretion, shall be conveyed by warranty deed through the process outlined in Subchapter 14 of the UDC once all intended civic space improvements have been provided and deemed acceptable by the Parks and Recreation Director.
5. Details for intended civic space improvements shall be finalized at time of site development and approved by the Parks and Recreation Director.

Subchapter 15: Subdivision Process

1. Required 10-foot Public Utility Easements may be considered in alternative locations with the Preliminary Plan. Public Utility Easements shall not be permitted within public right-of-way. Public water, wastewater and stormwater facilities shall be placed in public right-of-way or specifically designated easements. Public Utility Easements shall be dedicated adjacent to existing perimeter streets (Old Austin Pflugerville Road, Pecan Street and Heatherwilde Boulevard) and other alternate locations considered with the Preliminary Plan).
2. A Preliminary Plan for the entire development must be submitted prior to, or concurrently with the Final Plat for the first phase of development. The Preliminary Plan must be approved prior to approval of any final plat for the Development.
3. Prior to approval of the first final plat of the Development, a master property owner's association shall be established for maintenance of all common elements and civic spaces. A license agreement between the master property owner's association and the City shall be established for any improvements located in the civic spaces and for any improvements located between the back of curb and the buildings. Such improvements shall include but are not limited to trees and landscaping, hardscape, seating, signs, awnings, and similar improvements as mutually agreed upon.

Engineering Design Manual and Construction Standards

1. A Transportation Impact Analysis (TIA) in accordance with the Engineering Design Manual for the entire Development shall be provided with the Preliminary Plan application for the Development.
2. An on-site or off-site regional detention facility may be considered for the entire Development, provided the facility and downstream conveyance is designed in accordance with the Engineering Design Manual, and approved by the City Engineering Department.



Emergency Access Provisions

Emergency access must be provided in accordance with the City of Pflugerville Fire Code. Access drives must extend to within 150 feet of all portions of the development, measured by an approved route around the exterior of buildings, and drives utilized for emergency access must be a minimum of 26 feet in width measured curb to curb and inside of parking. Access drives serving single-family detached, and single-family attached, structures shall be a minimum of 30 feet in width measured curb to curb and inside of parking. Bulb-outs at intersections and traffic calming devices may be installed when approved by the City of Pflugerville and the Fire Code Official. The City of Pflugerville and the Fire Code Official may approve modifications to access drive requirements when additional safeguards are provided in accordance with Section 104.9 of the Fire Code.



EXHIBIT 3

Table 6.4 Design Parameters for Walkable Urban Thoroughfares

Thoroughfare Design Parameters for Walkable Mixed-Use Areas									
	Suburban (C-3)						General Urban (C-4)		
	Residential			Commercial			Residential		
	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street
Context									
Building Orientation (entrance orientation)	front, side	front, side	front, side	front, side	front, side	front, side	front	front	front
Maximum Setback [2]	20 ft.	20 ft.	20 ft.	5 ft.	5 ft.	5 ft.	15 ft.	15 ft.	15 ft.
Off-Street Parking Access/Location	rear, side	rear, side	rear, side	rear, side	rear, side	rear, side	rear	rear, side	rear, side
Streetside									
Recommended Streetside Width [3]	14.5–16.5 ft.	14.5 ft.	11.5 ft.	16 ft.	16 ft.	15 ft.	16.5-18.5 ft.	14.5 ft.	11.5 ft.
Minimum sidewalk (throughway) width	6 ft.	6 ft.	6 ft.	6 ft.	6 ft.	6 ft.	8 ft.	6 ft.	6 ft.
Pedestrian Buffers (planting strip exclusive of travel way width) [3]	8 ft. planting strip	6–8 ft. planting strip	5 ft. planting strip	7 ft. tree well	6 ft. tree well	6 ft. tree well	8 ft. planting strip	8 ft. planting strip	6 ft. planting strip
Street Lighting	For all thoroughfares in all context zones, intersection safety lighting, basic street lighting, and pedestrian-scaled lighting is recommended. See Chapter 8 (Streetside Design Guidelines) and Chapter 10 (Intersection Design Guidelines).								
Traveled Way									
Target Speed (mph)	25–35	25–30	25	25–35	25–35	25	25–35	25–30	25
Number of Through Lanes [5]	4–6	2–4	2	4–6	2–4	2	4–6	2–4	2
Lane Width [6]	10–11 ft.	10–11 ft.	10–11 ft.	10–12 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.
Parallel On-Street Parking Width [7]	7 ft.	7 ft.	7 ft.	8 ft.	7-8 ft.	7-8 ft.	7 ft.	7 ft.	7 ft.
Min. Combined Parking/Bike Lane Width	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.
Horizontal Radius (per AASHTO) [8]	200–510 ft.	200–330 ft.	200 ft.	200–510 ft.	200–510 ft.	200 ft.	200–510 ft.	200–330 ft.	200 ft.
Vertical Alignment	Use AASHTO minimums as a target, but consider combinations of horizontal and vertical per AASHTO Green Book.								
Medians [9]	4–18 ft.	Optional 4–16 ft.	None	4–18 ft.	Optional 4–18 ft.	None	4–18 ft.	Optional 4–16 ft.	None
Bike Lanes (min./preferred width)	5 ft./6 ft.	5 ft./6 ft.	5 ft./6 ft.	5 ft./6 ft.	5 ft./6 ft.	5 ft./6 ft.	5 ft./6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.
Access Management [10]	Moderate	Low	Low	High	Moderate	Low	Moderate	Low	Low
Typical Traffic Volume Range (ADT) [11]	20,000–35,000	1,500–25,000	500–5,000	20,000–50,000	1,500–35,000	1,000–10,000	10,000–35,000	1,500–20,000	500–5,000
Intersections									
Roundabout [12]	Consider urban single-lane roundabouts at intersections on avenues with less than 20,000 entering vehicles per day, and urban double-lane roundabouts at intersections on boulevards and avenues with less than 40,000 entering vehicles per day.								
Curb Return Radii/Curb Extensions and Other Design Elements	Refer to Chapter 10 (Intersection Design Guidelines)								

Table 6.4 Notes:

1. Multiway boulevards are a special form of boulevards. Generally they add one-way, 16–20 foot wide access lanes adjacent to the outer curb and separated from the through traffic lanes by a longitudinal island at least 6 ft. wide (10 ft. if accommodating transit stops). Access lanes have curb parallel parking plus one moving traffic/bike lane with a target speed of 15–20 mph. All vehicular traffic on the access lanes is local. See Chapter 6 section on multiway boulevards for additional information.
2. For all context zones with predominantly commercial frontage, this table shows the maximum setback for buildings with ground floor retail. In suburban contexts, office buildings are typically set back 5 ft. further than retail buildings to provide a privacy buffer. In general urban and urban center/core areas, office buildings are set back 0–5 ft. Setback exceptions may be granted for important civic buildings or unique designs.
3. Streetside width includes edge, furnishing/planting strip, clear throughway, and frontage zones. Refer to Chapter 8 (Streetside Design Guidelines) for detailed description of sidewalk zones and widths in different context zones and on different thoroughfare types. Dimensions in this table reflect widths in unconstrained conditions. In constrained conditions streetside width can be reduced to 12 ft. in commercial areas and 9 ft. in residential areas (see Chapter 5 on designing within constrained rights of way).
4. Desired target speeds on avenues serving C-4 and C-5/6 commercial main streets with high pedestrian activity should be 25 mph.
5. Six lane facilities are generally undesirable for residential streets because of concerns related to neighborhood livability (i.e., noise, speeds, traffic volume) and perceptions as a barrier to crossing. Consider a maximum of four lanes within residential neighborhoods.
6. Lane width (turning, through and curb) can vary. Most thoroughfare types can effectively operate with 10–11 ft. wide lanes, with 12 ft. lanes desirable on higher speed transit and freight facilities. Chapter 9 (Traveled Way Design Guidelines) (lane width section) identifies the considerations used in selecting lane widths. Curb lane width in this report is measured to curb face unless gutter pan/catch basin inlets do not accommodate bicycles, then it is measured from the edge of travel lane. If light rail transit or streetcars are to be accommodated in a lane with motor vehicles, the minimum lane width should be the



EXHIBIT 4, CONT.

Table 6.4 Design Parameters for Walkable Urban Thoroughfares (continued)

Thoroughfare Design Parameters for Walkable Mixed-Use Areas									
	General Urban (C-4)			Urban Center/Core (C-5/6)					
	Commercial			Residential			Commercial		
	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street
Context									
Building Orientation (entrance orientation)	front	front	front	front	front	front	front	front	front
Maximum Setback [2]	0 ft.	0 ft.	0 ft.	10 ft.	10 ft.	10 ft.	0 ft.	0 ft.	0 ft.
Off-Street Parking Access/Location	rear, side	rear, side	rear, side	rear	rear	rear, side	rear	rear	rear, side
Streetside									
Recommended Streetside Width [3]	19 ft.	16 ft.	16 ft.	21.5 ft.	19.5 ft.	16 ft.	21.5 ft.	19.5 ft.	16 ft.
Minimum sidewalk (throughway) width	8 ft.	6 ft.	6 ft.	10 ft.	9 ft.	6 ft.	10 ft.	9 ft.	6 ft.
Pedestrian Buffers (planting strip exclusive of travel way width) [3]	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well
Street Lighting	For all thoroughfares in all context zones, intersection safety lighting, basic street lighting, and pedestrian-scaled lighting is recommended. See Chapter 8 (Streetside Design Guidelines) and Chapter 10 (Intersection Design Guidelines).								
Traveled Way									
Target Speed (mph)	25–35	25–30 [4]	25	25–35	25–30	25	25–35	25–30 [4]	25
Number of Through Lanes [5]	4–6	2–4	2–4	4–6	2–4	2–4	4–6	2–4	2–4
Lane Width [6]	10–12 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.
Parallel On-Street Parking Width [7]	8’	7–8 ft.	7–8 ft.	7 ft.	7 ft.	7 ft.	8 ft.	8 ft.	7–8 ft.
Min. Combined Parking/Bike Lane Width	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.
Horizontal Radius (per AASHTO) [8]	200–510 ft.	200–330 ft.	200 ft.	200–510 ft.	200–330 ft.	200 ft.	200–510 ft.	200–330 ft.	200 ft.
Vertical Alignment	Use AASHTO minimums as a target, but consider combinations of horizontal and vertical per AASHTO Green Book.								
Medians [9]	4–18 ft.	Optional 4–18 ft.	None	4–18 ft.	Optional 4–16 ft.	None	4–18 ft.	Optional 4–18 ft.	None
Bike Lanes (min./preferred width)	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.
Access Management [10]	High	Low–Moderate	Low–Moderate	Moderate	Low–Moderate	Low–Moderate	High	Low–Moderate	Low–Moderate
Typical Traffic Volume Range (ADT) [11]	15,000–50,000	1,500–30,000	1,000–15,000	15,000–30,000	1,500–20,000	500–5,000	15,000–40,000	1,500–30,000	1,000–15,000
Intersections									
Roundabout [12]	Consider urban single-lane roundabouts at intersections on avenues with less than 20,000 entering vehicles per day, and urban double-lane roundabouts at intersections on boulevards and avenues with less than 40,000 entering vehicles per day.								
Curb Return Radii/Curb Extensions and Other Design Elements	Refer to Chapter 10 (Intersection Design Guidelines)								

width of the transit vehicle plus 1 ft. of clearance on either side. Most modern streetcars or light rail vehicles (LRT) can be accommodated in an 11 or 12 ft. wide lane but designers need to consider the LRT vehicle's "dynamic envelope" when designing on horizontal curves and intersections.

- An 8 ft. wide parking lane is recommended in any commercial area with a high turnover of parking.
- For guidance on horizontal radius—see AASHTO's "green book" section on "Minimum Radii for Low Speed Urban Streets—Sharpest Curve Without Superelevation." Dimensions shown above are for noted target speeds and are found on Exhibit 3–16 (Page 151) in *A Policy on Geometric Design of Highways and Streets* (2004), assuming a superelevation of –2.0 percent reflecting typical cross slope. Depending on design vehicle, horizontal curves may require lane widening to accommodate large vehicle off-tracking. See AASHTO's section on "Traveled Way Widening on Horizontal Curves" for guidance.
- See also Chapter 9 for additional detail on medians. For curb to curb intersection crossing distances of 60 ft. or more, medians should be at least 6 ft. wide to serve as a pedestrian refuge, otherwise the median should be at least 4 ft. wide. Where left turn lanes are to be provided, median widths should be increased by the width of the turn lane(s). Where left turn lanes are not needed (e.g., long blocks) median widths may be as little as 4 ft.
- Access management involves providing (i.e., managing) access to land development in such a way as to preserve safety and reasonable traffic flow on public streets. Low, moderate and high designations are used for the level of access restrictions. A high level of access management uses medians to restrict mid-block turns, consolidate driveways and control the spacing of intersections. A low level of access management limits full access at some intersections, but generally uses minimal measures to restrict access.
- These ranges of typical traffic volumes are intended to help determine the characteristics of thoroughfares. Volumes can fluctuate widely on all thoroughfare types. These ranges are not intended to establish guidelines or upper bounds for designing thoroughfares.
- Double-lane roundabouts are not recommended in urban areas with high levels of pedestrians and bicyclists.