CHAPTER 9 THOROUGHFARE PLAN

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9. THOROUGHFARE PLAN

A Thoroughfare Plan is a long-range planning tool used by the city to plan for the expansion/development of the transportation roadway network by preserving right-of-way. Right-of-way is preserved through a functional classification system, which identifies the hierarchy of the roadway and design requirements.

Temple's Thoroughfare Plan was adopted on October 15, 2020, as part of the Comprehensive Plan. The Thoroughfare Plan is a living document, requiring periodic updates in addition to asneeded amendments. The full Thoroughfare Plan is typically updated every five to seven years to evaluate the comprehensive network. Between updates, the city has an amendment process in place to provide for unplanned impacts to the community that affect the system enough to require a change to the Plan.

Through the planning process of the MMP, recommendations to update the current Thoroughfare Plan were developed and are discussed in this chapter.

9.1 LEGAL AUTHORITY

Under the provisions of Article XI, Section 5 of the Texas Constitution and Title 7, Chapter 212 of the Texas Local Government Code, the City of Temple can require that development plans and subdivision plats conform to "... the general plan of the municipality and its current and future streets ..." and "... the general plan for extension of the municipality and its roads, streets, and public highways within the municipality and its extra-territorial jurisdiction."

Requirements for right-of-way dedication and construction of street improvements apply to all subdivision of land within the City's incorporated area and its extra-territorial jurisdiction. In accordance with the Texas Local Government Code, the City has adopted rules governing plats and subdivision of land within the municipality's jurisdiction, and, by ordinance, those rules have also been extended to the City's ETJ.

9.2 FUNCTIONAL CLASSIFICATIONS

The Functional Classification system is used to plan and design street improvements. A roadway's functional class defines that roadways level within the hierarchy of the network. Although six classifications are represented in the Temple Comprehensive Plan, the Thoroughfare Plan uses five functional classifications, excluding "local" streets.

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Figure 1: Hierarchy of the adway Terms to Know: **Functional Classifications Right-of-Way:** Land, property, or interest acquired for or devoted to a transportatio

- Highway: Roadway that provides mobility
- Major Arterial: Roadway that provides
- Minor Arterial: Roadway that provides
- Community Collector: Roadway that
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9.2.1 CONTEXT SENSITIVE DESIGN STANDARDS

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Typical cross-sections are associated with functional classifications. They are used to define ROW, number of lanes, medians/center turn lanes, additional mode types, etc. The Comprehensive Plan denotes three contexts associated with the Thoroughfare Plan: Urban, Suburban, and Rural. Cross-section design varies by these different contexts due to the varying demands on the system. The suburban context is the most prevalent throughout the City.

Table 1 through Table 3 provide a summary of the crosssection specifications for roadways within each context. MMP recommended ROW widths reflect the requirements for including the components shown in the recommended crosssection diagrams discussed in the following sections. Variations, developed in coordination with the City, may be appropriate based on constraints of the built environment and components selected for inclusion in the project.

ATTRIBUTE

ROW

Travel Lanes

Turn Lanes

Median

Traffic Volumes

Bikeway

ATTRIBUTE	URBAN AVENUE (THOROUGHFARES)	URBAN LOCAL
ROW	80'	66'
Travel Lanes	2 to 3	2-way movement, striped travel lanes
Turn Lanes	On occasion	None
Median	Not recommended	Optional
Traffic Volumes	Varies	80 – 700
Bikeway	Optional, 8' minimum cycle track or shared lane	Optional, shared lane

TABLE 3: RECOMMENDATION FUNCTIONAL CLASSIFICATIONS, RURAL CONTEXT

ATTRIBUTE	RURAL COLLECTOR	RURAL LOCAL
ROW	84'	66'
Travel Lanes	2 lanes, demarcated travel lanes	2 lanes, not demarcated
Turn Lanes	None	None
Median	None	None
Traffic Volumes	300 – 2,600	80 – 600
Bikeway	Not designated	Not designated

TABLE 1: RECOMMENDATION FUNCTIONAL CLASSIFICATIONS, SUBURBAN CONTEXT

MAJOR ARTERIAL	MINOR ARTERIAL	COMMUNITY COLLECTOR	NEIGHBORHOOD COLLECTOR	LOCAL
140'	110'	84'	66'	54'
4 to 6	2 to 4	2 to 4	2-way	2-way unstriped
Intermittent	Intermittent	Not typical	Not typical	None
Yes	Yes	As appropriate	As appropriate	Not recommended
20,000 - 40,000	12,000–24,000	4,000 – 15,000	1,000 – 5,000	80 – 1,000
10' minimum side path, if required	10' minimum side path, if required	Optional, 4' bike lane, 8' cycle track, or 10' min. side path	10' minimum side path, if required	Not designated

TABLE 2: RECOMMENDATION FUNCTIONAL CLASSIFICATIONS, URBAN CONTEXT

9.2.2 NEIGHBORHOOD PLANS

Through on-going planning efforts, the City is supporting improvements to neighborhoods and developing street crosssections that are specific to the community character. These special planning efforts are detailed in the City's Neighborhood Specific Plans. Cross-sections in these plans are a-typical and designed specifically for the identified roadways. These location specific cross-sections should be evaluated separately, using a flexible approach with the specific Neighborhood Plan and the overall Thoroughfare Plan in mind.

9.3 TYPICAL STREET SECTION DESIGN CHARACTERISTICS

Street design characteristics for each functional role identified in the 2020 Comprehensive Plan were reviewed and recommendations for modifications were produced. Although not previously described in the 2020 Comprehensive Plan, recommendations for commercial and residential driveway spacing as well as utility placements are also provided.

Recommendations by functional role are described in the following subsections. These descriptions are for planning purposes only. For development of engineering schematics or design specifications for pre-construction or construction of a facility such as horizontal or vertical assignments, depth of utilities, etc. readers should consult the engineering specifications in the City of Temple Design Manual and the requirements defined in the Unified Development Code (UDC).

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9.3.1 RURAL LOCAL

The Comprehensive Plan recommends a ROW width of 50'- 60' for streets functioning as a Rural Local and that these streets maintainadesignspeed of 20-25 mph. The MMP recommendation is that the ROW width be increased to 66' and that the design speed be set to 25 mph. On-Street Parking is still recommended as a permitted component, but the MMP recommendation is that it occur only on an improved surface, such as gravel, and occupy 8' of the typical section. The MMP also recommends that commercial and residential driveways be spaced at least 100' and 40' respectively from the nearest driveway or intersection. Water and wastewater utilities are recommended to be adjacent to the roadway. Stormwater is recommended to be conveyed by open channels or swales. In such instances that a longitudinal slope of 0.50% is not attainable the drainage channel should include a concrete pilot channel. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 4

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 2 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.are recommended to be under the landscape buffer while stormwater is recommended to be under the curb. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 6

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TABLE 4: RURAL LOCAL RECOMMENDED SPECIFICATIONS

Attribute	2020 Comprehensive Plan	MMP Recommendation
Right-of-Way	50 - 60'	66'
Design Speed	20 - 25 mph	25 mph
On-Street Parking	Permitted, limited by width	Permitted 8', on improved surface such as gravel
Driveway Spacing	N/A	100' Commercial 40' Residential
Utilities - Water	N/A	Adjacent to Paved Road
Utilities - Wastewater	N/A	Adjacent to Paved Road
Utilities – Stormwater	N/A	Open Channel or Swale
Utilities - Dry	N/A	Private Easement Outside of ROW

Figure 2: Rural Local Cross Section



Street Attribute		Measurement/ Placement
	R.O.W.	66' minimum
۸	Travel Lanes	2, 12' minimum
	Median/center turn lane	None
B	Parking	Allowed 8' minimum, on improved surface such as gravel
	Bicycle facility	Not designated
	Sidewalks	None
C	Landscape Buffer/ Planting Strip	8' minimum
	Planting Type	mowed grass, outside 5' of R.O.W. can be native planting
	Commercial Driveway Spacing	100' to nearest driveway or intersection
	Residential Driveway Spacing	40' to nearest driveway or intersection

Utili	ties Location	Measurement/Placement
w	Water	Under landscape buffer
s	Sewer	Under landscape buffer
ST	Storm	Open swale
	Electrical/gas/ telecom	Private easement outside of R.O.W.

9.3.2 RURAL COLLECTOR

The MMP recommendation is that the Right-of-Way for a Rural Collector be increased from 60'-70' to 84'. It is also recommended that the design speed be increased from 25-30 mph to 45 mph. The 2020 Comprehensive Plan recommends two demarcated travel lanes. The MMP current recommendation agrees with this assessment but states that a 3rd lane can be accommodated. The MMP recommends commercial and residential driveways be spaced at least 200' from the nearest driveway or intersection. Water and wastewater utilities are recommended to be adjacent to the roadway. Stormwater is recommended to be conveyed by open channels or swales. In such instances that a longitudinal slope of 0.50% is not attainable the drainage channel should include a concrete pilot channel. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 5

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 3 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	60 - 70'	84'
Design Speed	25 - 30 mph	45 mph
Travel Lanes	2 lanes, demarcated travel lanes	2, a 3rd lane can be accommodated, 8' shoulder
Driveway Spacing	N/A	200' Commercial 200' Residential
Utilities - Water	N/A	Adjacent to Paved Road
Utilities - Wastewater	N/A	Adjacent to Paved Road
Utilities – Stormwater	N/A	Open Channel or Swale
Utilities - Dry	N/A	Private Easement Outside of ROW

TABLE 5: RURAL COLLECTOR RECOMMENDED SPECIFICATIONS

Figure 3: Rural Collector Cross Section



Street Attribute		Measurement/ Placement	
	R.O.W.	84' minimum	
A	Travel Lanes	2, 14' minimum with 6' shoulder, a 3rd lane can be accommodated	
	Median/center turn lane	none	
	Parking	none	
	Bicycle facility	Not designated	
	Sidewalks	None	
D	Landscape Buffer/ Planting Strip	8' minimum	
	Planting Type	mowed grass, outside 10' of R.O.W. can be native planting	
	Commercial Driveway Spacing	200' to nearest driveway or intersection	
	Residential Driveway Spacing	50' to nearest driveway or intersection	

Utili	ties Location	Measurement/Placement
w	Water	Under landscape buffer
s	Sewer	Under landscape buffer
ST	Storm	Open swale
	Electrical/gas/ telecom	Private easement outside of R.O.W.

9.3.3 SUBURBAN LOCAL

The Comprehensive Plan recommends a ROW width of 50'for streets functioning as a Suburban Local and that these streets maintain a design speed of 20-35 mph. The MMP recommendation is that the ROW width be increased to 54' and that the design speed be 20-25 mph. The 2020 Comprehensive Plan and the current recommendations agree that on-street parking is permitted however the MMP recommends specifically that it be either 7' on both sides or 8' if only on one side of the street. The MMP also recommends commercial and residential driveways be spaced at least 50' and 20' respectively from the nearest driveway or intersection. Water and wastewater utilities MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 4 acorss. Depending on the

built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

TABLE 6: SUBURBAN LOCAL RECOMMENDED SPECIFICATIONS

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	50'	54'
Design Speed	20 – 35 mph	20 – 25 mph
On-Street Parking	Permitted	7' Parking Both Sides or 8' One Side Parking
Street Trees/Landscaping	Shade trees in edge zones or outside of ROW	Turf (no trees)
Driveway Spacing	N/A	50' Commercial 20' Residential
Utilities - Water	N/A	Landscape Buffer / Planting Strip
Utilities - Wastewater	N/A	Landscape Buffer / Planting Strip
Utilities – Stormwater	N/A	Along Curb
Utilities - Dry	N/A	Private Easement Outside of ROW

Figure 4: Suburban Local Cross Section



Street Attribute		Measurement/ Placement
	R.O.W.	54' minimum
A	Travel Lanes	2, 12' minimum
B	Median/center turn lane	None
C	Parking	Optional, 7' both sides, or 8' one side
	Bicycle facility	Not designated
D	Sidewalks	On entry streets 4' minimum both sides
	Landscape Buffer/ Planting Strip	4' minimum
	Planting Type	Turf (no trees)
	Commercial Driveway Spacing	50' to nearest driveway or intersection
	Residential Driveway Spacing	20' to nearest driveway or intersection

Utili	ties Location	Measurement/Placement
W	Water	Under sidewalk or landscape buffer
s	Sewer	Under sidewalk or landscape buffer
ST	Storm	Along curb
	Electrical/gas/ telecom	Private easement outside of R.O.W.

9.3.4 SUBURBAN NEIGHBORHOOD COLLECTOR

The current recommendation is to increase the ROW of a Suburban Neighborhood Collector to 66' with a design speed of 25-35 mph and a desirable spacing of 2000' maximum. The MMP also recommends commercial and residential driveways be spaced at least 150' and 50' respectively from the nearest driveway or intersection. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb.

Wet utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private

utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 7.

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 5 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the city during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

Attribute	2020 Comprehensive Plan	Current Recommendation	
Right-of-Way	50 - 60'	66'	
Design Speed	30 – 40 mph	25 – 35 mph	
Desirable Spacing	800 – 1200'	2000' Max	
Turn Lanes/Median	Not Typical	Optional 10', at Entry	
Sidewalks	4-5' on Both Sides, 6-8' on One Side	5' Both Sides	
Edge Zone	Optional. 6-8'	8' Minimum	
Driveway Spacing	N/A	150' Commercial 50' Residential	
Utilities - Water	N/A	Center of Outside Lane / Under Sidewalk	
Utilities - Wastewater	N/A	Center of Outside Lane / Under Sidewalk	
Utilities – Stormwater	N/A	Along Curb	
Utilities - Dry	N/A	Private Easement Outside of ROW	

TABLE 7: SUBURBAN NEIGHBORHOOD COLLECTOR RECOMMENDED SPECIFICATIONS

Figure 5: Surban Neghborhood Collector Section



Street Attribute		Measurement/ Placement
	R.O.W.	66' minimum
A	Travel Lanes	2, 12' minimum
B	Median/center turn lane	Optional 10' at entry of neighborhood(s)
	Parking	Optional 8' minimum parallel both sides
	Bicycle facility	10' minimum sidepath, if required
С	Sidewalks	5' minimum both sides
D	Landscape Buffer/ Planting Strip	8' minimum
	Planting Type	Shade trees
	Commercial Driveway Spacing	150' to nearest driveway or intersection
	Residential Driveway Spacing	50' to nearest driveway or intersection

Utilit	ties Location	Measurement/Placement
w	Water	Under sidewalk or center of outside lane
s	Sewer	Under sidewalk or center of outside lane
ST	Storm	Along curb
	Electrical/gas/ telecom	Private easement outside of R.O.W.

9.3.5 SUBURBAN COMMUNITY COLLECTOR

The MMP recommendation is that the Right-of-Way for a Suburban Community Collector be increased from 65'-75' to 84'. It is also recommended that the design speed be set to 35 mph. The desirable spacing in the Comprehensive Plan is 0.25-0.50 miles. The MMP recommendation is 0.50-1.00 miles spacing. It is also recommended that sidewalks be 5' wide and present on both sides of a Suburban Community Collector. The MMP recommends commercial driveways be spaced at least 150' from the nearest driveway or intersection while residential driveways are recommended to be prohibited along Suburban Community Collectors. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb. Wet

utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 8. MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 6 across. Depending on the built environment or the included components agreed to in collaboration with the city, the ROW may need to be adjusted in coordination with the city during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	65 – 75'	84'
Design Speed	35 – 45 mph	35 mph
Desirable Spacing	1/4 to 1/2 Miles	1/2 Mile Recommended, 1 Mile Maximum
On-Street Parking	Typically restricted, but may be appropriate in certain areas	Optional, 8' both sides, not allowed on 4 lane streets
Turn Lanes/Median	One turn lane at signalized intersections and others as needed. Medians are Appropriate to Improve Aesthetics and Access Management	10' Median / Center Turn Lane
Bikeways	On-street 4' Bike Lanes or Shared-Use Paths	4' Bike Lanes, 8' Cycle Track, or 10' Minimum Side Path
Sidewalks	6' Minimum on Both Sides	5' Both Sides
Edge Zone	Optional. 8-10'	8' Minimum
Driveway Spacing	Prohibit Residential	150' Commercial Prohibit Residential
Utilities - Water	N/A	Center of Outside Lane / Under Sidewalk
Utilities - Wastewater	N/A	Center of Outside Lane / Under Sidewalk
Utilities – Stormwater	N/A	Along Curb
Utilities - Dry	N/A	Private Easement Outside of ROW
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TABLE 8: SUBURBAN COMMUNITY COLLECTOR RECOMMENDED SPECIFICATIONS

Figure 6: Suburban Community Collector Cross Section



Street Attribute		Measurement/ Placement
	R.O.W.	84' minimum
A	Travel Lanes	2-4,12' minimum
B	Median/center turn lane	10' minimum
C	Parking	Optional, 8' both sides, not allowed with 4 travel lanes
0	Bicycle facility	Optional, 4' bike lane, 8' cycle track, or 10' mini- mum sidepath
0	Sidewalks	5' minimum both sides
F	Landscape Buffer/ Planting Strip	8' minimum
	Planting Type	Shade trees
	Commercial Driveway Spacing	150' to nearest driveway or intersection
	Residential Driveway Spacing	Prohibited

Utilities Location		Measurement/Placement	
w	Water	Under sidewalk or center of outside lane	
S	Sewer	Under sidewalk or center of outside lane	
ST	Storm	Along curb	
	Electrical/gas/ telecom	Private easement outside of R.O.W.	

9.3.6 SUBURBAN MINOR ARTERIAL

The MMP recommends that the Right-of-Way for a Suburban Minor Arterial be increased from 80'-100' to 110'. The 2020 Comprehensive Plan recommends a range of 8-12' for landscape buffers whereas the MMP recommends landscape buffers be 12' minimum. The MMP recommends commercial driveways be spaced at least 200' from the nearest driveway or intersection while residential driveways are recommended to be prohibited along Suburban Minor Arterial. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb.

Wet utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented

in Table 9.

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 7 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

TABLE 9: SUBURBAN MINOR ARTERIAL SPECIFICATIONS

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	80 – 100'	110'
Travel Lanes	2-4	4
Turn Lanes/Median	Intermittent turn lanes throughout. I turn lane at most intersections & up to 2 turn lanes at major intersections. Medians are intended to manage turning movements and access, provide refuge for pedestrians crossing, and landscaping	14', Center Turn Lane
Edge Zone	8-12'	12' Minimum
Driveway Spacing	Prohibit Residential	200' Commercial Prohibit Residential

Figure 7: Suburban Minor Arterial Cross Section



Street Attribute		Measurement/ Placement
	R.O.W.	110' minimum
۸	Travel Lanes	4, 12' minimum, Outside travel lane 14' minimum
B	Median/center turn lane	14' minimum
	Parking	Not appropriate
	Bicycle facility	10' minimum sidepath, if required
C	Sidewalks	8' minimum, if 10' sidepath present other side may be 6'
D	Landscape Buffer/ Planting Strip	12' minimum
	Planting Type	Shade trees
	Commercial Driveway Spacing	200' to nearest driveway or intersection
	Residential Driveway Spacing	Prohibited

Utili	ties Location	Measurement/Placement
w	Water	Under sidewalk or center of outside lane
s	Sewer	Under sidewalk or center of outside lane
ST	Storm	Along curb
	Electrical/gas/ telecom	Private easement outside of R.O.W.

9.3.7 SUBURBAN MAJOR ARTERIAL

The MMP recommends that the Right-of-Way for a Suburban Major Arterial be increased from 80'-120' to 140'. The 2020 Comprehensive Plan recommends a range of 8-12' for landscape buffers whereas the MMP recommends landscape buffers be 10' minimum. The MMP recommends commercial driveways be spaced at least 400' from the nearest driveway or intersection while residential driveways are recommended to be prohibited along Suburban Major Arterial. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb.

Wet utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 10.

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 8 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

TABLE 10: SUBURBAN MAJOR ARTERIAL RECOMMENDED SPECIFICATIONS

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	80 – 120'	140'
Turn Lanes/Median	Intermittent turn lanes throughout. I turn lane at most intersections & up to 2 turn lanes at major intersections. Medians are intended to manage turning movements and access, provide refuge for pedestrians crossing, and landscaping.	24'
Edge Zone	8-12'	10' Minimum
Driveway Spacing	Prohibit Residential	400' Commercial Prohibit Residential

Figure 8: Suburban Major Arterial Cross Section



Street Attribute		Measurement/ Placement	
	R.O.W.	140' minimum	
<	Travel Lanes	4-6, 12' minimum, Out- side travel lane 14' mini- mum	
B	Median/center turn lane	24', minimum	
	Parking	Not appropriate	
	Bicycle Facility	10' minimum sidepath, if required	
C	Sidewalks	8' minimum, if 10' sidepath present other side may be 6'	
D	Landscape Buffer/ Planting Strip	12' minimum	
	Planting Type	Shade trees	
	Commercial Driveway Spacing	400' to nearest driveway or intersection	
	Residential Driveway Spacing	Prohibited	

Utilities Location		Measurement/Placement Under sidewalk or center of outside lane	
Water			
s	Sewer	Under sidewalk or center of outside lane	
ST	Storm	Along curb	
	Electrical/gas/ telecom	Private easement outside of R.O.W.	

9.3.8 URBAN LOCAL

The current recommendation is to increase the ROW of an Urban Local to 66' with a design speed of 25 mph and a desirable spacing of 400' maximum. The MMP recommends that 8' be available for on-street parallel parking. It is also recommended that sidewalks be present on both sides of an Urban Local and that landscape buffers be a minimum of 8' in width. The MMP recommends commercial and residential driveways be spaced at least 40' from the nearest driveway or intersection. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb.

Wet utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private utilities are recommended to be in private easements outside of the ROW. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 11.

MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 9 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	50 – 60'	66'
Design Speed	20 mph	25 mph
On-Street Parking	Both Sides. Head-in or Parallel as Appropriate	8' Parallel
Bikeways	Yes	Shared Lane
Sidewalk	Yes	5' Both Sides
Edge Zone	Yes, 4-6'	8' Minimum
Street Trees/ Landscaping	Urban street trees should be planted in metal grates in pedestrian areas with adequate growing room. Paired with benches, annuals, and planter boxes. Trees with less than 6' shall be planted with root barriers to allow for optimal root conditions and compatibility with utilities.	Shade Trees
Driveway Spacing	N/A	40' Commercial 40' Residential
Utilities - Water	N/A	Center of Outside Lane / Under Sidewalk
Utilities - Wastewater	N/A	Center of Outside Lane / Under Sidewalk
Utilities – Stormwater	N/A	Along Curb
Utilities - Dry	N/A	Private Easement Outside of ROW
Desirable Spacing	N/A	400' Maximum

TABLE 11: URBAN LOCAL RECOMMENDED SPECIFICATIONS

Figure 9: Urban Local Cross Section

Residential

Driveway Spacing or intersection

	G			A B	
Stre	et Attribute	Measurement/	Utili	ties Location	Measurement/Placement
	R.O.W.	66' minimum	- I w	Water	Under sidewalk or center of outside lane
A	Travel Lanes	2, 12' minimum	s	Sewer	Under sidewalk or center of outside lane
B	Parking	8' parallel	ST	Storm	Along curb
	Bicycle Facility	Optional, shared lane		Electrical/gas/	Private easement outside
С	Sidewalks	5' minimum both sides		telecom	of R.O.W.
0	Landscape Buffer/ Planting Strip	8' minimum]		
	Planting Type	Shade trees			
	Commercial Driveway Spacing	40' to nearest driveway			

40' to nearest driveway

9.3.9 URBAN AVENUE

The current recommendation is to set the ROW of an Urban Avenue to 80' with a design speed of 35 mph and a desirable spacing of 400' maximum. The MMP recommends that 8' be available for on-street parallel parking or 19' for on-street angled parking. The MMP recommends commercial and residential driveways be spaced at least 100' from the nearest driveway or intersection. Water and wastewater utilities are recommended to be under the center of the outside lane or under the sidewalk while stormwater is recommended to be under the curb.

Wet utilities, especially water or other infrastructure under pressure, should never be in proximity to street trees. Private utilities are recommended to be in private easements outside of the ROW. Private utilities are recommended to be in private easements outside of the ROW. A summary of these recommendations is presented in Table 12. MMP recommended ROW widths are the minimum requirement for including the components shown in the recommended cross section shown in Figure 10 across. Depending on the built environment or the included components agreed to in collaboration with the City, the ROW may need to be adjusted in coordination with the City during site planning or preliminary engineering.

The MMP ROW recommendation does not include private utilities, which are anticipated to be in a private easement outside of the public ROW.

TABLE 12: URBAN AVENUE RECOMMENDED SPECIFICATIONS

Attribute	2020 Comprehensive Plan	Current Recommendation
Right-of-Way	60 - 80'	80'
Design Speed	30 – 35 mph	35 mph
Desirable Spacing	N/A	400' Maximum
On-Street Parking	Both Sides. Head-in or Parallel as Appropriate	19' Angled 8' Parallel
Bikeways	Shared Lanes or 4' Bike Lanes	Shared Lanes or 8' Cycle Track
Sidewalk	8'	7' Minimum with Angled Parking
Driveway Spacing	N/A	100' Commercial 100' Residential
Utilities - Water	N/A	Center of Outside Lane / Under Sidewalk
Utilities - Wastewater	N/A	Center of Outside Lane / Under Sidewalk
Utilities – Stormwater	N/A	Along Curb
Utilities - Dry	N/A	Private Easement Outside of ROW

Figure 10: Urban Avenue Cross Section



Street Attribute		et Attribute	Measurement/ Placement	
		R.O.W.	80' minimum	
	A	Travel Lanes	2, 12' minimum, a 3rd land can be accommo- dated	
	B	Parking	19' angled or 8' parallel	
		Bicycle Facility	Optional, 8' minimum cycle track or shared lane	
	С	Sidewalks	7' minimum, both sides	
	D	Landscape Buffer/ Planting Strip	Varies	
		Planting Type	Planing beds or shade trees with grates, trees planted in bed that 6' in width (narrowest point) shall be planted with root barriers	
		Commercial Driveway Spacing	100' to nearest driveway or intersection	
		Residential Driveway Spacing	100' to nearest driveway or intersection	

Utili	ties Location	Measurement/Placement		
W	Water	Under sidewalk or center of outside lane		
S	Sewer	Under sidewalk or center of outside lane		
ST	Storm	Along curb		
	Electrical/gas/ telecom	Private easement outside of R.O.W.		

9.4 PROPOSED THOROUGHFARE PLAN **AMENDMENTS**

As the Thoroughfare Plan was adopted only two years prior to this planning effort, only minor adjustments are recommended as amendments for consideration. The proposed changes take into consideration new developments, forecasted level of service on the transportation network, physical geography, and the vision and goals of the MMP. The City of Temple Thoroughfare Plan with the recommended amendments included is shown in Figure 11

Table 13 presents the recommended amendments to the Thoroughfare Plan for the City to consider in the next cycle of Thoroughfare Plan amendments.

Figure 11: City of Temple Thoroughfare Plan by Functional Class with MMP Recommended Amendments

Highway Major Arterial - Minor Arterial MMP Updates ETJ

TABLE 13: RECOMMENDED AMENDMENTS TO THE CITY OF TEMPLE THOROUGHFARE PLAN

#	Street Name	From Limit	To Limit	Current TP Classification	Proposed TP Classification
1	W. Young Ave	W Zenith Ave	8th St	Local Street	Added as a Future NC
2	Bob White Rd	FM 3117 / Knob Creek Rd	Tower Road	Local Street	Added as a Future CC to Map
3	E FM 436	E FM 436	Primrose Trail	Local Street	Added as a Future Minor Arterial
4	Primrose Trail	Primrose Trail	E FM 436	Local Street	Added as a Future CC to Map
5	Avenue T	S. 57th St	S. 31st St	Local Street	Added as a Future CC to Map
6	Knob Creek Rd	Dirt Rd	North of Dirt Road	Community Collector	Realigned to soften sharp 90 degree turn
7	Knob Creek Rd	Knob Creek Rd	FM 3117	Community Collector	Realigned to connect to/intersect with Bob White Rd
8	Young Ave	Young Ave	Shell Ave	Community Collector	Realigned to form T intersection with Shell
9	Shell Ave	Shell Ave	Young Ave	Minor Arterial	Realigned to form T intersection with Young
10	Pecan Rd	Future Berger Rd	Berger Rd	Neighborhood Collector	Downgraded Future NC to Local
11	Pecan Rd	Future Berger Rd	Future Outer Loop	Local Street	Added as Future CC to Map
12	Future Berger Rd	Pecan Rd (North)	Pecan Rd (South)	Neighborhood Collector	Added as Future CC to Map





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