



COLLIER COUNTY TRANSPORTATION PLANNING DEVELOPMENT GUIDEBOOK

For more information contact:

Transportation Planning Department
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OVERVIEW OF TRANSPORTATION PLANNING

COLLIER COUNTY TRANSPORTATION PLANNING DEPARTMENT

Collier County Transportation Planning is a Department within the Growth Management Division. The Department plans for the current and future needs of transportation improvements to provide for the safe and convenient movement of people and goods throughout Collier County.

For any planning or development application that involves new or altered development, the Transportation Planning Division is responsible for the review for land use changes, rezoning, and conditional uses of concurrency, access management, traffic impacts, roadway construction standards, pedestrian/bicycle facilities.

ABOUT THIS GUIDEBOOK

The Collier County Transportation Planning Department wants to provide the best possible experience during the review process for each development project. The purpose of this "Transportation Planning Development Guidebook" is to provide development applicants and their professional practitioners with guidance for producing accurate and complete applications at the start of the project.

This Guidebook highlights the primary transportation planning considerations for typical development projects and how to address them. At the end of the Guidebook, you will find checklists that are designed to facilitate the practitioner's preparation and sufficiency review of the application prior to submittal.

This is only a Guidebook and not a legal document or ordinance. This document is a supplement to the County's Land Development Code, Administrative Code, and other standards, not a substitute. The considerations and checklists contained in this Guidebook are not all-inclusive and have only been provided to assist the Developer/Designer with the review and permitting process. All applicable Collier County and FDOT standards as appropriate should be followed. For more information, the Transportation Planning Department resources and links to applicable Codes and Manuals are available online at the Collier County Government Transportation webpage found at www.colliergov.net.

The following pages are intended to provide you with an understanding of the primary topics that must be considered and addressed in most typical applications for development or redevelopment, followed by checklists for your use and submittal with your application.

For further questions or information, please contact the Collier County Transportation Planning Department at (239) 252-8192.

APPLICABILITY

Generally, this Guidebook references the practices and processes that apply to planning and development applications for lands in the unincorporated area outside the City limits of Naples, Marco Island, and Everglades City. Occasionally, plans or development applications may cross jurisdictional boundaries, or may be within a City but access a County-maintained road. Some of the guidance found herein may be applicable in such cases.



ROADWAY CLASSIFICATIONS

Collier County's roadway network is comprised of State, County, City and privately maintained roadways. Roadways are generally classified as Arterial, Collector, or Local.

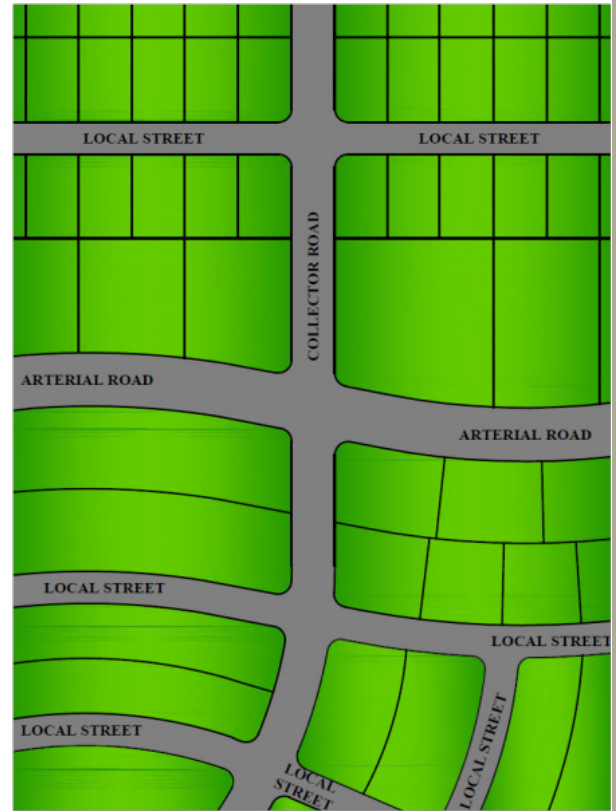
During your initial planning phase, it is important to identify the jurisdiction governing the site's surrounding roadways because this affects the permitting process and requirements. Also identify the adjacent roadway classifications because this determines location and spacing of access points, types of turning movements and relationship of your site to the surrounding network.

Arterial road: A roadway that serves primarily through traffic and secondarily provides access to abutting properties.

Collector road: A roadway providing access and traffic circulation service to a residential, commercial, or industrial area and secondarily provides for local through traffic.

Local road or street: A route providing service which is of relatively low traffic volume, serving short trip length, or minimal through-traffic movements, and a high degree of access for abutting properties. Local roads may be privately owned or governed by Collier County jurisdiction.

If your project involves construction of a new or expanded public collector or arterial road, refer to the Collier County DEVELOPER SPONSORED ROAD PROJECT PERMITTING PROCESS HANDBOOK for additional guidance.

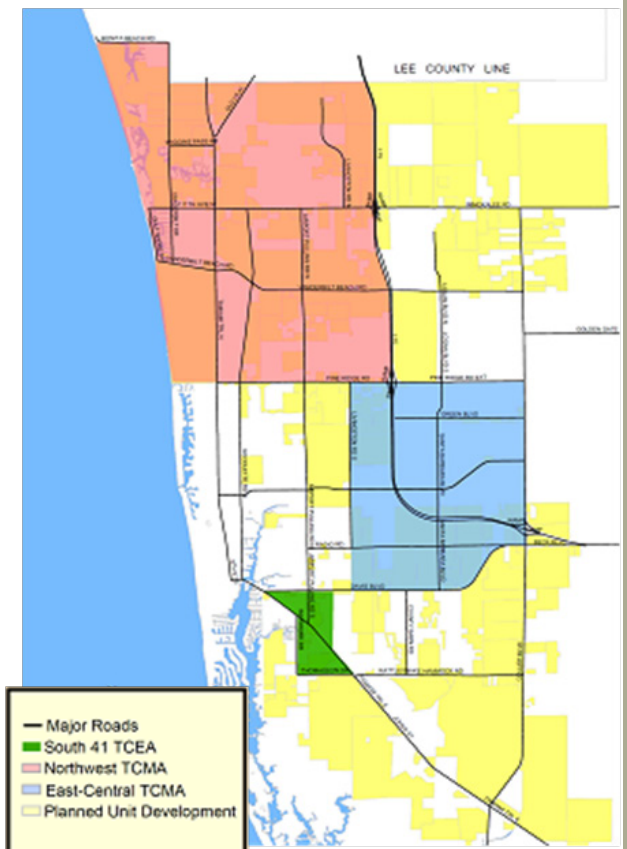


ROADWAY CONCURRENCY

Collier County's Concurrency Management System is intended to ensure that there is adequate roadway capacity available to serve current and future development. Transportation Concurrency is a measure of the capacity of the roadway system to support the adopted level of service for vehicular traffic. Collier County evaluates concurrency at time of application for site development plan, site development plan amendment, site improvement plan, and subdivision plat and plan application.

Generally, concurrency is evaluated for each link significantly impacted by a proposed application. Collier County has two Transportation Concurrency Management Areas (TCMAs) where growth-related impacts to transportation facilities are managed on an area-wide basis rather than on a link-by-link basis.

Proportionate share payments may be used to mitigate impacts of a development on a deficient roadway link by more than a de minimis amount within a TCMA. Refer to Land Development Code Section 6.02.03 for more information. Collier County has one Transportation Concurrency Exception Area (TCEA), where development is exempt from transportation concurrency requirements so long as impacts to the transportation system are mitigated using Transportation Demand Management strategies enumerated in the Land Development Code.





TRAFFIC IMPACT STUDY (TIS)

The purpose of the traffic impact study (TIS) is to quantify the potential traffic impacts, evaluate compliance with the transportation concurrency requirements consistent with the comprehensive plan, and identify site-related operational deficiencies that impact the health, safety and welfare of the traveling public. The TIS also analyzes access points, median openings and intersections significantly impacted by the development on the transportation system and identifies mitigation strategies to offset the impacts.

Prior to conducting any study, practitioners are required to prepare a methodology statement according to the Collier County TIS Guidelines and submit it for review and approval by County Transportation Planning Staff. The purpose of the methodology statement is to establish agreed upon methodologies and assumptions prior to the start of the study. A methodology meeting to review the statement is generally required. In such cases, a methodology meeting fee is required.

TIS Guidelines are available online at the Collier County Government Transportation Planning webpage found at www.colliergov.net.

Please contact the Transportation Planning Department at (239) 252-8192 to set up a methodology meeting.

PROJECT CONNECTION POINTS

A focal point of your site design should be the connection point(s) for the site. A connection is the driveway, street, turnout, or other means of providing for the right of physical access to or from a public or private roadway. Whether your project is new development with new connection points or redevelopment, it is important to consider how the site connects to the public network with proper sight distances, pedestrian crossings, driveway throat length, lighting, and alternative interconnection opportunities. Depending on the roadway classification, number of lanes and traffic volumes, the site connection may require turn lanes. All new connection points and median modifications require a Collier County Right-of-Way permit and are subject the requirements of to Collier County Access Management Resolution 13-257, as amended.

Access Management

Access management is a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways. Access management includes several techniques that are designed to increase the capacity of these roads, manage congestion, and reduce crashes. The general separation requirements are provided in the table below. These minimum spacing standards may not be adequate if auxiliary lanes and storage is required. Single properties with frontages exceeding the minimum spacing criteria may not necessarily receive permits for the maximum number of possible connections.

Collier County Access Management Standards (Resolution 13-257)

Access Class	Facility Features	Minimum Connection Spacing (feet)(2)(3)	Minimum median opening – directional (feet)(2)	Full (feet)(2)	Minimum Signal Spacing (mile)(2)
2	Controlled Access	1320/600	1320	2640	0.5
3	Arterials and Collectors, divided	660/330	660	1320	0.5
4	Arterials and Collectors, undivided	660/330	N/A	N/A	0.5
5	Arterials and Collectors, divided	330/220	440	320/660 (1)	0.5/.25
6	Arterials and Collectors, undivided	330/220	N/A	N/A	0.25
7	Arterials and Collectors, divided and undivided	125	330	440	0.25

Notes: (1) ≥ 45mph / <45mph

(2) These minimum spacing standards may not be adequate if auxiliary lanes and storage is required.

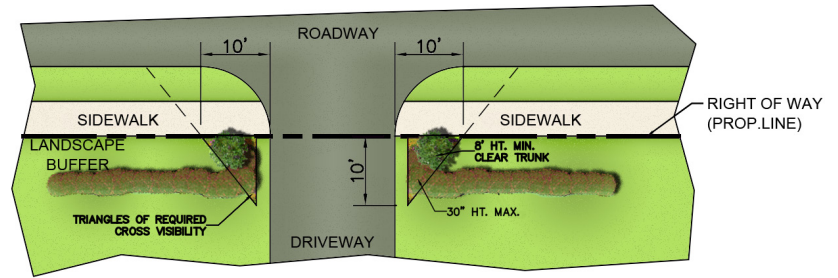
(3) Single properties with frontages exceeding the minimum spacing criteria may not necessarily receive permits for the maximum number of possible connections.

Local roads are typically classified as Access Class 7, however, there may be cases of local roads with a higher access classification.

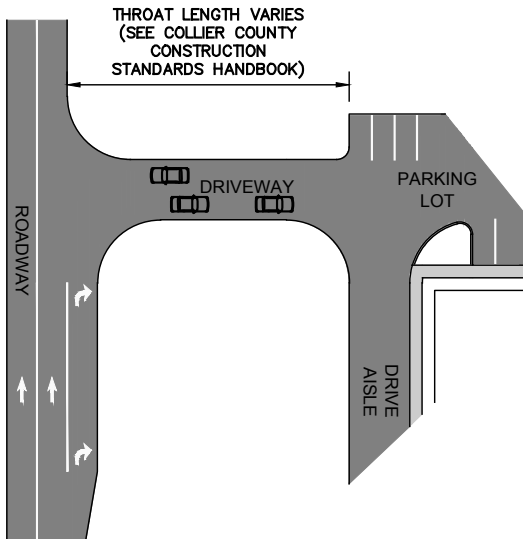
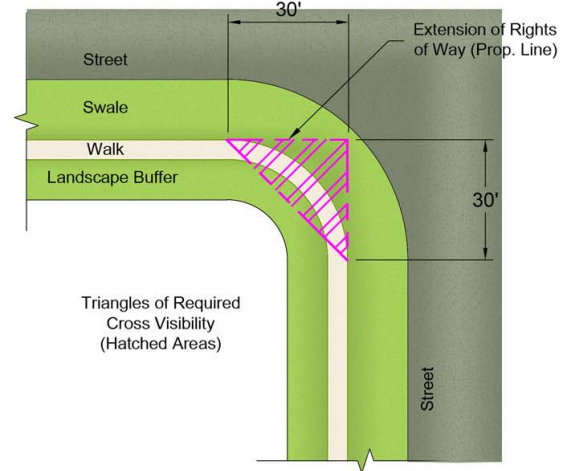
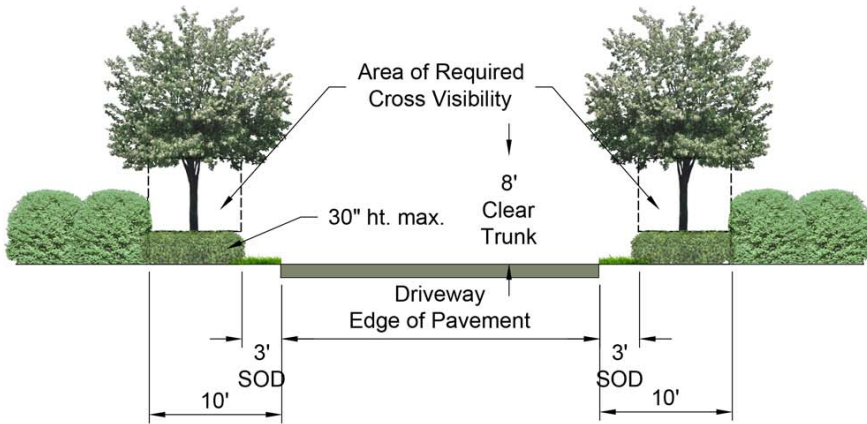
What you should do...

Clear Sight Distance

Section 6.06.05 of the Land Development Code specifies clear sight distance requirements where an accessway connects to a right-of-way and on corner lots where a property abuts the intersection of two Rights-of-Way.



INTERSECTION OF DRIVEWAY AND STREET



Driveway Throat Length

It is important to provide for adequate driveway distance between the public road and any internal intersection, gate house or parking spaces on the site. This distance, or the "throat length," is prescribed in the *Construction Standards Handbook for Work within the Public Right-of-Way (ordinance 09-19, as amended)*.

Lighting

The Land Development Code specifies streetlight design and standards for lighting at the connection point for any residential or commercial development along a public collector or arterial street. Lighting should be an integral part of the access plan for the site, and your submittal must include details addressing illumination levels, fixtures, and photometrics. For more information, refer to *Land Development Code Section 6.06.03*.



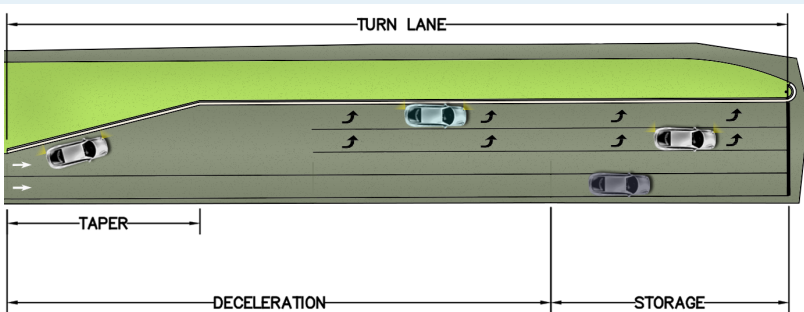
Interconnections

Vehicular and pedestrian interconnection between adjoining properties allows for greater circulation opportunities, and often connects residents to each other and to businesses in a more efficient and safe manner. During the development or redevelopment of commercial or residential projects and all rezoning petitions, shared access and vehicular interconnection is required unless it is not physically or legally possible, the cost is unreasonable (over 10% of the value of the development), environmentally sensitive lands will be impacted and cannot be mitigated, or the abutting use is incompatible.



Turn Lanes

Primary vehicular access into a development may require the addition of turn lanes to promote smooth traffic flow and reduce hazards to vehicular, bicycle, and/or pedestrian traffic. The addition of turn lanes is required pursuant to Section III of the Right of Way Handbook when it has been determined that project traffic volumes warrant the improvement(s).



Collier County turn lane standards require that separate turn lanes be added whenever any of the following conditions exist:

For Two Lane Roadways:

- Left turn lanes must be provided whenever the left turn peak hour volume is 20 vehicles or more.
- Right turn lanes must be provided whenever the right turn peak hour volume is 40 vehicles or more.

For Multi-lane Divided Roadways:

- Median openings, other than those existing at the time of Permit application, to accommodate left turns at locations other than street intersections may be permitted, consistent with applicable Access Management Standards, only when the projected traffic volume at the proposed opening (two-way total) averages 150 vehicles per hour during the eight highest hours. Turn lanes in the median that serve the public shall take precedence over turn lanes serving privately owned developments. (i.e. if a median opening/turn lane for a private development precludes the installation or lengthening of a turn lane benefiting the public, the turn lane serving the private entity may be required to be reduced or removed at the expense of the beneficiary).
- Right turn lanes shall always be provided for existing multi-lane divided roadways or for roadways, which are scheduled to become multi-lane divided roadways in accordance with the Annual Update and Inventory Report of the Collier County Growth Management Plan.

Additional Requirements

All right turn lanes must accommodate existing roadway conditions and/or planned capital improvement project on a collector or arterial road. For all turn lanes:

- If existing County Right-of-Way is utilized, compensating Right-of-Way must be provided.
- If a sidewalk must be reconstructed for a turn lane, the existing separation or the required clear zone, whichever is greater, must be maintained.

What you should do...

Maintenance of Traffic Plans

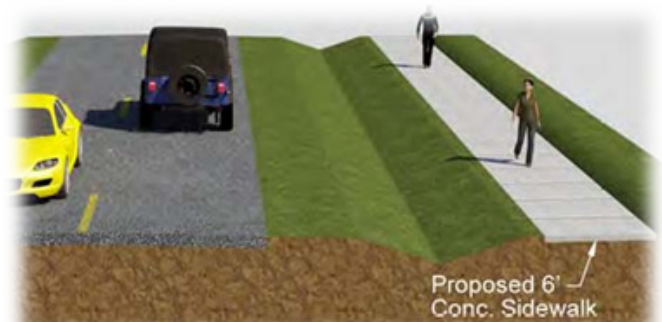
Maintenance of Traffic Plans must meet or exceed the minimum requirements specified in the most current edition of both the Manual on Uniform Traffic Control Devices (MUTCD) and the FDOT Design Standard Index 600 series. Additionally, all work in County Right-of-Way shall follow the requirements adopted in and Collier County's Maintenance of Traffic Policy # 5807.

DESIGN FOR ALTERNATIVE MODES: SIDEWALKS, BICYCLE LANES AND TRANSIT

Sidewalks

Sidewalks are required to be constructed within subdivisions, and within parking lots. Sidewalks are also required along public Rights-of-Way (6" thick concrete minimum) and private Rights-of-Way (4" thick concrete minimum) adjacent to development sites.

Six-foot wide sidewalks are required on both sides of Arterial and Collector Streets. Five-foot wide sidewalks are required on both sides of local streets and internal accessways. *The County has a program for payment-in-lieu of sidewalk in situations where a sidewalk is not practical. For more information, refer to Land Development Code Section 6.06.02.*



Bicycle Lanes

Bicycle lanes are the portion of the roadway designated for use exclusively by bicycles. A bike lane is designated by both signage and pavement markings. Construction of bike lanes is required within public and privately maintained collector roads located within all developments.



Sidewalk and Bicycle Crossings at Intersections

At roadway intersections all sidewalk and bicycle paths are required to adjoin to the edge of curb or edge of pavements as depicted. When a curb is present, Americans with Disabilities Act (ADA) compliant directional curb ramps are required at all corners of the intersection to provide full accessibility. The connection point must maintain or create safe pedestrian crossing conditions by adhering to ADA standards and County standards for direction, visibility, surface type, slope, width, and markings.

Pathways

Pathways are defined as an off-road corridor whose primary use is dedicated to non-motorized traffic. Collier County allows for pathways to be constructed of either concrete or asphalt material. Where asphalt is used, the County requires no less than six inches of compacted limerock base (LBR 100) over a stabilized subgrade with a minimum of 1-1/2 inches of asphalt.

Transit

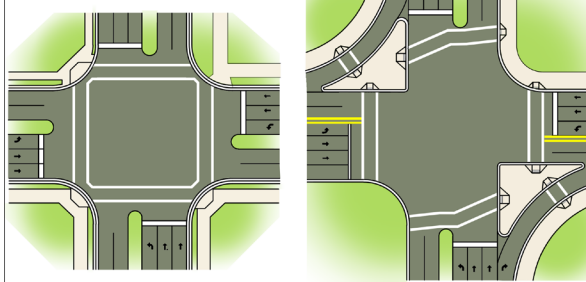
New transit stops and associated pedestrian connections to bus stops are important to consider in site design where Collier Area Transit routes exist or are planned in proximity to the project site. *For further information please contact the Collier Area Transit Office at (239) 252-7777.*

Traffic Calming

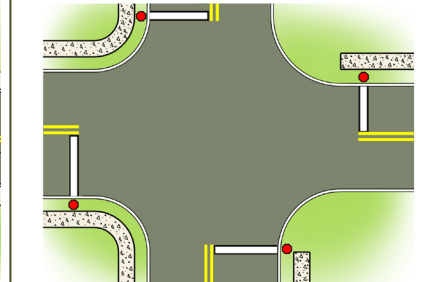
The Collier MPO and Collier County Transportation Planning created the Neighborhood Traffic Management Program to provide a process for identifying and addressing problems related to speeding motorists, excessive traffic volumes, and safety on local, residential and minor collector streets.

The Neighborhood Traffic Management Program Manual is available online at the Collier County Government Transportation Planning webpage found at www.colliergov.net. The Manual outlines procedure for initiating traffic calming measures in a neighborhood or business area, and identifies options for traffic calming strategies. The criteria to qualify for implementation of traffic calming measures are:

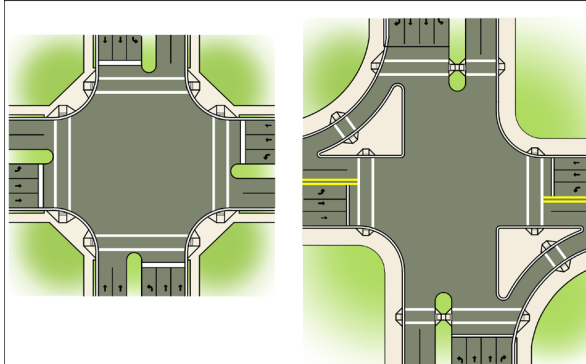
CURB RAMPS - DON'T DO THIS



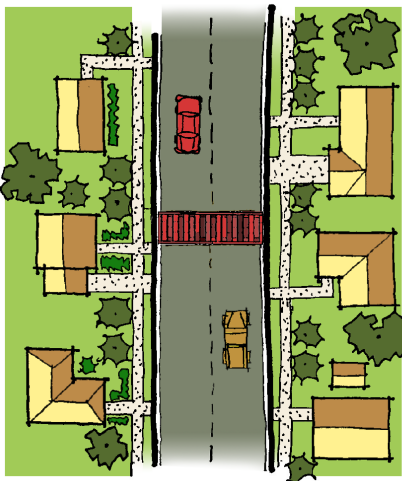
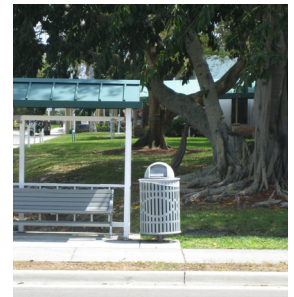
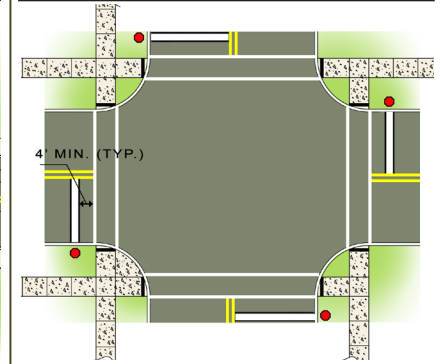
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EDGE OF CURB - DO THIS



- **Minimum Vehicular Volume:** Local residential: Daily traffic volumes greater than 2,000 vehicles per day or peak hour traffic volumes greater than 200.
- **Speed:** Local residential: More than 85% of automobiles are driving at least 5 miles per hour over the posted speed limit.
- **Support:** More than 51% of households and/or businesses in the area must sign a petition in support.

The three "E"'s of **E**ducation, **E**nforcement and **E**ngineering make up the Traffic Calming solution strategy that is put forth to the Board of County Commissioners for approval. *For more information, contact the Neighborhood Traffic Management Program Project Manager in the Transportation Planning Department at (239) 252-8192.*



Collier County Transportation Planning Checklists

The checklists on the following pages were developed to maintain and improve the quality of Developer Design plans in Collier County. The designer should be familiar with the following documents and ensure that the design is in compliance with these documents:

	N/A	Required	
1.0			Traffic Impact Study (TIS) Quality Control Checklist
2.0			Project Connection Points Quality Control Checklist
3.0			Multi-Modal Transportation Quality Control Checklist

Prior to each submittal, the designer is advised to confirm that current editions of the above documents are being used. The complete checklist for each phase and the responses to comments must be submitted with each phase submittal.

Engineer of Record

I have reviewed the application package and all required design elements and supporting documents within Collier County Right-of-Way are included in the site plan submittal and verified as part of this Quality Control Review.

Engineer of
Record: _____

Date: _____



Collier County Transportation Planning Checklists

Project Number:	Name of Firm:
Project Description:	Prepared By:
	QC'd By:
	Date:

1.0 Traffic Impact Study (TIS) Quality Control Checklist

1.1 Basic Requirements

Initials	Designer	CC	#	General
N/A				
			1	Development Parameters, including Build Out Horizon Year, are identified.
			2	Site is estimated to generate _____ A.M. Peak Hour Trips, _____ P.M. Peak Hour Trip, and _____ Average Daily Trips.
			3	Estimated Internal Capture Rate is _____%.
			4	Estimated Pass-by Capture Rate is _____%

1.2 Small Scale Study

Initials	Designer	CC	#	General
N/A				
			5	The project generates less than 50 net new total 2-way AM and less than 50 net new total 2-way PM peak hour trips
			6	The access point to the adjacent roadway network does not require modification inside the Right-Of-Way beyond a standard driveway connection.

1.3 Minor Study

Initials	Designer	CC	#	General
N/A				
			7	The project generates less than 100 net new total 2-way AM and less than 100 net new total 2-way PM peak hour trips and less than 2% of adopted LOS service volume on the roadway segment(s) it directly accesses.
			8	The access point to the adjacent roadway network may not require modifications inside the right-of-way beyond the scope of turn lanes and median modifications.
			9	The only mitigation required is ingress and egress turn lane(s) and median modifications.
			10	Payment of \$750 fee upon submission.

1.4 Major Study

Initials	Designer	CC	#	General
N/A				
			11	The project generates more than 100 net new total 2-way AM or PM peak hour trips.
			12	The project significantly impacts one or more roadway facilities or causes them to become deficient, or the project requires access management improvements and intersection improvements above and beyond turn lanes and/or median modification
			13	Payment of \$1500 fee upon submission.

Collier County Transportation Planning Checklists

Project Number:		Name of Firm:		
Project Description:		Prepared By:		
		QC'd By:		
		Date:		
2.0 Project Connection Points Quality Control Checklist				
2.1 Access Management – Connection Separation				
Initials	Designer	CC	#	General
N/A			1	Access spacing meets the minimum Collier County or FDOT Access Management and driveway separation standards.
2.2 Driveway Design				
Initials	Designer	CC	#	General
N/A			2	Width of proposed driveway at Right-of-Way has been identified and is within standards.
			3	Size of driveway radii or turnout intersection roadway labeled on the site plan.
			4	Driveway does not impair existing drainage patterns.
			5	Type of pavement has been clearly identified on the site plan and meets or exceeds Collier County minimum standards.
			6	All proposed culverts within County Right-of-Way are to be reinforced concrete pipe (RCP) meeting the most current edition of the FDOT Standard Specifications for Road and Bridge Construction.
			7	Site Plan matches the proposed typical section.
			8	Throat length meets standards with dimensions labeled on plan.
2.3 Clear Sight Distance				
Initials	Designer	CC	#	General
N/A			9	Clear sight distance triangles are provided at intersections with dimensions labeled on plans.
			10	Streetscape improvements do not impede motorist, pedestrian or cyclist visibility at sight triangle locations at roadway intersections or access ways.
2.4 Interconnection				
Initials	Designer	CC	#	General
N/A			11	Vehicular and/or pedestrian facilities connect with adjacent sites as applicable.
2.5 Turn Lanes				
Initials	Designer	CC	#	General
N/A			12	Right turn lanes has been provided if the right turn peak hour volume is 40 vehicles or more at the access location.
			13	Left turn lane have been provided if the left turn peak hour volume is 20 vehicles or more at the access location.
			14	Turn Lanes meet or exceed FDOT Design Standard Index 301.
			15	Compensating right-of-way is provided for right turn lane within County R-O-W.
			16	Maintenance of Traffic Plans meets or exceeds the minimum requirements specified in the most current edition of both the Manual on Uniform Traffic Control Devices (MUTCD) and the FDOT Design Standard Index 600 series and complies with Collier County's Maintenance of Traffic Policy No. 5807.
			17	Site Plan matches the proposed typical section.
2.6 Lighting				
Initials	Designer	CC	#	General
N/A			18	Min. of 2.0 foot candles and max. of 5.0 foot candles at intersections.
			19	Full cutoff fixtures on both sides of entry or exit.
			20	Pedestrian lighting standards are met along sidewalks by street lights.

Collier County Transportation Planning Checklists

Project Number:	Name of Firm:
Project Description:	Prepared By:
	QC'd By:
	Date:

3.0 Multi-Modal Transportation Quality Control Checklist

3.1 Sidewalks

Initials	Designer	CC	#	General
N/A			1	Sidewalk has minimum 6' width on Arterial or Collector Roadways or minimum 5' width on local streets or accessways
			2	Sidewalks located on both sides of Arterials, Collectors, or Local Streets within the development.
			3	Proposed Sidewalk has a 6" minimum thickness within County Maintained Right-of-Way and/or a 4" minimum thickness within Privately Maintained Right-of-Way.
			4	Sidewalks provided on site and in parking lots, extending to connect to the adjacent right-of-way
			5	Sidewalks comply with the "Americans with Disabilities Act of 1990" (ADA)
			6	Directional curb ramps and crosswalks have been provided at roadway intersections.
			7	If Payment in Lieu is applicable, provide exhibits and payment.

3.2 Bicycle Lanes

Initials	Designer	CC	#	General
N/A			8	4-foot bike lanes provided on Arterial or Collector Roadways within the development

3.3 Multi-Use Pathways

Initials	Designer	CC	#	General
N/A			9	Pathway typical section includes a 12' minimum width within Collier County Right-of-Way.
			10	Material is shown as concrete or asphalt.
			11	For asphalt, a detail is provided to show no less than six inches of compacted limerock base (LBR 100) over a stabilized subgrade with a minimum of 1-1/2 inches asphalt.

3.4 Connections to Transit

Initials	Designer	CC	#	General
N/A			12	Transit stops in proximity to the project site are labeled on the plan.
			13	Sidewalk connections are provided to existing and proposed transit stops.
			14	Transit stops, if proposed or modified, must be ADA compliant.